

Event Greening

Menu of Options
For events with limited
green resources

Developed by
Missouri Botanical Garden's
EarthWays Center



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EPA Event Greening - Introduction

Congratulations! You're putting on an event.

And – *good for you!* – you're looking for ways to make your event “Green” or more sustainable. This guide will help.

Professional Event Planners now have many resources to help them make sustainability work: manuals of best practices, national standards, and certification programs to verify and market their experience and skills.

This guide is designed to help the individuals and groups who typically volunteer, *without* the services of a Professional Event Planner, to put on events at a community scale. It covers all the elements involved in any kind of event – from Venue to Vendors, Transportation to Food – and lays out sustainable choices applicable to events for school, church, business and social groups, attended by adults or youth.

Green event choices are like the green we see in plants. They grow in all shapes, shades and sizes – and they all do basically the same things – but they function differently in different settings. Plants in the tropics can thrive in constant rainfall, while desert plants have to capture and hold scarce moisture. On the plains plants are adapted to drought, floods and even fire. The options that work depend on where each plant is located, and they can change over time. Let the locally based know-how of plants encourage sustainable growth for your events!

Green Makes Trusted Old Ideas New Again and Strengthens Communities

In many ways, sustainability concepts are old-fashioned values coming around again. Green means reducing or eliminating waste in every way possible, and making the most efficient, sensible use of resources provided by people, the planet, and our pocketbooks. It means focusing our buying locally - to support community businesses, reduce the impacts of long-distance transportation of goods, and strengthen relationships with our neighbors.

Your goals should include:

- Make the sustainability options in this guide work for you.
- Work with what's Available – Affordable – Practical.
- Measure your success.
- And know that whatever you choose to do, for the event you're working with now and next time, all of your efforts matter!

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This list covers the range of elements involved in planning events: Food, Communications and Event Materials, Housing, People, Transportation, Venue, and Vendors. Identify the elements involved in your event, evaluate the options, and make the choices that work best for you.

2. Green Event Activities Worksheet.....page 17

Make copies of this worksheet for each person on the event committee. List the action items each person is responsible for completing, along with a timeline for the tasks, costs, etc. The lead event organizer should keep a master set of copies of these individual worksheets. Worksheets can help keep the committee members organized, and help the group leader track progress.

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From tracking the percentage of waste material recycled instead of sent to a landfill, to shrinking the “footprint” of a whole event, it’s important to be able to show results and measure your success. When people realize the impact of their efforts, they’re much more likely to try a Greener challenge next time.

4. Models for Soliciting Bids or Proposals.....page 22

Use these lists of green elements, as needed, in any request for service bids or proposals. Being specific about your green expectations will help you get the best sustainable benefits from waste haulers, event venues, accommodations, caterers and other providers of event-related services.

5. Stackable Training Modules.....page 26

Short educational modules detail the what-why-how of measures on the Menu of Options. When you and your fellow event planners dig a little deeper into the details of sustainable measures you want to pursue, you’ll understand the options better. The training materials can help your whole team make the most sensible sustainable decisions.

6. Questions to Inspire Green Event Planning.....page 29

Sustainability starts with how we think about our choices. Considering these questions, in light of your event’s audience, purpose and resources, can help you evaluate which choices will work for your events from the many green measures detailed in this guide.

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Focus Area: Food Choices and Food Serving Items

Goal 1: Make sustainable food choices.

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|--|---|--|--|
| Use Local and Sustainably Certified Food | <ul style="list-style-type: none">If hiring a caterer, use local caterers and ask them to work with <i>your green guidelines (A1)</i>. If not hiring a caterer, use local foods. Set a goal: at least 5% of food should be locally produced. | <ul style="list-style-type: none">Use organically produced food and beverages. Products should be certified as meeting <i>regional or USDA organic standards (A2)</i>, to the greatest possible extent. | <ul style="list-style-type: none">Look for low <i>food miles (A3)</i> the lower the distance the food had to travel the better. Set a goal: at least 10% of food should be locally produced. |
| Composting and Food Recycling | | <ul style="list-style-type: none">Provide for <i>commercial composting (A4)</i> of scraps and leftovers. | <ul style="list-style-type: none">If leftover food or beverages are expected, make contact with a nonprofit organization to arrange for a food donation after the event. |
| Promote Your Green Efforts | <ul style="list-style-type: none">Educate and engage vendors and event workers to fully support:<ul style="list-style-type: none"><i>Green aspects of food choices (A5)</i>.Raising awareness of the origins of the food.The sustainable handling of leftovers. | <ul style="list-style-type: none">Educate and engage attendees about:<ul style="list-style-type: none">The <i>green aspects of food choices (A5)</i>.Awareness of the origins of the food.The sustainable handling of leftovers. | <ul style="list-style-type: none">Report data collected showing results of greening efforts to EPA (see sample metrics). |

Notes on meeting this goal for your event:



Focus Area: Food Choices and Food Serving Items

Goal II: Choose sustainable food service items.

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|-------------------------------------|---|---|---|
| Use Reusable Items to Serve Food | <ul style="list-style-type: none">Do not use single serve drink containers, or disposable lids and straws; serve beverages from pitchers or spigot coolers. | <ul style="list-style-type: none">50% or more of the items used for serving food are reusable (plates, trays, platters, utensils, serving containers, etc.) | <ul style="list-style-type: none">75% or more of the items used for serving food are reusable (plates, trays, platters, utensils, serving containers, etc.) |
| Use Reusable Items to Consume Food | | <ul style="list-style-type: none">50% or more of the items used to eat food are reusable (plates, bowls, cups, glasses, utensils). | <ul style="list-style-type: none">75% or more of the items used to eat food are reusable (plates, bowls, cups, glasses, utensils). |
| Use Reusable Non-Food Related Items | <ul style="list-style-type: none">Use table coverings, aprons, and napkins that have recycled content.* | <ul style="list-style-type: none">If <i>commercial composting (A4)</i> is available, use all compostable table coverings, aprons, and napkins.* | <ul style="list-style-type: none">Use washable and reusable table coverings, aprons, and napkins.* |

Notes on meeting this goal for your event:

*Plastic serving gloves will always need to go into landfill trash. Currently no recycling or composting of these products is available.



