GIVING
CHARITIES GREEN

Assessment Template

You do not need to be technically inclined to do this assignment, but don't shy away from going outside of your comfort zone! Start with the easy (*) and work toward the more difficult (**). You will definitely need the assistance of someone from the maintenance or property team to discover the technical (***) items (even those who are technically inclined) as the information is specific to the building and its operations. Same for the IT questions. The more you can figure out, the better the picture you can draw.

Level of Task Difficulty

(*) easy (**) more difficult (***) technical / maintenance person needed

As you start to look at your building, you may start to wonder how one part of the building consumes energy relative to another. This is a simple view to give you a sense of relative scale.

BASIC INFORMATION

Start by gathering some basic data about your organization. I have created an assessment template at www.GivingCharitiesGreen.com to help gather this information.

☐ **Number of employees (*):**

If possible, see if you can break it down to full-time and part-time. If you can also determine the typical number of volunteers, note that as well.

☐ **Number of sites/locations (*):**

If you can, get a list of each site name, address, square-footage, type of program(s) you deliver, contact information, whether the site is owned vs. leased. Determine if they have a green team, and capture their contact name and info. Do one per building.

1. _____
2. _____

PROPERTY: _____

OPERATIONAL INTIATIVES

Dive into your work environment, head office, and areas you and colleagues spend time and work. This potential list is so large, that it is literally endless. You are limited by your imagination.

Tweet other ideas (@givinggreen "ops checklist")

In the meantime, start with the following, and add more of your own that you discover while asking around:

- **General Recycling in your places of business:**

☐ Are there blue bins for paper (*)? Yes / No

☐ Are there green bins for food in the office spaces (*)? Yes / No

☐ Does the cleaning staff actually recycle the paper at the end of the day/week (**)? Ask your maintenance person - they'll know. One trick is to see if they have garbage bins and recycling bins in the loading dock or maintenance areas. Yes / No

☐ Is your organization recycling batteries (*)? Yes / No

Did you know that batteries take up 2-3% of landfills by volume but contribute up to 85% of the hazardous materials in many landfills! This would be a great initiative to start if you don't already have this program in-place!

☐ What happens to old computers and monitors when they are retired (**)? Ask someone in IT - they'll know. Answer: _____

- **Printer Paper:**

☐ Check to see if it is FSC Certified and/or has recycled content on the packaging (*).

☐ FSC? Yes / No ____% Recycled Content

☐ Are printers settings defaulted to printing double-sided (**)? Yes / No

- **Recycling in the Kitchen/Eating Areas:**

☐ Is there recycling for paper and plastics (*)? Yes / No

☐ Is the organic food waste being captured separately (*)? Yes / No

☐ What types of cups are being used (styrofoam, paper, food based, ceramic/glass, etc) (*)? _____

☐ Is there a sink to wash dishes(*)? Yes / No ☐ Dishwasher(*)? Yes / No

- **Look in your Bathrooms & Kitchens:**

☐ Look at the labels on the toilet paper, paper towels, tissue paper – are these products FSC Certified, have an "Eco-logo" and/or contain recycled content (*)?

More on water consumption down below.

☐ FSC ☐ Eco-logo ☐ Other

- **Meetings:**

Cold Beverages (*):

☐ Do people typically offer bottled water or water pitchers with glasses?

☐ Are you encouraged to bring reusable water bottles?

Hot beverages (*):

☐ Do people have re-useable cups? ☐ Disposable or biodegradable stir sticks?

☐ Reuseable mugs?

Food (*):

☐ Is it served on washable plates vs. paper or plastic?

☐ Is there a culture of fast-food with a lot of packaging or locally grown thoughtfully packaged food?

☐ Where is food being ordered from?

_____ _____

_____ _____

1. EXISTING GREEN CULTURE

Look at how your programs and/or services operate. Try to understand what existing programs, meetings and events are focused on being green. Anything related to green - regardless of who started it, why it was started, when it was started. It should all be captured and labeled green.

☐ Are there any Green Teams, Environmental Teams, or people that are pushing the above types of initiatives (*)? Note how many, where they are located, and try to figure out their outputs and impacts (**).

☐ Identify the green leaders (*).

_____ _____

_____ _____

_____ _____

_____ _____

☐ Do you bring in speakers or companies that have themes related to green topics (*)?

☐ Are there cleanup days at the local park (*)?

☐ Are there bike to work days (*)?

☐ Do you have bike racks at your site (*)?

PROPERTY: _____

☐ Do you have showers at your office (*)?

☐ Are there existing programs that address environmental issues (**)? Be creative - they might not have been started to save the world, just to teach or educate people based on their circumstances, and are also ecologically friendly.

