

Sustainability Scorecard Report

This report is intended to be a snapshot of your current and planned sustainability initiatives based on our most recent assessment using the Green Check Scorecard. It will provide you with a guide as you develop your **Comprehensive Sustainability Plan**.

The items included within this report will make up the core of the **Actions and Impacts** section of your plan. You are encouraged to add your own initiatives or modify and adapt these items as you build your plan.

In addition, the **Policies and Procedures** section of your Comprehensive Sustainability Plan can be built using this report as a starting point. While we do not include sample policies in this guide, you may reference sample policies in our **Sample Policy Guide**.

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## The Guide is Divided into Themed Sections

\*\*\*A1. Each activity from the scorecard is represented here, with a title and numeric identifier. Items that start with \*\*\* are required in order to receive Green Check Certification. Below, we provide you with two types of information for each activity.

### **General Information**

In the left hand column below the activity title, you will find general information about that activity, including links to additional resources that can provide you with more information.

#### Resources

Below each item will be a list of recommended outside resources on the web. These links appear in underlined italics and clicking on the title of the items will direct you to the website.

### **Example Hyperlink**

### **Specific Information**

The right hand column is dedicated to information about your own initiatives, with suggestions based on our meetings with you, or a summary of your progress as reported to us.

### **Activity Status**

Below the recommendations will be the status of the activity based on your reporting during your initial consultation. This status will be updated as you continue complete activities throughout the process, displaying a timeline of your progress over time.

**A2.** We have highlighted any activities that require a written policy in this color, to make it easier for you to find those items as you develop your policies.

You can write your policies using references we provide here.

Or you can develop your own policies tailored to your operational needs.

## Sustainability Management and the Green Team

# \*\*\*\$1. Develop a written Comprehensive Sustainability Plan that includes goals in these categories:

- Sustainability Goals Your Sustainability Goals will form the basis of your sustainability mission statement. Do not make them overly specific. You should be able to communicate them to someone succinctly, and they should guide the rest of your policies and activities.
- Roles and Responsibilities Assigning Roles and Responsibilities in writing clearly will help to provide for the guidance necessary to achieve your goals.
- Policies and Procedures As you continue through this report, activities that start with "create a policy" or "establish a policy" indicate that these will require a written policy that should be included in your Policies and Procedures section.
- Activities and Impact This report forms the basis of your Activities and Impacts section.
- Timelines Create a timeline for the completion of planned activities.

## Sustainability Management and the Green Team

# \*\*\*\$2. Designate a Sustainability Coordinator or Green Team responsible for managing sustainability initiatives.

A general rule of thumb is that businesses of 50 employees or under will require a Sustainability Coordinator, and those of more than 50 will require a Green Team. It is recommended that the duties of both be written and that the positions rotate if necessary. The success of these positions will require some time to be dedicated to them, and we recommend accounting for this time in the employees' schedules. Companies of over 500 may consider a full-time Sustainability Coordinator position in addition to a Green Team.

### \$3. Hold quarterly Green Team meetings.

We recommend that your Green Team meet quarterly at a minimum, and provide updates to management on at least a regular basis.

# S4. Provide time for quarterly updates from Sustainability Coordinator in upper management meetings.

If you do not have a Green Team, we recommend that the Sustainability Coordinator be allowed to address management on a quarterly basis to update on progress.

### \*\*\*A1a. Include sustainability tips in a monthly newsletter.

If you have an existing employee newsletter, this is an easy way to get the word out about your sustainability initiatives and give your employees pointers on achieving sustainability goals both inside or outside of the workplace. You can either cater your messaging to your inhouse initiatives, or we can provide you with tips of a general nature that you can cut and paste into a newsletter.

# \*\*\*A1b. Provide a sustainability information board in a common area such as a break room or kitchen.

If you do not have an employee newsletter, we recommend achieving your employee outreach goals through an information board in one or more common areas where employees are likely to see them. We can help you prepare these materials based on your initiatives or you can prepare the signage on your own.

### \*\*\*A2. Include a sustainability statement and training in all new hire materials.

This is one of the most important items in this section. In order to meet your sustainability goals, you will need to ensure that your new employees come in with the appropriate knowledge. You do not need to include your entire sustainability plan, just an overview of your programs. We do recommend including a statement of your sustainability goals, as well as an overview of your recycling program, your energy efficiency program, and a statement on water quality and litter.

# A3. Host annual trainings or workshops to educate employees about sustainability issues, policies and procedures.

While this might seem to be a very difficult item to achieve, it is important to note that this item can be fulfilled by including a sustainability component in a pre-existing employee development day, fun fair, or other annual employee-focused event.

# A4. Promote sustainability accomplishments in external marketing materials (website, social media, newsletter, press releases, TV/radio ads).

This is a relatively easy item to accomplish, and one that will have a direct impact on your marketing. Adding a sustainability statement to your website is a great way to let your community know that you are. Adding a chronicle of your sustainability efforts as you undertake them is a great way to tell your story in real time and engage the public in your process.

## A5. Highlight sustainability efforts or initiatives at career fairs or career days.

If you do recruitment events, table at conferences, or do career fairs at high school, include information on your sustainability program. A broad overview of your program is sufficient. Think of including a sustainability statement, your sustainability goals, and a few select initiatives you have undertaken which you think best represent your organization and tell your story.

### A6. Create an annual green employee award to highlight employee sustainability efforts.

Awarding an employee who is not your Sustainability Coordinator or on your Green Team is a great way to incentivize the work. Another option is a sustainability innovation award, for the employee who finds the most innovative way to improve your sustainability profile.