Focus Area: Food Choices and Food Serving Items

Goal II: Choose sustainable food service items.

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|---|---|--|--|
| Reduce Waste in Box Lunches | <ul style="list-style-type: none"> No Styrofoam is used. | <ul style="list-style-type: none"> Request <i>recyclable (A7)</i> or <i>compostable (A4)</i> boxes and individual portion containers. | <ul style="list-style-type: none"> Use <i>box-less box lunches (A6)</i> with little or no individual portion packaging. |
| Reduce Waste in Pre-Packaged Food Items | <ul style="list-style-type: none"> No Styrofoam is used. | <ul style="list-style-type: none"> Purchase products with the least amount of packaging possible. Instead of individual servings, buy in bulk and serve in <i>compostable (A4)</i> containers. | <ul style="list-style-type: none"> Choose products and packaging that can be <i>recycled (A7)</i> or <i>composted (A4)</i> through commercial services in your area. If disposable items are essential, try to ensure they contain a high content of recycled or plant-based material or compostable material if composting is available. |
| Reduce Waste from Event Food Service | <ul style="list-style-type: none"> Avoid <i>single serve packaging for food and condiments (A8)</i> (e.g., milk, cream, sweeteners, butter, ketchup, vinegar, mustard, jams, salt, pepper, breakfast cereals, cream cheese, etc.) | <ul style="list-style-type: none"> Specify <i>Waste Reduction Services (A10)</i> in your catering contract (see Model Bid Specs for more information). | <ul style="list-style-type: none"> Everything is reusable, <i>recyclable (A7)</i> or <i>commercially compostable (A4)</i>. |
| Promote Your Green Efforts | <ul style="list-style-type: none"> Educate and engage vendors and event workers to fully support: <ul style="list-style-type: none"> The <i>green aspects of the serving items (A9)</i> used. Limiting packaging. The efforts to reduce waste. | <ul style="list-style-type: none"> Educate and engage attendees about: <ul style="list-style-type: none"> The <i>green aspects of the serving items (A9)</i> used. Limiting packaging. The efforts to reduce waste. | <ul style="list-style-type: none"> Educate and engage the community about: <ul style="list-style-type: none"> The <i>green aspects of the serving items (A9)</i> used. Limiting packaging. The efforts to reduce waste. |

Notes on meeting this goal for your event:



Focus Area: Communication and Event Materials

Goal I: Reduce waste in communications and giveaway items.

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|------------------------|---|---|---|
| Use Electronic Systems | <ul style="list-style-type: none">Set up an <i>electronic system (B1)</i> for invitations, registrations, submittal of forms, evaluations, pictures, and access to event materials via e-mail or through a web service. | <ul style="list-style-type: none">Use <i>mobile applications (B1)</i> rather than printing out programs for onsite updates and shared event documents. Give consideration to printing only the most important materials (e.g. agenda) or have paper copies available for those who prefer them. | <ul style="list-style-type: none">Use monitors for announcements and room meetings rather than posting signs. |
| Reuse Materials | <ul style="list-style-type: none">Collect name badges for reuse at the next event. | <ul style="list-style-type: none">Design signage so that it is reusable (e.g. without dates). | <ul style="list-style-type: none">Use dry-erase (or other reusable) name badges and table tents. |
| Reduce Use of Paper | <ul style="list-style-type: none">When printing is required, print double-sided on recycled content paper. | <ul style="list-style-type: none">Use blackboards/chalkboards, dry erase boards, or digital screens instead of flipcharts. | <ul style="list-style-type: none">Work with presenters, vendors, exhibitors and sponsors to have <i>paper-free presentations (B1)</i> and exhibits. Information can be provided via QR codes, websites, or a previously established electronic system for your event. Consider also using announcements or posters to promote sponsors rather than giveaways. |

Notes on meeting this goal for your event:



Focus Area: Communication and Event Materials

Goal 1: Reduce waste in communications and giveaway items.

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|------------------------------|---|---|--|
| Choose Sustainable Giveaways | <ul style="list-style-type: none">Find <i>locally or regionally (B2)</i> produced <i>eco-friendly, giveaway items (B2)</i>. | <ul style="list-style-type: none">Provide <i>edible or eco-friendly speaker gifts (B2)</i>. If providing awards or plaques, choose eco-friendly products (toxic-free, reduced packaging, recyclable, made of sustainable and recycled materials). | <ul style="list-style-type: none">Eliminate giveaways to attendees. |
| Promote Your Green Efforts | <ul style="list-style-type: none">Ensure that the information on your sustainability efforts is provided electronically prior to and after the meeting. | <ul style="list-style-type: none">Provide all participants with a list of suggested <i>ways to reduce their event environmental impact (B3)</i>. | <ul style="list-style-type: none">Make “Green” a thematic element of your event. |

Notes on meeting this goal for your event:



Focus Area: Housing

Goal 1: Select sustainable housing choices for attendees.