_____ _____

_____ _____

Notes/Cool ideas:

2. BUILDING EFFICIENCY:

Explore the world of facilities and building operation and start to understand how your organization's physical assets impact the planet.

As you start, I would recommend you buy your maintenance person a coffee for 15 minutes of their time, and have them help you answer these questions. Coffee is the currency of the construction and maintenance world (while on the clock.) They will probably love to take you on a tour of the building as you are one of the few people enlightened enough to engage them in this type of conversation. Ask lots of questions!

Key Question: Who is the leader in your organization for implementing energy efficiency? Answer: _____

- Electrical Efficiency: Lighting, air-conditioning, and the devices we plug in tend to be the biggest users of electricity. Look for some of these items to get a sense of your building's efficiency:

Basic Lighting (**): Are the round light bulbs in the ceilings, desk lamps or on the walls Compact Fluorescent Lights (CFLs) with a "screw" on the top, or the traditional style (incandescent)? LEDs are now more mainstream and show evidence of recent good decisions. Are you seeing these? If you are seeing a combination, then focus on the incandescent – those are evidence that change is not happening fast enough.

☐ Incandescent ___% ☐ CFL ___% ☐ LED ___%

Fluorescent Lighting (**): Do the rectangular lights in the ceiling (typically fluorescent) have bulbs that are about one inch in diameter - the size of a toilet paper core (if so they are inefficient T12 lights that are no longer even made) or the smaller ½ or ¾-inch bulbs (which are more efficient T5 or T8s)?

☐ T12 ___% ☐ T8 or T5 ___% ☐ LED ___%

Lighting Control (*):

☐ Do some or all rooms have motion-sensors to turn on the lights? Yes No ____%

☐ Where?: ☐ Offices ☐ Exterior ☐ Parking garage ☐ Bathrooms ☐ Other

Convenience and Safety Lighting (*):

☐ EXIT signs ☐ CFL ___% ☐ LED ___%

☐ Safety lighting ☐ CFL ___% ☐ LED ___%

☐ Stairwell lighting ☐ T12 ___% ☐ T8 or T5 ___% ☐ LED ___%

☐ Garage lighting ☐ T12 ___% ☐ T8 or T5 ___% ☐ LED ___%

☐ Pass by your building at night, are the lights on everywhere? Yes No

Individual Air Conditioning Units (***):

Are they old units or new units?

☐ "Energy Star" labels? ☐ "EnerGuide" ☐ Not sure

Refrigerant: While you are there, you should see if it contains R-22 or R-410A. R-22, also known as HCFC-22, is the refrigerant that keeps everything cool in older units, but has been phased out due to its ozone-depleting effects. R-410A is the newer "approved" replacement.

☐ HCFC-22 ☐ HFC-410A ☐ Other: _____

Building-wide Air Conditioning (**):

Are there programmable or updated thermostats? Bigger buildings have more complicated systems. A great way to see if you have more efficient systems, regardless of the size of the building, is to look at the thermostat. Updated and efficient systems have programmable thermostats that both sense the space and work intelligently to ensure energy is used appropriately. Older thermostats just go on and off manually and are usually just left on.

- Thermostats:

☐ Manual ___% ☐ Connected ___% ☐ Not sure

PROPERTY: _____

Small Appliances (*):

☐ Refrigerator: ☐ "Energy Star" labels? ☐ "EnerGuide" ☐ Not sure

☐ Do you have old clunky computers and monitors?

☐ Is there a culture of people leaving computers on overnight?

☐ Do you have electric baseboard heaters (these are big and inefficient users of electricity) under windows and desks?

**Extra Credit: If you are in a warm season, check the window heaters to see if it's warm. If so, this is an example of double wasted energy – heating when you don't need it and your air-conditioning working extra to compensate.

Building System Appliances (***): Basement Tour! (…come on, this is fun. If you are weary, think back to the "fun house" tours you took at Halloween or Carnival and take the tour!) If you have been able to have productive conversations with your maintenance person, ask them for a tour of the building through their eyes. They will be delighted to show off this space! Ask them to show you the water heater – is it electrical? If so, does it have an "Energy Star" label? Ask them to show you other items that use electricity for supporting the building. Most of them will show you a computer that was given to them in the 1990s, and never touched again.

Tweet @givinggreen "old computer" if I'm right!