### A7. Provide volunteers for community environmental projects annually.

Allowing a group of employee volunteers to participate in community environmental events like Reforest the Bluegrass or the Main Street Clean Sweep fosters awareness, improves the community, and helps you communicate your sustainability commitment to the community at large. You do not need to have your entire staff volunteer to get points for this item. We generally ask that 50% of your staff volunteer if you have 20 or fewer employees, 30% if you have 75 or fewer, and 15% volunteer if you have more than 75 employees. We can work with you on an individual basis to set goals that are realistic for your organization, and it is at our discretion to award partial or full points for this item.

### A8. Host an environmental event at your location.

To achieve this, you do not necessarily need to plan your own event. Some examples that fulfill this item include inviting another group to your site to plant trees or making your employee picnic zero waste. Because of the wide range of options in this category, we encourage you to work with us to find an option that is most appropriate for you. It is at our discretion to award partial or full points for this item.

### A9. Sponsor an environmental booth at an existing community event.

Sponsoring or co-sponsoring a booth with a local non-profit at community event is a great way to raise your profile and show that you are committed to making a more sustainable community. If you need help finding opportunities for sponsorship at community events, we can help you find them.

### A10. Participate in the Bluegrass Sustainability Summit

Our annual Bluegrass Sustainability Summit is a great resource for businesses looking to start or expand their sustainability initiatives. We bring together the national, regional, and local leaders in sustainability to help you learn what others are doing and creative approaches to achieving your goals that don't have a big impact on your balance sheet. Participation as an attendee, vendor, or speaker by at least one staff member from your organization gets you full points.

### \*\*\*E1. Utilize the free Energy Star Portfolio Manager to assess energy consumption.

The first step in increasing your energy efficiency and lowering your costs is beina able to assess your current energy consumption and track usage over time. EPA's Energy Star Portfolio Manager is a free tool that allows users to measure and track energy and water consumption, as well as greenhouse gas emissions, by simply inputting your energy bills and basic building information. Based on this information, Portfolio Manager provides a user friendly interface that will allow you to track your energy and water consumption and create a plan of action to increase your efficiency and lower your utility costs.

#### **Resources**

How to Use Portfolio Manager

Portfolio Manager Fact Sheet

# \*\*\*E2. Establish a power-down policy and checklist that includes items such as shutting off lights at night.

Establishing a power-down policy is the best way to ensure that all employees are on the same page when it comes to shutting off electrical devices and lighting at the end of the work day, we recommend providing employees with a simple, easy to follow checklist outlining the process for shutting down your facility. Effectively communicating this policy and checklist through memos, e-mail, and posting in common areas will ensure that the responsibility is shared among all member of your business or organization and lead to decreased energy consumption utility costs.

#### Resources

Sample Power Down Policy

# \*\*\*E3. Set water heater thermostats to a maximum of 120 degrees or install an in-line water heater.

Most water heaters come with a factory setting of 140 °F. However, the Consumer Product Safety Commission (CPSC) recommends setting to 49 °C (120 °F) to safely eliminate potential pathogens, slow mineral buildup and corrosion in your water heater and pipes, and help lower energy costs. Lowering your water heater thermostat to a maximum of 120 degrees helps lower costs due to standby losses (heat lost from water heater into surrounding basement area); and consumption (from water demand or use in your home).

#### **Resources**

Lowering Your Water Heater Set Point

## E4. Apply for energy credits, rebates or incentives.

Energy efficiency initiatives can seem like an expensive undertaking, but luckily they don't have to be. There are a number of financing and tax options that can reclaim more than 100% of the cost of efficiency upgrades in the first year. Many energy service providers also offer substantial energy credit, rebates, or incentive programs that can help offset many of the expenses of energy efficiency updates. For example, Kentucky Utilities offers up to \$50,000 per facility for commercial energy savings improvements.

#### Resources

Kentucky Utilities Rebates

<u>Bluegrass Energy Rebates</u>

### E5. Sign up for a green energy program with your electric provider.

Green Energy programs do not directly provide you with energy from wind, solar, or other renewable sources. After all, it would be hard to keep all those electrons separate. Instead, when you enroll in a green energy program you are charged a small fee that goes to help offset the startup costs of alternative energy. In addition, it requires the utility to source at least the total amount of renewable energy that is being purchased through the program.

Kentucky Utilities Green Energy Program

Bluegrass Energy Green Energy Program

- E6. Replace incandescent lights with compact fluorescent lights (CFLs) 25-50%.
- E7. Replace incandescent lights with compact fluorescent lights (CFLs) 50-75%.
- E8. Replace incandescent lights with compact fluorescent lights (CFLs) 75-100%.
- E9. Replace incandescent or CFL lights with LED lights 25-50%.
- E10. Replace incandescent or CFL lights with LED lights 51-75%.
- E11. Replace incandescent or CFL lights with LED lights 76-100%.

Certified commercial light fixtures use at least 75% less energy and last 10–50 times longer than incandescent lighting. Plus, certified fixtures produce low heat and LED options provide optimal precision lighting for commercial applications.

Resources

**Lighting Choices Video** 

**EPA Lighting Standards** 

**Lighting Facts** 

**Commercial Lighting Fixtures** 

Efficiency Savings

### E12. Upgrade all Exit signs to LED.

Exit signs that utilize incandescent bulbs can create a substantial energy drain over time since they remain constantly lit. Replacing incandescent bulbs with LED bulbs can save up to \$40 per year per fixture over the 25 year life span of the bulb. This is an example of an easy to implement change that requires very little up-front cost or effort that can make a measurable difference on your bottom line.