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|--|--|--|--|
| Reduce Energy Use | <ul style="list-style-type: none"> Ensure guests have the option of a re-use sheet and towel program to save energy and water used by laundry. | <ul style="list-style-type: none"> Ensure housing choices use <i>ENERGY STAR (C1)</i> appliances in the lights, kitchen, furnaces, TV's, air conditioners. | <ul style="list-style-type: none"> Select <i>a building certified by a green rating system (C1)</i> building for attendee housing. |
| Reduce Paper and Toiletries Waste | <ul style="list-style-type: none"> Ensure housing choice limits paper: paperless checkout, and only delivers newspaper on request. | <ul style="list-style-type: none"> Ensure housing toiletries are purchased in bulk and provided in refillable dispensers. | <ul style="list-style-type: none"> Ensure housing facilities donate partially used or worn materials (e.g. linens, toiletries) to shelter organizations. |
| Minimize Travel Between Housing and Event Location | <ul style="list-style-type: none"> Ask the housing facilities to organize and offer group use of a shuttle bus or van. Tell attendees this service will be available – and why. | <ul style="list-style-type: none"> Select housing that is close to your event, making it possible to walk, use public transportation, or opt for a very short ride. | <ul style="list-style-type: none"> Have the event in the same building as the housing. |
| Encourage Sustainable Guest Behavior | <ul style="list-style-type: none"> Encourage attendees to stay at housing facilities you have <i>chosen based on sustainability factors (C2)</i>. | <ul style="list-style-type: none"> Provide attendees with a <i>sustainable guest tips list (C3)</i>. | <ul style="list-style-type: none"> Provide attendees with <i>sustainable action tips (C3)</i> they can use in restaurants outside of the event housing and/or venue facility. |

Notes on meeting this goal for your event:



Focus Area: People

Goal I: Build involvement with your Green efforts from people engaged in the event.

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|--|---|---|---|
| Obtain Support from Stakeholders for Your Green Efforts | <ul style="list-style-type: none"> Develop a <i>Sustainable Event Factsheet (D1)</i> and share it with stakeholders. | <ul style="list-style-type: none"> Consult and cooperate with <i>community stakeholders (D2)</i> (e.g. land owners, neighbors, public authorities and emergency services) in order to reduce environmental impacts such as noise, parking and handling of waste. | <ul style="list-style-type: none"> Motivate <i>event stakeholders (D2)</i> to engage in recognition options and/or competitions that create awareness and require active participation. For example, give certificates to partners, sponsors or vendors who engage in sustainable event practices. |
| Educate Workers Involved with the Event About Your Green Efforts | <ul style="list-style-type: none"> Develop a <i>Sustainable Event Factsheet (D1)</i> and share it with workers. | <ul style="list-style-type: none"> Have personal contact with as many workers and service providers as possible to explain the what-why-how of the green efforts for this event. | <ul style="list-style-type: none"> Provide training about the green efforts for the event for as many workers and service providers as possible. |
| Educate Attendees at the Event About Your Green Efforts | <ul style="list-style-type: none"> Develop a <i>Sustainable Event Factsheet (D1)</i> and share it with attendees. | <ul style="list-style-type: none"> Use the event to raise awareness among participants; through information documents, opening remarks and announcements. | <ul style="list-style-type: none"> Develop a survey or use <i>event evaluation (D3)</i> plans to gather feedback from attendees about your green efforts. Have attendees take a <i>green pledge (D4)</i>. |

Notes on meeting this goal for your event:



Focus Area: Transportation

Goal 1: Encourage participants to use sustainable transportation.

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|--|---|---|--|
| Encourage Carpooling and Shuttles | <ul style="list-style-type: none"> Encourage public transportation or car pooling. Provide preferential parking for car poolers. | <ul style="list-style-type: none"> Provide an electronic platform for participants to communicate and organize sharing of cars, buses, and/or taxis. Post a ride-share board at the registration area or hotel lobby, if transportation to off-site meetings and tours is not pre-arranged. | <ul style="list-style-type: none"> Encourage public transportation. If public transport is not available, organize a shuttle or carshare service for travel between the hotel, venue and/or point of arrival/departure (e.g. railway/bus station, airport). |
| Encourage the Use of Bicycles | <ul style="list-style-type: none"> Promote the use of bicycles by providing appropriate information (e.g. bike routes) to attendees. | <ul style="list-style-type: none"> Provide a secure area to park bikes with easily accessible bike racks or volunteer bike valet support for cyclists. | <ul style="list-style-type: none"> Make bicycles available for participants to borrow or rent. |
| Encourage the Use of Alternative Fuel Vehicles | <ul style="list-style-type: none"> Provide preferential parking to <i>alternative fuel vehicles (E1)</i>. | | <ul style="list-style-type: none"> If a bus rental company needs to be hired, select one that operates with hybrid/electric/alternative fuel fleets and that applies <i>ecological driving practices (E4)</i> (e.g. not idling, route planning, minimal trips). |
| Promote Your Green Efforts | <ul style="list-style-type: none"> Provide attendees with information on reducing release of greenhouse gasses through the personal use of <i>sustainable transportation (E2)</i>. | <ul style="list-style-type: none"> Offer <i>remote participation (E3)</i>. | |

Notes on meeting this goal for your event:



Focus Area: Transportation

Goal II: Make sustainable choices for how materials and goods are shipped to your

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|--------------------------|---|---|---|
| Use Sustainable Shipping | <ul style="list-style-type: none">Acquire event materials locally to minimize shipping. | <ul style="list-style-type: none">Order materials with time enough for them to be <i>bundled for shipping (E5)</i>. | <ul style="list-style-type: none">For materials that must be shipped, select a freight hauler that uses environmentally responsible practices in their operations (e.g. <i>EPA SmartWay Certified Hauler (E5)</i>). |

Notes on meeting this goal for your event:



Focus Area: Venue

Goal I: Choose a venue that supports green efforts.