- Gas Efficiency: One of the largest impacts on your organization's ecological and carbon footprint is its gas consumption. Most of the time, gas is used to heat the building's air and water. If you look back at the pie chart at the start of this chapter in the book, you will see that this uses more than half of your energy and half of your spending. Don't have the book? Go buy it! www.givingcharitiesgreen.com

☐ What is the Fuel Source? ☐ Gas ☐ Oil ☐ Other

☐ Is their a Generator? ☐ Gas ☐ Diesel ☐ Other

Heating your building's air (**):

☐ Are there programmable or updated thermostats?

How is the Hot Air Made?

☐ Hot Air is made by: ☐ Gas-fired Units ☐ Hot Water Boilers ☐ Electricity

☐ Other:

☐ Boilers making hot water for heating ____ # Units

How is the extra heat removed from the system?

☐ Cooling Tower ☐ Condenser ☐ Exhaust Fans ☐ Other:

How is Hot Air Moved?

☐ Air Handling Units (AHU) ____ # Units

☐ Roof Top Units (RTUs) ____ # Units

☐ Large Exhaust Fans ____ # Units

One rule of thumb that works with heaters and boilers – the smaller the unit, the more efficient (also, the dirtier the older!) Ask your maintenance person their opinion on its efficiency.

Notes/Comments about Heating Air in your building:

Heating your building's water (***): Again, your maintenance person is your friend here. On your tour, ask them to show you the water heater. Is it gas? If so, does it have an "Energy Star" label? Ask them to show you other equipment that uses gas for supporting the building. Are they new? Do they have "Energy Star" labels?

☐ What is the Fuel Source? ☐ Gas ☐ Electricity ☐ Oil ☐ Other

How is the Hot Water Made?

☐ Boilers making hot water ____ # Units

☐ Hot Water Storage ____ # Tanks

Notes/Comments about Hot Water in your building:

▪ Water Efficiency: Most people appreciate the natural resource that is water and the need to use what you need – not be wasteful. What many people don't realize is the amount of energy used by major systems to get that water into your building. There are pumps, filters, chemical treatment stations, pipes, more pumps, valves – and that just gets it to your water-consuming appliance. Conserving water not only protects this importance resource, it saves a lot of energy.

For faucets and showers, they are typically rated based on their flowrate in gallons or liters per minute (GPM/LPM). For toilets and urinals, they are rated based on the gallons/liters per flush (GPF/LPF)…and when you opened this book today, I bet you didn't think you would be learning about urinals!

So, how do you figure out if you are being efficient or inefficient? One of the tricks that I recommend is the get yourself a Starbucks Grande Coffee (it holds 16oz). If you can't find the label on your water-using appliance, see how long it takes to fill it up! Refer to the "Starbuck Cup Trick" inset for a description of how it works.

☐ Faucets (*): Do they leak? Do they have auto-flush sensors? Are they low-flow? (it's usually written on the side of the round section – right where the water flows out) 9.5 LPM (2.5 GPM) is the current standard for "low flow." Can't tell? Use the Starbucks Cup Trick.

☐ Faucets are:

____ LPM / GPM (circle one)

☐ Shower heads (*): Are they low-flow models? Low flow is 9.5 LPM (2.5 GPM). Can't tell? Again, use the Starbucks Cup Trick.

☐ Showers are:

____ LPM / GPM (circle one)

Starbucks Cup Trick:

While this may appear to be a piece of shameless promotion, I actually created this trick after a walk along the Newfoundland Atlantic Coast. As I finished my trek back from the Signal Hill, I picked up a Grande Americano in St. Johns, and then walked back to my hotel to work on this section. I was trying to figure out the efficiency of the sink in my hotel room, and I couldn't see any labels. I rinsed my cup out for a drink of water, and voila, this trick was born!

It is simple, and relies on a 16-ounce cup, or a Starbucks Grande. It works best with faucets and shower heads – not so much on toilets!

Step 1: *Place cup under spout.*
Step 2: *While looking at your watch, turn on and count the seconds.*
Step 3: *When your hand gets wet (i.e. water overflows the rim), record the amount of seconds:*

- *less than 3 sec = not efficient*
- *3 sec = 9.5 LPM (2.5 GPM)*
- *5 sec = 8 LPM (1.5 GPM)*
- *15 sec = 2 LPM (0.5 GPM)*

If you get four seconds, it is likely a 2.5 GPM faucet with some grunge inside, making it even more efficient!

☐ Toilet (*): Look carefully - are they dual flush or low-flow and/or have auto-flush sensors? Typical low flow for toilets is 6 LPF or 1.6 GPF. The label is on the back of the bowl…**careful now, I said look**!

If you can't tell - flush the toilet. Does the flow go on and on? This indicates a high-flow or inefficient toilet. Does it stop after two seconds? This is low flow, probably 6 LPF (1.6 GPF)? There are also 5 LPF (1.3 GPF) toilets available too. Older toilets can use up to 26.5 LPF (7 GPF)! At this point, note if your building's toilets are high or low-efficiency.