#### **Resources**

**EPA Factsheet on LED Exit Signs** 

### E13. Delamp vending machines.

Vending machine lights are another example of unnecessary energy usage that often goes unnoticed. This issue can be remedied by contacting your vending machine supplier and asking about switching to vending machines with variable lighting that only engages when the machine is in use or by simply removing light bulbs from the machines altogether.

#### **Resources**

**Energy Star Vending Machines** 

## E14. Achieve a year-over reduction in energy usage from the baseline of at least 5%.

Tracking your energy usage using an energy calculator tool (such as Energy Star Portfolio Manager) will enable you to establish as baseline for your energy consumption. After establishing your usage baseline we recommend your next step to be to identify potential areas of improvement (with help from Bluegrass Greensource Outreach Staff) and formulate an attainable plan of action to reduce your consumption. Using this plan as a road map you will be able to implement energy reduction strategies in a stepwise process, with the assistance of Bluegrass Greensource, to reach established benchmark goals throughout the year.

### E15. Establish a regular filter maintenance policy for your HVAC system.

Routine scheduled HVAC maintenance is the best way to ensure that your system is continually operating at the most efficient level possible. In addition, keeping detailed reports of scheduled maintenance will provide you with a vital tool for tracking the performance of your HVAC system over its lifetime. These reports are useful for long term planning to prepare for eventual system replacement.

#### Resources

**EPA Maintenance Checklist** 

## E16. Have your HVAC system evaluated every 2 years by a certified service provider.

In addition to performing and documenting routine HVAC maintenance, it is important to have your HVAC system evaluated by a certified service provider on a regular basis. We recommend every two years as a good benchmark for evaluation as this will help identify preventative measures and diagnose potential major issues before they become dire.

#### **Resources**

Contractor Checklist

# E17. Establish a policy for purchasing that requires Energy Star rated appliances and electronics.

Energy Star appliances meet minimum standards for efficiency that will help you save money and reduce the need for unnecessary power production. These appliances and electronics have been verified to save power while delivering the same performance as non-efficient alternatives. Although these appliances and electronics can seem costly at first glance, the savings you will realize over the lifetime of the product will more than offset the initial investment. By establishing a policy for purchasing Energy Star products you will be able to avoid the high initial costs of replacing everything at once and ensure that wise decisions are made when the time comes for replacing aged appliances and electronics.

#### Resources

<u>Energy Star Appliance and Electronics</u> Program

### E18. Establish a dress code that encourages employees to dress for thermal comfort.

A flexible dress code will allow employees to more easily adjust to the ambient temperatures within your business or organization and reduce the need to overheat or overcool the building.

### E19. Assess energy consumption by conducting a plug load inventory.

Identifying and creating and inventory off all devices drawing power in your work space will help establish a baseline for energy consumption.

# E20. Install power strips for computers and equipment to power down during non-business hours.

This simple and relatively inexpensive strategy is a great way to combat the issue of "phantom/vampire energy loss". Computers and other electronic devices that are constantly plugged in create significant energy losses even when they are turned off or in "sleep mode". Although the amount of energy loss per device is seemingly small, the combined effect of similar devices within your workspace can take a sizeable toll (up to an additional 10%) on monthly energy bills. Connecting devices to power strips, along with educating and encouraging employees about shutdown policies, will go a long way in avoiding these costly energy drains.

#### Resources

**Energy Vampires** 

Plug Load

**Phantom Power** 

# E21. Install programmable thermostats and use them to adjust temperature during unoccupied hours.

Heating and cooling during unoccupied hours accounts for one of the biggest sources of energy inefficiency among businesses and organizations. Luckily, this is also one of the most easily remedied issues thanks to the use of programmable thermostats. By installing programmable thermostats you will be able to set automatic schedules for heating and cooling based on when the building is occupied. Many systems also offer indoor/outdoor resets that allow the system to automatically adjust to outdoor ambient temperatures, further improving system efficiency and lowering costs.

#### Resources

### **Programmable Thermostats**

# E22. Install occupancy sensors in bathrooms, meeting room, and other infrequently used areas.

Even the most energy efficiency minded of people can forget to turn off lights when leaving a room. Installing occupancy sensors in bathrooms, meeting rooms, laundry rooms, and other infrequently used areas is a great way to combat this issue and lower costs related to unnecessary lighting in unoccupied rooms.

#### Resources

Factsheet from MACED

Occupancy Sensors

### E23. Conduct an energy audit or assessment (within the last three years).

An energy audit allows you to get a snapshot of potential upgrades or fixes that could lead to big savings. A professional auditor will be able to pinpoint areas where you are losing energy through the building envelope, where equipment is not functioning at peak efficiency, or where waste is occurring. All auditors will provide you with a report that will help you build the energy section of your Sustainability Plan.

#### **Resources**

Bluegrass Greensource Energy Efficiency

<u>LFUCG Energy Efficiency Information</u>

### E24. Install or upgrade to energy efficient fans.

Energy Star Certified fans are 60% more efficient than conventional fan/light units, which can save you more than \$15 per year on utility bills thanks to improved motor/blade designed. In addition to the installation of energy efficient fans, it is also important to establish an interoffice policy regarding shutting off fans when rooms are not occupied.

### **Resources**

**Energy Efficient Fans** 

## E25. Install energy efficienct (i.e. Energy Star) rated windows in all conditioned spaces.

Energy Star certified windows, doors, and skylights can reduce your energy bills by an average of 12% nationwide. Converting all windows in your facility at one time can be an expensive undertaking. One way to help lessen this cost is by establishing a policy for purchasing Energy Star rated windows when performing regularly scheduled replacements and upgrades. An energy audit is a great way to assess your current energy losses and identify potential areas for improvement in order to prioritize your efforts.