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|---|---|--|--|
| Select a Venue that Incorporates Green Building Design Principles | <ul style="list-style-type: none">• Venue has incorporated natural lighting to save on electricity.• Ensure the venue has areas for parking bicycles. | <ul style="list-style-type: none">• Venue uses <i>energy efficient lighting (F1)</i>, <i>ENERGY STAR appliances (F1)</i> and <i>high efficiency HVAC systems (F1)</i>. | <ul style="list-style-type: none">• Venue is green certified in <i>ENERGY STAR (F1)</i>, <i>a building certified by a green rating system (C1)</i>, etc. |
| Select a Venue that Reduces Paper Waste | <ul style="list-style-type: none">• Dry-erase boards, chalk boards or electronic displays are provided rather than flip charts.• All water, coffee, tea, etc. is served from containers into reusable cups, glasses or mugs. No bottled water. | <ul style="list-style-type: none">• If meeting in a hotel, let them know you do NOT need blank pads of paper and pencils or pens for all participants. If these items are needed, they can be requested on the spot. | <ul style="list-style-type: none">• Use a <i>zero-waste facility (F2)</i>. |
| Consider Access When Selecting a Venue | <ul style="list-style-type: none">• Venue for the event is as close as possible to a majority of local attendees' homes.• Ensure venue is <i>fully accessible (F3)</i> to participants of all abilities. | <ul style="list-style-type: none">• Venue is close to (or within) the housing needs of visiting attendees. | |

Notes on meeting this goal for your event:



Focus Area: Venue

Goal II: Incorporate green factors at the venue.

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|--|---|---|--|
| Use Sustainable Decorations | <ul style="list-style-type: none"> Choose items with recycled content that can be recycled by your local services. Do not use balloons. | <ul style="list-style-type: none"> Choose decoration materials that are reused or can be reused (e.g. placing flowers in mason jars for a table centerpiece). | <ul style="list-style-type: none"> Incorporate reused materials into decorations that can become attendee gifts or items in a fundraising auction, or that can be donated to a local charity or health care facility. |
| Manage Waste Collection | <ul style="list-style-type: none"> Pair up <i>recycling and landfill trash bins (F4)</i> everywhere bins are placed. Ensure that all are properly signed with information about what goes in each kind of bin. | <ul style="list-style-type: none"> Incorporate <i>compost bins (F4)</i> into your waste stations if commercial composting is available in your area or arrange for a home composter to take flowers. | <ul style="list-style-type: none"> <i>Assign a person (F4)</i> to work each waste station to ensure proper distribution of items into landfill, recycling and compost bins. |
| Utilize Sustainable Energy for an Outdoor Event | <ul style="list-style-type: none"> Minimize electrical needs in order to avoid the use of generators. | <ul style="list-style-type: none"> If a generator must be used, use a <i>biodiesel generator (F5)</i>. | <ul style="list-style-type: none"> Incorporate a <i>portable solar generator (F5)</i> into your event. |
| Provide Sustainable Restroom Components for an Outdoor Event | <ul style="list-style-type: none"> Include <i>accessible unit(s) (F3)</i> in your order for portable toilets and hand washing stations for the event. Ensure regular staffing to restock restroom supplies. | <ul style="list-style-type: none"> Use recycled content paper towels and toilet paper in your portable toilet and hand washing area. | <ul style="list-style-type: none"> If you have access to a commercial scale composting service, collect paper towels for composting. |
| Protect the Outdoor Environment Surrounding Your Event | <ul style="list-style-type: none"> Ensure that parking does not <i>damage the natural environment (F6)</i>; (e.g. there may be sensitive plant or animal life in the area or a need for erosion control.) | <ul style="list-style-type: none"> When erecting structures (stages, booths, portable toilet areas) ensure that the <i>natural environment is not damaged (F6)</i>. | <ul style="list-style-type: none"> Develop your event layout so that large vehicles and structures don't impact <i>sensitive natural environments (F6)</i> (e.g. root zones around trees, habitat on property edges, etc.) or cause erosion or other damage to the environment. |

Notes on meeting this goal for your event:



Focus Area: Vendors

Goal 1: Support vendor pre-event efforts to make your event sustainable.

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|-------------------|---|--|--|
| Reduce Energy Use | <ul style="list-style-type: none">Encourage vendors to develop displays that do not require booth electricity. | <ul style="list-style-type: none">Group vendors that must have electricity to minimize the use of electric generating sources. | <ul style="list-style-type: none">Provide a discount or free space to a vendor that will offer a <i>biodiesel (F5)</i> or <i>solar generator (F5)</i> to other vendors for use. |
| Reduce Waste | <ul style="list-style-type: none">Share <i>sustainable giveaway guidelines (G1)</i> with vendors and encourage their green choices. | <ul style="list-style-type: none">Require vendors to use recycled content packaging, packaging that can be recycled by your local recycling services, or encourage vendors to use reduced packaging. | <ul style="list-style-type: none">If <i>commercial composting (A4)</i> is available, require vendors to purchase all compostable serving and sampling products. |
| | <ul style="list-style-type: none">Any printed materials should be printed 2-sided, on recycled content paper. | <ul style="list-style-type: none">Require <i>electronic information transfer (G2)</i> instead of handouts. | <ul style="list-style-type: none">Develop a <i>Green Vendor Pledge (G3)</i> and promote vendors who have signed the Green Pledge with preferential placement of their booth, higher presentation listing, special notation/listing in program books, special sign at their booth, etc. |

Notes on meeting this goal for your event:



Focus Area: Vendors

Goal II: Support onsite vendor waste minimization practices.