☐ Urinals (*): **from a distance…you never want to actually touch a urinal, right?** Are they low-flow and/or have auto-flush sensors? A water efficient urinal is 3.8 LFP or 1 GPF or less (older ones use 11 liters or 3 gallons!) Not sure? Move on!

☐ Handwash (*): **Seriously, please wash your hands** after assessing your building's water efficiency - with soap (*)! This is a good use of water.

- Cleaning Chemicals (*): While you are bending the ear of your maintenance person, ask them about their cleaning chemicals. As an example, bleach is not considered a "green" chemical by these two certifications.

☐ Are they marked with "Eco-Logo" or "Green Seal" certifications (*)?

☐ Eco-Logo ☐ Green Seal ☐ Other: _____ ☐ Combination

- Hazardous Chemicals (**): This is a question that is often sensitive, but ask your maintenance person about old chemicals on unlabeled pails. If there are "unknown" items, ask your service contractor to a take a look. I believe in amnesty for honesty – help them find a good solution. It's better to solve this problem with an eye to safety than let someone pour it down the drain.

☐ Hazardous chemicals? Yes / No

What Type: _____

- Building Exterior (***): As you gaze through the recently washed windows and doors around your building, you are also staring at the weakest point for keeping your building warm in the winter and cold in the summer. What do you see?

☐ Windows is double-paned (i.e. two sheets of glass) ☐ triple-paned

☐ Do you notice any "foggy" windows? # _____

☐ Drafty Front door ☐ Drafty Back Door ☐ Drafty Side Door

☐ Windows with cracks in frame or air coming through #_____

☐ Are there obvious warm and cold spots?

There are all good things to note, and your maintenance person will have a good idea on well-insulated the building is. In cooler climates, a good rule of thumb is if you see lots of heaters under desks or in offices, that you are dealing with an insulation problem and wasting lots of energy.

Notes about your Building Exterior:

3. INFORMATION TECHNOLOGY (IT):

The main systems that run the brains of this information network: servers, switches, and computers are much more efficient. Even more impactful is the design of the IT architecture with centralized application servers, virtualized servers and shared centralized storage systems. THIS CAN HAVE A VERY SIGNIFICANT IMPACT.

IT people also love a cup of coffee, and are critical to the success of understanding how your IT systems work…just don't bring the coffee into the server room! Please remember that your IT person might be frustrated about the type of system that is being used. While you may discover that the systems are quite outdated, this is more often about the IT department not getting enough money to upgrade their systems. So as you have these conversations, do so with an understanding that you seek to help bring focus to inefficient systems that could improve their budgets.

- Computers (*): Look around your desk. How old is your computer? Is your monitor is really big one that weighs 50 pounds or the new thinner and lighter ones? The newer ones use much less power and work with more modern and efficient computers.

☐ Notes about your computers:

- Servers (**): With the help of your IT person, ask to peek in on the server room. Look around and talk with them about the following things:

  - Do the servers look like big computers, sitting on shelves and desks? If so, they are really old.
  - Are the servers lined up like a stack of pizza boxes in neat racks? This is newer.
  - Are the servers in the racks with lots of gaps? This could be the same as the last one, with fewer servers. Or, it could be a sign that there are modern "blade" servers that are more efficient, but create more heat and need more space to keep cool. Ask them.
  - Ask about virtualization, where they take a physical servers (one of the pizza boxes), and put five to ten "virtual servers" (virtual pizza boxes) onto one physical server. This demonstrates a modern IT approach that is very efficient, and has many other benefits to the IT team as well around data recovery and network speed.

- Is the server room uncomfortably hot? If so, this can burn out the equipment more quickly, create data loss and start to create other issues. While they might be saving energy, this is not the way to do it.

▪ IT Architecture (***): As you start to discuss the architecture of the IT systems, this starts to get very technical. There are some trends you are trying to understand with these questions about how things are set up.

- Does each site run with its own servers? Or is everything centrally managed?
- Are we managing our disaster recovery? Could this be done offsite by a partner?

☐ Notes about your Servers and IT Architecture. What do they want to do? Have they read the chapter 14?:

Benchmark

Aren't you curious how your organization compares to other ones? Once you are done, you can use a free test for your organization at www.GivingCharitiesGreen.com/shade-o-meter to see your shade of green. After answering 25 questions, it will assign a value that gives you a starting point for your shade of green.

☐ What is your score?

☐ Celebrate completing your first step…go buy yourself another coffee, or maybe even a latte!