#### Resources

**Energy Star Rated Windows** 

### E26. Insulate roof to control energy loss.

Heating and cooling accounts for a third of the energy consumption of non-residential buildings in the U.S. Much of this energy is lost through the building's roof. Inspecting and insulating the roof of your building is an effective way to limit the amount of energy loss and lower your energy costs related to heating and cooling.

#### Resources

**Energy Efficient Roofing Products** 

Other Types of Efficient Roofs

## E27. Install efficiency-rated HVAC of minimum standard SEER rating of 14.0.

Today's best air conditioners use 30% to 50% less energy to produce the same amount of cooling as air conditioners made in the mid 1970s. Even if your air conditioner is only 10 years old, you may save 20% to 40% of your cooling energy costs by replacing it with a newer, more efficient model. Central air conditioners are rated according to their seasonal energy efficiency ratio (SEER). SEER indicates the relative amount of energy needed to provide a specific cooling output. Many older systems have SEER ratings of 6 or less. The minimum SEER allowed today is 13. Look for the ENERGY STAR® label for central air conditioners with SEER ratings of 13 or greater, but consider using air conditioning equipment with higher SEER ratings for greater savings.

#### **Resources**

What's a SEER?

### E28. Take measures to insulate HVAC system and ductwork to minimize heat loss.

Updating your HVAC system can be a costly undertaking, especially depending on the size of your building. One alternative to a complete replacement can be insulating your current HVAC system and ductwork to minimize energy loss and improve the overall efficiency of your system.

#### Resources

**Guide to Insulating Ductwork** 

Insulation Factsheet

Requirements for Commercial Buildings

## E29. Assess building envelope and address any leaks.

Making the commitment to a full-scale professional audit can be costly and time consuming. Luckily, there are many ways you can address energy loss within your facility on a smaller scale. One of the best ways to accomplish this is by assessing the envelop of your building by ensuring that all windows, doors, ceilings, and floorboards are adequately insulated against air leaks. Even small leaks around windows and doors can pose a significant source of energy loss over time and can greatly impact your utility bills. Bluegrass Greensource provides energy audit kits (as well as personal consultation) free of charge to help identify current problem areas and formulate a plan of action to address these issues and improve energy efficiency.

#### **Resources**

### The Building Envelope

### E30. Perform external lighting audit.

Unnecessary external lighting can be a significant drain on energy usage and costs. Performing an audit is the first step to determine your energy usage and establish a policy for shutting down external lighting at the end of the day. Additionally, if you have security concerns, motion sensor lights are a good way to minimize costs while ensuring the security of your facility.

#### **Resources**

Conducting a Lighting Audit

Exterior Lighting Guide

## E31. Daylight work spaces wherever possible.

Using natural sunlight to light work spaces is an excellent way to not only minimize energy costs but also increase the livability of your facility. Adjusting work area layouts to incorporate natural light you will save on your utility bills with the added bonus of increasing the aesthetic appeal of your workspace and boosting productivity and morale among employees.

### **Resources**

**Daylighting** 

Daylighting 101 Video

### \*\*\*R1. Implement a basic recycling program.

To implement a program, you will need to acquire an external service container, interior containers, and train your employees on your program.

### \*\*\*R2. Conduct a waste audit (within the past two years).

Waste audits are a great way to establish a baseline picture of your waste stream, set goals for waste reduction, and monitor your progress. Bluegrass Greensource can provide free waste audits on a regular basis. Large manufacturers or businesses with non-typical materials streams may need to hire a contractor who provides large-scale waste auditing services.

### \*\*\*R3. Provide clearly marked recycling bins at each work station.

For a recycling program to be successful, it is imperative that employees be able to readily access containers. We find that centralizing waste collection in fewer locations and distributing recycling collection more widely is the most effective efficient means to achieving this goal.

### \*\*\*R4. Train and require janitorial staff to segregate waste and recyclable materials.

We find that far too often the work of separating recycling from waste is undone by inattention or confusion on the part of cleaning staff. Communicate with the staff or companies responsible for gathering your materials and taking them to the exterior collection point to ensure that they understand your recycling program. Keeping materials separate throughout the entire chain of custody will prevent your efforts from being in vain.

### \*\*\*R5. Use reusable mugs and dishware instead of disposable plates, cups, and utensils.

Providing reusable plates, bowls, cups, and flatware for employees is a great way to reduce waste from disposables. This requires a kitchen area with a sink, so may not be practical for all organizations. However, for those who do have the appropriate facilities, this activity can have a large cumulative impact.

# \*\*\*R6. Establish a policy for environmentally friendly printing such as two-sided printing, reusing copy paper, and electronic document sharing.

Paired with recycled paper, this initiative has the ability to significantly reduce your organization's environmental impact on forests.

### R7. Establish an electronic waste policy that diverts all e-waste away from landfill.

Electronics and other electrical devices are often full of recoverable materials such as steel, aluminum, gold, among others. In addition, many electronics contain toxic materials that can escape into the environment. Recycling these items through a recovery facility will keep valuable and potentially toxic materials out of landfills. We recommend using a recovery facility that does not ship items overseas to be processed.

### R8. Create a landfill diversion goal.

Setting targets for landfill diversion is an important way to maintain and perhaps expand your recycling program.

# R9. Replace at least 50% of paper stock with minimum 30% post-consumer content recycled paper.

Utilizing paper with a minimum of 30% post-consumer content reduces the need to harvest virgin wood.