| Action Tasks | Green ● | Greener ●● | Greenest ●●● |
|--------------------------|---|---|--|
| Recycling/ Composting | <ul style="list-style-type: none">Set up a designated recycling area. A dumpster in which vendors and event workers can place recyclable material is ideal. At some smaller events, recycling can be transported by workers to municipal recycling centers. For larger events, it makes sense to contract with a recycling company or waste hauler to provide the container and take the recycling. | <ul style="list-style-type: none">Designate an event worker(s) as a vendor liaison to support their waste minimization efforts. | <ul style="list-style-type: none">Involve your local recycler as an event sponsor in exchange for material pickup and/or use of collection bins. |
| | <ul style="list-style-type: none">Provide an event worker(s) to monitor recycling collection for misplaced items. | | <ul style="list-style-type: none">Provide for <i>reuse, recycling or composting of wood, metal or other special waste materials (G4)</i> specific to your event.If <i>commercial composting (A4)</i> is available, require vendors to use all compostable serving and sampling products. Have vendors monitor composting for misplaced items. |

Notes on meeting this goal for your event:

Green Event Activities Worksheet

Event:

Event Date:

Committee Members/Event Team:

Location:

| Focus Area: | | | |
|----------------|--------------------|----------|---------------------|
| Green Actions: | Responsible Person | Timeline | Comments/Costs/Etc. |
| Action 1: | | | |
| Action 2: | | | |
| Action 3: | | | |
| Action 4: | | | |
| Action 5: | | | |

| Focus Area: | | | |
|----------------|--------------------|----------|---------------------|
| Green Actions: | Responsible Person | Timeline | Comments/Costs/Etc. |
| Action 1: | | | |
| Action 2: | | | |
| Action 3: | | | |
| Action 4: | | | |
| Action 5: | | | |

Sample Metrics: Measuring Your Green Efforts

Inputs and Outputs:

These two flows are a basic way of measuring the results of any sustainable effort. In this guide they are defined in terms of event planning and focused in the areas of Transportation, Materials, Energy and Greenhouse Gases.

Inputs:

What is taken from the environment and *put in to creating the event*.

Measuring inputs includes measuring the kinds of resources and materials used to create the event. This includes energy sources used to power the event and all materials brought in either for consumption or use.

Outputs:

What is going back to the environment *from the event*.

Measuring outputs can be measurements of what is given back to the environment or what is NOT given back. This would include limiting any outputs that are damaging to the environment or our health.

Waste Management Heirarchy:

The following list describes waste management efforts in order from the most sustainable to least sustainable.

- **Source Reduction** is reducing the volume, mass or toxicity of products.
 - This includes decreasing Inputs of material used for the event as well as decreasing some of the Outputs, like Greenhouse Gases.
 - Source Reduction is more sustainable and preferable than Recycling, because you are reducing waste at its source, compared to the processes of Recycling that limit waste of material but take energy to create the material and then to recycle it into another use.
- **Recycling** involves collecting, sorting and processing materials like paper, cardboard, and containers made of glass, plastic or metal - as well as items like electronic equipment.
 - Recycled materials are diverted from the landfill.
 - These materials can be used to manufacture new products with recycled content.
 - **Composting** also involves collecting, sorting and processing material, specifically “organic” plant and animal matter, including food scraps.
 - Compost, a valuable soil amendment, is the end-product of these efforts.
- **Energy Recovery** is the effort to convert waste into energy, typically in the form of a gas (like methane) that can be burned for fuel.
- **Treatment** is reducing or eliminating any potential harm the waste can cause to living beings or the environment.
- **Disposal or Other Release** is the option least preferred. This is disposing of waste, usually in a landfill, without any Treatment to reduce potential harm.

When choosing green efforts for your event and planning how those efforts can be measured, keep this heirarchy in mind and work towards the most preferred options to manage waste.

Sample Metrics: Measuring Your Green Efforts

Statistics to Collect

This is a list of data that can be collected to measure the success of your green efforts. These statistics can be used alone or can be used in the formulas that follow this list.

Transportation:

- Miles traveled by the attendees of the event to their housing for the event.
- Miles traveled by attendees from housing to the event.
- Number of attendees who walk to the event.
- Number of attendees who ride a bicycle to the event.
- Number of people riding in each vehicle.
- Number of people flying to the event.
- Distance flown by all attendees to arrive at and return home from the event.

Materials:

- Collect totals for waste produced (by weight or volume).
 - Total recycling collected.
 - Total compost collected.
 - Total landfill waste collected.
- Total paper consumption (by reams, cases or costs).
 - Total recycled paper used.
 - Total non-recycled paper used.
- Total recycled material used in making the event (by weight or volume).
- Total materials needed to make the event happen.
- Food (measured by cost).
 - Total food cost.
 - Total food cost from within 150 miles.
 - Total food cost from within 250 miles.
 - Total food cost for organic (USDA certified or locally produced).

Energy:

- Electrical usage for the event (in kilowatt hours).
- Renewable energy credits used (in kilowatt hours).
- Energy made from biodiesel generators (in kilowatt hours).

Sample Metrics: Measuring Your Green Efforts

Using the Data

This list of formulas can be helpful in measuring and comparing the green efforts for the event. All of the formulas use some data from the list above.

Transportation

More than 25% of our nation's greenhouse gases come from the transportation sector.

Bicycle Mode Share: This measure will give you an idea of how many of the trips taken during the event (typically from housing to the event) were taken on a bicycle. To calculate this take the total number of trips taken on a bicycle and divide by the total number of trips taken during the event. The higher this number the larger percentage of trips were taken in a way that didn't emit any greenhouse gases.

$$(\text{Total Number of Bicycle Trips}) / (\text{Total Number of Trips}) = \text{Bicycle Mode Share}$$

Pedestrian Mode Share: This measure is similar to the Bicycle Mode Share but measures pedestrian trips taken compared to the total trips taken during an event. To calculate this divide the total number of trips taken on foot by the total number of trips.

$$(\text{Total Number of Trips Walked}) / (\text{Total Number of Trips}) = \text{Pedestrian Mode Share}$$

Vehicle Miles Traveled (VMT): This is the total miles traveled by vehicles used to bring attendees to the event and shuttle them to sites during the event. This may be calculated by adding the total miles traveled by any vehicles during your event (ie: shuttle buses) to the total miles traveled by vehicles in bringing attendees to the event (e.g.: miles driven by a group from their home to housing for the event). The smaller this number is the better, particularly keeping the total VMT during the event as low as possible.

$$(\text{Total Miles Traveled by All Vehicles During Event}) + (\text{Total Miles Traveled by Vehicles in Bringing Attendees to the Event}) = \text{Vehicle Miles Traveled}$$

VMT per Capita: This number is created by taking the total VMT (see above) and dividing by the total number of attendees to the event. A smaller number is better.

$$(\text{Vehicle Miles Traveled}) / (\text{Total Number of Attendees}) = \text{VMT per Capita}$$

Average Vehicle Occupancy: This is calculated by taking the total number of attendees that arrive using a vehicle (do not count those that walk or ride a bike) divided by the total number of vehicles used (not counting bicycles). The higher this number gets, the better the effort.

$$(\text{Total Number of Attendees Arriving by Vehicle}) / (\text{Total Number of Vehicles Used}) = \text{Average Vehicle Occupancy}$$

Sample Metrics: Measuring Your Green Efforts

Materials

A 2006 study of 25 events in California found that the average attendee at an event generates 2.44 pounds of waste per day. (<http://www.calrecycle.ca.gov/Publications/Detail.aspx?PublicationID=1184>)

Total Waste Generated (TWG): Add the total landfill trash collected (in pounds) + total recycling collected (in pounds) + total commercial compost collected (in pounds). Remember that source reduction is the more preferable method. Therefore TWG can be an important measure of your potential to change next time. The lower the Total Waste Generated the better your efforts.

$$\text{Total Landfill Trash Collected} + \text{Total Recycling Collected} + \text{Total Compost Collected} = \text{Total Waste Generated}$$

Waste Generated per Capita: For this measure take the Total Waste Generated and divide by the total people attending the event. This would give you a number to compare to the 2006 study in California that found the average waste generated was 2.44 pounds per visitor per day.

$$(\text{Total Waste Generated}) / (\text{Number of People Attending}) = \text{Waste Generated per Capita}$$

Waste Diversion Rate: This number is calculated by taking the total pounds of recycling and compost collected, divided by the Total Waste Generated. This formula will generate a number somewhere from zero to one. To make this a percentage simply multiply by 100. The closer it is to one the better the green efforts.

$$(\text{Total Recycling} + \text{Total Compost}) / (\text{Total Waste Generated}) = \text{Waste Diversion Rate}$$

Models for Soliciting Bids or Proposals

In a request for services bid you should require your service provider to describe how they would address the following “green” issues and features during planning, implementation, and takedown of a green event/venue. These lists are not complete; you should encourage service providers to suggest additional green efforts. Preference should be given to service providers with the most comprehensive approach to greening events/venues and a history of performing these operations at other events/venues or buildings.

Communications and Event Materials

- Promote the use of the web, e-mail and mobile app downloads for communications (such as event promotion, electronic registration, etc.) in order to reduce paper usage.
- Develop an electronic event newsletter.
- Paper used for printing and copying should contain a minimum of 30% post-consumer recycled content.
- Default printers and copiers to double-sided output.
- Create an event website and provide space to communicate what a green event is, the event’s green efforts, and/or video streaming of highlights of how a green event takes place.
- Develop a communication link with local mainstream and ethnic media to provide ongoing information and highlights of the green event.
- Develop a communication advisory team, which will include education and outreach, with representatives from local government, Chambers of Commerce, businesses, mainstream and ethnic media, etc.
- Provide web banners for local media websites.
- Provide only ENERGY STAR-rated office equipment.

Food Choices and Food Serving Items

- Purchase and serve water, beverages, condiments and other food items in pitchers and in bulk.
- Encourage use of personal reusable mugs; make personal reusable mugs available.
- Provide vegetarian food options.
- Provide food with low “food miles.”
- Provide food grown in a sustainable manner.
- Use only reusable linens and reusable, recyclable or biodegradable dishware, glasses, cups, utensils and serving platters.
- Require attendees to ‘sign-up’ for meals (as opposed to estimating number of servings to be provided).
- Donate used food to a food rescue program, participate in a food-to-animals program, or compost organics.
- Provide for composting of food scraps.

Models for Soliciting Bids or Proposals

Housing

- Use energy efficient lighting products and practices (such as high-efficiency fluorescent lighting, motion-controlled lighting, etc.).
- Use energy efficient mechanical systems.
- Reduce electricity consumption, eliminate unnecessary demand and emphasize equipment efficiency and energy efficient control strategies. Provide “green” power on-site (such as alternative energy from fuel cells and/or alternative fuel generations) or off-site (such as through carbon offsets).
- Use programmable thermostats.
- Include features in structural design and floor plan that reduce the total energy demand.
- LEED Certified building, or another certified green building program.
- Conserve water by using toilets that are dual flush or low flow.
- Conserve water by using low-flow and automatic turnoff faucets.
- Protect water by incorporating porous materials for parking areas and landscape cover.
- Cleaning products shall meet the Green Seal GS-37 standard or California Code of Regulations maximum allowable VOC levels: <http://www.greenseal.org/certification/standards/g37.pdf>.
- Disposable janitorial products must meet the minimum requirements of the U.S. EPA’s Comprehensive Procurement Guidelines: <http://www.epa.gov/epaoswer/non-hw/procure/products/tissue.htm>.
- Specify a sheet and towel reuse program.
- Use cold water for laundry.

Transportation

- Provide easily accessible bicycle racks or storage
- Promote use of bicycle, pedestrian and transit options by providing appropriate information on these transportation methods throughout the area.
- Provide shared bicycles and helmets for event attendees.
- Promote benefits of active transportation-economic, health, environmental, etc.
- Educate drivers and bicyclists on how to safely drive/ride.