### R10. Develop or participate in an existing composting program.

Until curbside composting pickup is available city-wide, this item will be difficult to complete for most organizations. Until that time, there are some smaller initiatives that will help start you down this road. Composting pre-consumer waste like fruit and vegetable scraps, lawn clippings, and leaves on-site is a great option for those who have the space. For restaurants and coffee shops, participating in the Compost Partners program with local non-profit Seedleaf is another options. For those in a municipal compost pilot area, participation in that program is another option.

## R11. Host, sponsor, or participate in a zero-waste event.

A zero-waste event diverts a minimum of 90% of the materials collected away from the landfill. This material is diverted to recycling and composting. By hosting, sponsoring, or participating as a vendor at a zero-waste event, you are helping to promote waste diversion to your employees, patrons, and the general public.

#### **Resources**

Zero Waste International Alliance

## Water Conservation

# \*WC1. Assess, track, and document water consumption using ENERGY STAR Portfolio Manager or similar program.

Establishing a baseline for water consumption is the first step towards assessing your current water usage and identifying potential areas of improvement. Similar to energy usage, EPA's ENERGY STAR Portfolio Manager offers a free tool for recording and tracking your water usage as well.

WC2. Conduct a water audit within the last three years. Monitor and record water usage, check indoor and outdoor pipes and fixtures for drips and leaks.

A water audit allows you to get a snapshot of potential upgrades or fixes that could lead to big savings. A professional auditor will be able to pinpoint leaks in indoor and outdoor pipes, identify equipment and appliances that are not functioning at peak efficiency, and recommend other means to improve water conservation at your facility. All auditors will provide you with a report that will help you build the energy section of your Sustainability Plan.

# WC3. Establish a policy for purchase of high efficiency (i.e. WaterSense) rated fixtures and appliances.

WaterSense fixtures and appliances meet minimum standards for efficiency that will help you save money and reduce unnecessary water consumption. These fixtures and appliances have been independently certified to perform well; help save water, energy, and money; and encourage innovation in manufacturing.

#### Resources

WaterSense

## Water Conservation

### WC4. Install water efficient faucets in all of the restrooms.

High–performing, water–efficient fixtures help reduce water use and save money on water bills. Fixtures that use a maximum of 1.5 gallons per minute can reduce a sink's water flow by 30 percent or more from the standard flow of 2.2 gallons per minute without sacrificing performance.

#### Resources

**Efficient Fixtures** 

Reducing Hot Water Usage

**Quantity Quotes** 

#### WC5. Install water efficient toilets in all of the restrooms.

Inefficient toilets can be one of the largest culprits of water loss within your facility, and can contribute significantly to your water bills. Recent advancements have allowed toilets to use 1.28 gallons per flush or less while still providing equal or superior performance. This is 20 percent less water than the current federal standard of 1.6 gallons per flush.

#### Resources

Water Efficient Toilets

### \*\*\*WQ1. Establish a policy for proper hazardous waste disposal.

Not only is hazardous waste dangerous for the wellbeing of your employees and customers it also poses a significant threat to the surrounding environment. If proper disposal methods are not utilized hazardous waste can often end up in storm drains where it flows directly, untreated, into the surrounding groundwater, streams and rivers. Having a clear policy outlining specific disposal methods is the first step in ensuring that this waste is handled properly and no longer poses a threat to the surrounding environment.

#### Resources

Dispose of Hazardous Waste in Lexington

### \*\*\*WQ2. Organize or participate in a storm drain stenciling.

Although internal stormwater pollution measures are very important, educating the public is also a key factor in helping mitigate stormwater pollution on your property. Storm drain stenciling is a simple yet effective way to remind people that storm drains lead directly to waterways and that anything dumped within them is deposited directly, untreated, into neighboring streams.

### Resources

Storm Drain Marking

\*\*\*WQ3. Establish a policy for proper disposal of fats, oils, and grease, distribute to staff, and post in key areas.

Improper disposal of fats, oils, and grease (FOG) can lead to major issues with your sanitary sewer system. When FOG is deposited down sink drains, even when flushed with hot water, it will eventually solidify and build up over time leading to blockages and eventual costly line backups or even breakages. Because sewer lines are hidden underground, these blockages often don't become apparent until the situation becomes dire, leading to costly mitigation measures after the fact. The best way to combat this issue is through proactive action by educating staff/tenants about proper FOG disposal as well as maintaining regular scheduled maintenance of lines to catch problems before they become dire.

#### **Resources**

Disposing of FOG

Grease Traps

Why is FOG bad?

## WQ4. Harvest rainwater through rain barrel system.

One way to mitigate stormwater pollution is to reduce the amount of rainwater overflow on your property by capturing it before it can reach the ground. Installing a rain barrel is a great way to accomplish this on your property. Rain barrels connect directly to your downspout and capture water that would normally inundate your property's groundwater during rain events. By diverting the water into the rain barrel instead of the ground you will be able to mitigate water pooling during heavy rain events and prevent excess rainwater from washing debris (litter, leaves/grass, automotive fluids from parking lots, etc.) into storm drains leading directly into neighboring waterways.

#### Resources

#### Rain Barrel Factsheet

# WQ5. Perform a stormwater pollution survey on your property with BGGS staff or other qualified professional.

Stormwater pollution not only decreases the aesthetic appeal of your property but also poses a major threat to your surrounding environment. Performing a stormwater pollution survey on your property is a good way to identify existing areas of concern and formulate measures that you can take to mediate current issues and prepare for future problems. BGGS staff is available to assist you with a stormwater pollution survey to assess your property and offer recommendations to mitigate your stormwater pollution.