Models for Soliciting Bids or Proposals

Transportation, continued

- Provide preferable parking to alternate fuel vehicles and car/vanpools.
- Use on-site transportation vehicles powered by alternative fuels or technologies (such as electric power, bio-diesel, or hybrid technology).
- Power vehicles used for transporting materials to the site with alternative fuels or technologies (such as electric power, bio-diesel or hybrid technology).

Vendors *(additionally food vendors must adhere to “Food Choice and Food Serving Items” list)*

- Communicate to event/venue users the “green” attributes of the products and services provided.

Venue

- Provide data following event/venue detailing “environmentally-friendly” activities and materials used.
- Include features in structural design and floor plan that reduce the total energy demand.
- Use programmable thermostats.
- Use energy efficient lighting products and practices (such as high-efficiency fluorescent lighting, motion-controlled lighting, etc.).
- Use energy efficient mechanical systems.
- Reduce electricity consumption, eliminate unnecessary demand and emphasize equipment efficiency and energy efficient control strategies. Provide “green” power on-site (such as alternative energy from fuel cells and/or alternative fuel generations) or off-site (such as through carbon offsets).
- LEED Certified building.
- Conserve water by using toilets that are dual flush or low flow.
- Conserve water by using low-flow and automatic turnoff faucets.
- Conserve water by installing waterless hand washing stations, where appropriate.
- Protect water by incorporating porous materials for parking areas and landscape cover.
- Cleaning products shall meet the Green Seal GS-37 standard or California Code of Regulations maximum allowable VOC levels: <http://www.greenseal.org/certification/standards/gs37.pdf>.
- Disposable janitorial products must meet the minimum requirements of the U.S. EPA’s Comprehensive Procurement Guidelines: <http://www.epa.gov/epaoswer/non-hw/procure/products/tissue.htm>.

Models for Soliciting Bids or Proposals

Venue, continued

- Provide recycling collection that:
 - Has collection containers adjacent to all trash collection containers, using consistent and clearly differentiated containers for recycling vs. trash;
 - Includes, at a minimum, paper (office paper, corrugated and boxboard cardboard, newspaper, and mixed paper) and food and beverage containers (metals, glass, and plastics);
 - Is available for both workers and event/venue/building users;
 - Has clearly visible and stated signage; and
 - Ensures that all collected materials will actually be recycled.
- Provide opportunities for reuse or composting of floral arrangements.
- Commit to work with city/county/other governmental organizations, and other organizing body as needed to help make the event/venue “green.”

Information for “Models for Soliciting Bids or Proposals” taken from:

Green RFP Language. (2015). Retrieved from <http://www.rethinkingrecycling.com/event-planning/resource/green-rfp-language>

Stackable Training Modules

Throughout the Green Event Menu of Options there are action items that may need some further explanation or clarification. This is a list of topics and questions that can be explained further to help you manage the green elements of an event. The training modules are numbered to correspond with numbers found in the action items of the checklist. Keywords are italicized and in green font to aid in finding modules related to your efforts.

Focus Area: Food Choices and Food Serving Items

- A1. What are the *Green Guidelines* of my event?
- A2. What are *regional and USDA organic standards* for food?
 - o What is the advantage of buying organic food?
- A3. What are *“food miles”* and why is local food important? What counts as “local food”?
 - o Organic or local, what should I choose?
- A4. What is *commercial composting*? How is it different from small-scale composting?
 - o How do I know if commercial composting will work for my event?
 - o Commercial Composting vs. Recycling, what is my best choice?
 - o Compostable vs. biodegradable.
 - o What is the advantage of biodegradable?
- A5. What are the *green aspects of food choices*?
- A6. How to handle box lunches.
 - o What are *box-less box lunches*?
- A7. What can *be recycled*? What is *reusable*?
- A8. What is *single serve packaging* and how do you avoid using it?
- A9. What are the *green aspects of serving items*?
- A10. What are *Waste Reduction Services*?

Focus Area: Communication and Event Materials

- B1. What are ways I can use electronic communication to reduce waste?
 - o How to set up an *electronic system*.
 - o What are some suggestions for setting up a RSVP online?
 - o How can I find a *mobile application* to help with event materials?
 - o How to encourage and host *paperless (paper free) presentations*.
 - o How to reduce waste when promoting sponsors.
- B2. What are sustainable giveaways?
 - o What are *eco-friendly* gifts and awards?
 - o What is *locally or regionally* produced?
- B3. How to create a list of ways for participants to *reduce environmental impact*.

Stackable Training Modules

Focus Area: Housing

- C1. How do I choose energy efficient housing?
 - o What is *ENERGY STAR*?
 - o What is *a building certified by a green rating system*?
 - o What is *Water Sense*?
- C2. How to encourage others to choose housing facilities based on *sustainability factors*.
- C3. Creating a *sustainable guest tips list*.
 - o *Sustainable action tips* for attendees choosing restaurants outside of the venue.

Focus Area: People

- D1. How to create a *Sustainable Event Factsheet*.
- D2. Who are the *community stakeholders* and *event stakeholders* for my event?
 - o How do I get buy-in from stakeholders for my green efforts?
- D3. How to create a *survey* or an *event evaluation* to gather feedback.
- D4. What is a *green pledge* and how do I create one?

Focus Area: Transportation

- E1. What is an *alternative fuel vehicle*?
- E2. Provide information on reducing greenhouse gases through *sustainable transportation*.
- E3. What is *remote participation*?
- E4. What are *ecological driving practices* for buses?
- E5. What is environmentally responsible hauling and shipping?
 - o What is *bundling for shipping*?
 - o What is an *EPA SmartWay Certified Hauler*?