# WQ6. Establish preventative maintenance program for sanitary sewer lateral lines on your property.

Establishing a regular preventative maintenance program for your sanitary sewer lines is the best way to ensure that your system is functioning at peak efficiency and to diagnose any potential issues before they become a major problem.

# WQ7. Post information in restrooms about proper disposal of flushable wipes and other items.

Even wipes and other products that claim to be "flushable" can pose major issues by causing blockages in sewer lines and once they reach the sewer treatment plant. The best way to avoid these issues is to educate your employees and customers about proper disposal of these products.

### WQ8. Coordinate or participate in a community litter clean-up.

Litter on the ground (especially on roads and parking lots) can end up being washed into storm drains during rain events where it is eventually deposited in nearby waterways. This can posses a very serious threat to water quality in the area and can have a dramatic effect on biodiversity, stream health, and the aesthetic appeal of your surrounding environment. Litter clean-ups are a great way to engage the community at large to take an active role in protecting water quality and increasing the overall livability of your area.

WQ9. Install outdoor ashtrays to prevent cigarette litter, and make pocket ashtrays available to staff who smoke.

Discarded cigarette butts represent one of the most common and environmentally harmful forms of litter due to the host of toxic chemicals they contain and the lengthy time it takes for them to biodegrade. Even if you operate a smoke free workplace, there will undoubtedly be employees or customers on your property who choose to smoke. The best way to encourage proper cigarette disposal on your property is to install outdoor ashtrays and designate areas for smokers to congregate and with clearly marked instructions for employees or patrons to safely dispose of their litter.

#### Resources

<u>Cigarette Litter Fact Sheet</u>

**Environmental Impact of Cigarette Butts** 

### WQ10. Before washing parking lots, sweep debris/litter and do not use cleaners.

Even when proper measure are taken to mitigate litter in and around your facility litter will undoubtedly find its way onto your property. Sweeping up debris/litter before washing your parking will ensure that these items are not washed down into storm drains where they will eventually end up in neighboring streams and waterways.

# Urban Forestry and Landscapes

## \*\*\*U1. Participate in a community reforestation project.

Our forests provide essential wildlife habitat, plant and animal biodiversity, clean water, aesthetic benefits, and recreational opportunities. Urban and rural reforestation projects play an important role in establishing or restoring native trees to a site. Reforestation includes planting native trees that are well-adapted to the area. Individuals or groups can participate in planting trees at local or regional reforestation events:

#### Resources

Reforest the Bluegrass

Reforest Frankfort

Reforest Northern Kentucky

# U2. Assess the ecosystem services of trees on the property using the National Tree Benefits Calculator.

Ecosystem services are the beneficial processes that existing natural systems provide to people. The National Tree Benefit Calculator allows the public to make an estimation of the benefits individual trees provide. After inputting location, species and tree size, you will get an understanding of the environmental and economic value that your property's trees provide on an annual basis.

#### Resources

<u>Tree Benefits Calculator</u>

# Urban Forestry and Landscapes

### U3. Establish a sustainability statement for landscape contracts.

Sustainable landscaping includes a array of practices that have been developed in response to environmental issues. Sustainable landscapes provide clean air and water, increase energy efficiency, restore habitats, and add economic, social, and environmental value. These practices are used in various components of landscaping, including design, construction, implementation and management of small and large landscapes. Whether you own or lease your property, establishing a sustainability statement will help guide landscape contractors in implementing sustainable practices.

### U4. Establish a native species-only plant replacement policy for tree and shrub planting.

Native trees and shrubs provide essential benefits to our environment. They have evolved to live in the regional climate, local soil types, and with animals indigenous to the area. Native trees and shrubs typically require less water, are lower maintenance, have few pests, benefit wildlife, and can provide a corridor to adjacent wildlands. Developing a native species-only plant replacement policy on your property will enhance your property and will provide these essential benefits. Refer to Bluegrass Greensource's Native Tree and Shrub Guide for further information on species and site requirements.

# Urban Forestry and Landscapes

### U5. Remove all invasive species from property.

Invasive plants are those that have ability to thrive and spread aggressively outside their native range. Invasive species compete with native species for sunlight, moisture, nutrients, and space. The presence of invasive species affects plant diversity, degrades wildlife habitat and water quality, increases soil erosion, and decreases recreation opportunities. Removing invasive trees and other plants will improve the overall health of your property.

#### Resources

Kentucky Exotic Pest Plant Council's Invasive Species List

# U6. Establish an Integrated Pest Management policy to reduce use of pesticides in the landscape.

Integrated pest management (IPM) is a process used to solve pest problems. It focuses on the prevention of pests or their damage through a combination of biological, cultural, mechanical, and chemical techniques while minimizing risks to people and the environment. Create a policy that requires landscape contractors to use IPM in routine maintenance of property.

### Resources

NPIC's Integrated Pest Management
Guidelines

## Urban Forestry and Landscapes

# U7. Establish environmentally friendly lawn care policies to reduce chemical pesticide and fertilizer use.

Prevent problems in your lawn before they occur. A healthy lawn can out-compete many weeds, and survive insect and disease infestations. Lawns should have healthy soil, a grass type that thrives in our climate, should be mown high and often, watered deeply but infrequently, and should have adequate thatch build-up.

#### Resources

EPA Healthy Lawn, Healthy Environment Guidelines

#### U8. Plant a pollinator garden.

Most flowering plants rely on bees, butterflies, and other animals for pollination. Pollinators are essential for maintaining healthy ecosystems. Habitat loss, pollution, diseases, and pesticide poisoning has caused a steep decline in pollinators. Planting a diversity of native nectar and pollen sources can counteract this decline, and can add natural beauty to the landscape.

#### **Resources**

Attracting Pollinators to Your Garden Using Native Plants

<u>Selecting Plants for Pollinators</u>

## Urban Forestry and Landscapes

## U9. Plant a rain garden.

A rain garden is a shallow depression that captures and treats runoff from impervious surfaces, such as rooftops, patios, driveways, and parking lots, before it enters the stormwater system. They use natural processes to improve water quality by filtering pollutants and reducing the amount of stormwater runoff. The water easily infiltrates into the soil because of the deep roots of native plants, where it is filtered of pollutants and recharges the groundwater supply. Native plant species are recommended for rain gardens because of their extensive root systems and tolerance to local weather conditions and fluctuations. Their deep root structures break up the soil and help more water infiltrate into the ground. A variety of native flowers, ferns, grasses, sedges, and shrubs can be used to customize the look of your rain garden.

#### Resources

Bluegrass Greensource's Rain Garden Manual

## Urban Forestry and Landscapes

### U10. Audit irrigation system for leaks (within last three years).

Leaks in your irrigation system won't always show up on your meter due to their separate shut-off valves. To determine if your irrigation system has leaks, walk the irrigation lines and check for unusually wet spots or broken or leaky sprinkler heads. Locate all hose bibs and check for leaks and drips. Replace the washers if there are any drips. Use your meter to measure total irrigation use.

#### Resources

EPA's Watersense Irrigation Audit Checklist

### U11. Adjust irrigation system to water during cool periods and wet weather.

Set your irrigation system to water only during early morning hours to prevent unnecessary evaporation loss. During periods of rainfall, manually override the system to prevent excessive use of water.

## Sustainable Purchasing

### \*\*\*SP1. Establish a policy for reducing the toxic chemicals/materials in your workplace.

Reducing toxic chemicals in your work-place can be as simple as checking the labels on the products you use such as cleaning supplies, packing materials, etc. From here you will be able to create a written policy to eliminate products that include toxic chemicals and institute a standard to only purchase safe, environmentally friendly products. Additionally, contacting your suppliers and ensuring that they adhere to similar purchasing standards is an important next step to eliminating toxic chemicals/materials in your workplace.

# \*\*\*SP2. Establish a policy to eliminate Styrofoam cups and plates for use at the workplace or at events.

Styrofoam is problematic for a number of reasons. It takes up a lot of space in trucks and landfills, it breaks apart and readily escapes into the environment, and it is widely dispersed when it does. Eliminating Styrofoam completely is the best course of action. Removing Styrofoam from the waste stream prevents it from clogging landfills and escaping into rivers and oceans, where it can persist for centuries and release hazardous toxins as it breaks down. These harmful side effects can be eliminated by purchasing and using Styrofoam alternatives such as paper, or reusable plates and cups.

#### Resources

What's Wrong with Styrofoam?

## Sustainable Purchasing

### SP3. Establish a policy for purchasing products locally, if available.

Purchasing locally whenever possible has two benefits. It lowers consumption of fuels for transportation and stimulates the local economy. By establishing a policy for purchasing locally you will help protect the environment and encourage economic growth within your community.

#### Resources

Why Buy Local?

**Local First Lexington** 

### SP4. Establish a policy to purchase/lease EPA SmartWay Certified fuel-efficient vehicles.

Vehicles that are EPA SmartWay Certified meet certain requirements for fuel efficiency with the goal of reducing transportation-related emissions that affect climate change, reduce environmental risk for companies and increase global energy security. Establishing a policy for purchasing, leasing, and renting vehicles that meet these standards helps ensure that your company is making strides to reduce your environmental impact as well as your bottom line transportation costs.

#### **Resources**

**EPA SmartWay Certified Vehicles** 

## Sustainable Purchasing

## SP3. Establish a policy for purchasing environmentally-friendly cleaning products.

Websites such as Green Seal offer a certification process for products that meet certain green criteria and provide a useful tool in determining which products are environmentally friendly and which to avoid. Including your purchasing policy as part of your custodial service provider contracts is a good way to ensure that the purchasing standards you set forth are followed.

#### **Resources**

Green Seal

**Green Cleaning Products** 

\*\*\*T1. Establish an incentives program for employees to use alternative transportation, such as carpooling, bicycling, or use of public transit.

Dollar for dollar, transportation efficiency incentive programs can have one of the greatest impacts on employee health and happiness as well as greenhouse gas reductions. Because these benefits are not taxable in most circumstances, the employees gain a valuable incentive to use active transportation such as walking or bicycling or alternative modes such as mass transit or carpooling.

#### Resources

**Employer Transportation Tool Kit** 

### \*\*\*T2. Establish and implement a no-idling policy.

Idling vehicles, especially those with diesel engines, waste resources and money and create environmental hazards. Diesel engines emit pollutants that can cause or aggravate a variety of health conditions such as asthma, other respiratory illnesses, and heart disease. Long term exposure to diesel exhaust can also cause lung cancer. People with asthma or other respiratory/cardiac conditions, and children whose lungs are still developing, are particularly vulnerable.

In addition, idling vehicles waste money. A six-cylinder diesel vehicle that idles for one hour a day wastes more than \$1600 worth of fuel over the course of a year (with fuel at \$2.50/gallon).

#### **Resources**

Sample No-Idling Policy

## T3. Hold an employee seminar highlighting alternative modes of transportation.

Transportation efficiency is one of the key components of a sustainable operation, and yet it is the most often overlooked. Emissions from transportation account for 27% of all greenhouse gas emissions nationwide. Commutes to and from a place of business, business travel, and shipping and logistics account for a large portion of this figure. Working to make employee commutes more sustainable and business travel more efficient will help to reduce these emissions.

#### **Resources**

#### Greenhouse Gas Emissions

## T4. Conduct a commuter or employee transportation survey.

A survey is a great way to assess your employees' current transportation usage, and gauge their receptiveness to alternative transportation. For example transportation surveys or assistance in crafting your own, please contact Bluegrass Greensource.

### T5. Adopt a telecommuting option and make it available to employees.

Telecommuting is a great way to reduce Vehicle Miles Traveled (VMT). Employees who at least occasionally work from home will reduce greenhouse gas and toxic pollutant emissions, reduce roadway congestion, and improve efficiency.

## T6. Designate parking spaces for hybrid vehicles and/or install EV charging stations.

Placing parking for efficient vehicles or EV charging stations in prime locations will help to raise the profile of these vehicles, incentivize adoption of these vehicles, and promote your sustainability program.

### T7. Install a bike rack with sufficient space for at least 10% of your employees.

One of the greatest barriers to bicycle commuting is a lack of vehicle storage. Bicycle storage takes a fraction of the space that car storage does, and provides a key support mechanism for employees wishing to commute using this type of active transportation. Bicycle infrastructure outside of a business also communicates to employees and patrons a dedication to supporting sustainable transportation solutions.

### T8. Install weather-protected bike storage (indoor or outdoor).

For some bicycle commuters, all that is needed is a place to store their vehicle. For others, storage that is protected from the elements is necessary. Bicycles can range into the thousands of dollars in cost. Unlike a car, most components on a bicycle are exposed to the elements, and outside storage can take a toll. Providing parking with shelter from the elements will help protect your employees' investments and make sure their seat is dry for the ride home.

### T9. Participate in a bike to work challenge.

Bike Lexington holds an annual bike-towork Commuter Challenge. Participation in this free event is a great way to get your employees inspired to use a bicycle for transportation as part of a fun and friendly competition.

#### **Resources**

Bike Lexington Commuter Challenge

## T10. Place bicycle storage closer than any other designated parking spot.

Placing bicycle storage in an out-of-theway, inconvenient space communicates that bicyclists are not valued or welcome. Instead, placing your storage front and center at the main entrance to your building, closer than any other vehicle storage spot communicates that you appreciate your employees' dedication to active transportation and lets visitors and patrons know that you value sustainable transportation solutions.

#### N1. Become LEED certified.

LEED (or Leadership in Energy and Environmental Design) is a certification platform for buildings that scores them in a number of categories and provides tiered award levels based on minimum scoring thresholds. LEED certification can be obtained for new construction, building shell, interiors, and existing building operations and maintenance.

#### **Resources**

US Green Building Council's website

#### N2. Become Green Globes certified.

Green Globes is a third-party sustainability certification program for building design and operation managed by the Green Building Initiative. Similar to LEED, it provides certification for existing buildings or for new construction.

#### **Resources**

Green Globes website

### N3. Become Energy Star certified

Buildings that score 75 points or higher on Energy Star Profile Manager are eligible to be Energy Star Certified. Energy Star Certification requires annual third party verification.

#### **Resources**

**Energy Star Certification for Buildings** 

### N4. Implement zero waste to landfill.

Most organizations send the majority of their waste materials to landfills. Those that recycle can often divert a significant amount but may not even reach a 50% diversion rate. Implementing a zero waste to landfill program requires three components: a traditional recycling program, such as that offered by the city or a private hauler, a composting program to divert food and other organic waste, and finally, a program to deal with materials that do not fit into either of those categories, such as industrial waste and scrap or hazardous materials. There will always be a small amount of waste that must be sent to conventional landfills, however, a generally accepted threshold for zero waste is a 90-95% diversion rate.

### N5. Install a permeable parking lot.

A permeable parking lot mimics the stormwater flow regime that existed prior to development. When an area is unpaved or not otherwise built upon, rain will percolate into the soil and flow slowly through vegetation before it reached streams. On the other hand, paved areas or areas with buildings will typically shed almost all of that water through pipes in a very short amount of time. This leads to several problems in streams, including erosion and the transportation of pollutants and sediments. Permeable lots will address these issues by allowing water to percolate underneath the pavement during rain events, and then be released slowly over time, mimicking a more natural process.

### N6. Install a green/living roof.

Green roofs have many benefits. They reduce the amount of water shed from buildings during rain events, as the soil stores the water and plants take up excess moisture. They also act as a thermal insulator, preventing heat loss and gain through the roof. In addition, they provide much needed habitat spaces for pollinators in urbanized areas that might otherwise not provide a hospitable environment for these important parts of our ecosystem.

#### N7. Install a green wall.

A green wall functions in much the same way as a green roof except that they provide thermal insulation and shade along a wall that gets a lot of direct sunlight during the summer, but could benefit from direct light during the winter when the plants have lost their leaves.

#### N8. Install a 300-gallon or above water catchment system.

In much the same way as a parking lot, a water catchment system is intended to reduce the impact of development on area streams by storing water on-site. Additionally, a water catchment system is most often paired with on-site use as greywater for things like watering land-scaping, washing equipment, or flushing toilets.

## N9. Generate energy from renewable resources such as solar or wind power on-site.

Installing renewable energy systems on site will have many positive impacts. They will provide tax credits, reduce your energy usage, especially during peak load times, and by their nature as external equipment, advertise your commitment to sustainable solutions.

#### **Resources**

<u>Information on Renewable Energy Tax</u> <u>Credits</u>

N10. Innovation of choice, up to 50 points.