Focus Area: Venue

- F1. How do I determine if a venue is energy efficient?
 - o What is *energy efficient lighting*?
 - o What is *ENERGY STAR*?
 - o What are *high efficiency HVAC systems*?
 - o What is *a building certified by a green rating system*?
- F2. What is a *zero-waste facility*?
- F3. What is a *fully accessible* facility?

Stackable Training Modules

F4. How do I manage collection of trash, recycling or compost?

- o How do I *pair up recycling and trash bins* effectively?
- o How do I *incorporate compost bins* into the waste stations effectively?
- o What would a worker that I *assign to work* the waste station need to know?

F5. What are some alternative fuel generators?

- o *Biodiesel generator.*
- o *Portable solar generator.*

F6. How do I ensure preventing *damage to the natural environment*?

- o Ensure that parking does not damage the natural environment.
- o Ensure that structures built for the event do not damage the natural environment.
- o Ensure that large vehicles do not *impact sensitive natural environments*.

Focus Area: Vendors

G1. What are sustainable giveaway guidelines?

G2. How can I eliminate handouts by using *electronic information transfer*?

G3. What is a *Green Vendor Pledge* and how do I create one?

G4. How can I handle wood, metals or other special waste materials that may be specific to my event?

- o *Reuse* materials from the event
- o *Recycle* special materials
- o *Composting* wood

Questions to Inspire Green Event Planning

Start your green event planning process with these key questions:

What are the sustainability goals for your event?

- **Is your goal educating others about Green ideas and practices?**

- o Look to action choices that you know will succeed. It's important to encourage and motivate people as we learn together!
- o Propose some choices from the Menu that necessitate learning together. Use the Training Modules to guide the event team's exploration of possible options.
- o People like to know that their efforts matter. Choose options that will generate reportable results, for example:
 - Electronic communications that save a measurable amount of paper;
 - Carpooling or use of group transportation that reduce a number of vehicle miles (and associated fuel use and pollutants emitted);
 - Local business purchases that keep a dollar amount in your community.

- **Do you want to prevent pollution and protect the environment?**

- o Work in the well-known order of the **“Three Rs” – Reduce, Reuse, Recycle** – and look first to options that reduce waste and pollution.
- o Budget your resources using the **“Triple Bottom Line” of sustainability – People, Planet, Profit** – and choose options to help your event make wise use of:
 - Energy, water, transportation, goods and more;
 - Your co-worker, family or volunteer contributions;
 - Available money, donations, gifts or sponsorships.

- **Do you want to save money?**

- o Frankly, going Green with your event may add to some costs. But the process of making decisions with Profit, People and Planet as factors all in play, instead of just “Profit and Loss” or “Expensive or Free” leads to more sustainable decision-making all around, especially with elements like fuel, food, water and waste.

What is the capacity of the coordinating group to make Green work?

- **Are you personally passionate about protecting the environment?**

- o An individual “Champion” is a key component for project success! But it can be hard to make Green ideas work as a solo force.
- o Engage others by exploring the possible options you've identified using this guide's Training Modules. Many hands and minds and hearts will help make Green work well in any one event, and over time.

- **Can Green elements rally the interest of a new group of helpers in an established event?**

- o Sustainability has become a cultural norm in our society, even though the popularity of Green ideas still widely varies. Tapping into this stream of ideas and options can invigorate your event planning process.
 - Start with actions that you know will work well, with one or two more challenging items, to help establish Green values.
- o People like to learn new things, especially when they relate to personal or community health.
 - Consider an element from the Checklist that addresses these interests and incorporate Training Module learning about it into your planning process.

Questions to Inspire Green Event Planning

What kinds of Green services and goods are available in your area?

- **Sustainable products and services are still often less available, and less affordable, in rural areas than they are in cities.**
 - o As you look at event planning choices from the Menu in this guide, consider your local options to make them work.
- **On the other hand, in both rural and urban areas, person-to-person resources can be in strong supply.**
 - o Can you barter a sponsorship for services?
 - Positive promotion of a Green-focused business could help your event afford Green options.
 - o If there's no business to support Green efforts for your event, can you arrange for sustainable services informally?
 - For example, if you want to compost food scraps or floral decorations, and there's no composting business in your area, a local farmer could help you by using event "food waste" as a valuable resource for livestock or crops.

Which options make sense as a starting point, toward Green growth over time?

- **Every event has different details and a unique character. We experience this vividly with birthdays and weddings. It's also true for events like regular group meetings or annual fairs or conferences.**
 - o Routine or reoccurring events may offer even more Green growth opportunity, because you can set goals and measure changes in relation to regular activity.
- **Starting with modest goals may be your best choice, especially if sustainable ideas or practices are new to your event group.**
 - o Demonstrating results and learning together over time about benefits of "Going Green" can help sustainability grow deep roots in group practices.
- **Take a step-by-step approach to integrating Green into your overall planning process.**
 - o This guide offers sustainable options for every kind of event coordinating responsibility. Start with the ones that are tasks for you.
 - o Think through event details and identify areas where eco-friendly approaches can be applied. This will pay off in ways that matter to anyone interested in being more sustainable:
 - Educating others about what "green" means;
 - Providing opportunities to be less wasteful;
 - Demonstrating options to use material, fuel, packaging, energy, water and other resources more respectfully.

Good Luck with Your Green Event!

Questions? Contact: earthways.center@mobot.org



 **EarthWays**
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a division of the  MISSOURI BOTANICAL GARDEN



Focus Area: Food Choices and Food Serving Items

Goal: Choose food and food service items that are sustainable

| Action Tasks | Green | Greener | Greenest |
|--|---|--|--|
| Use Local and Sustainably Certified Food | <ul style="list-style-type: none">• If hiring a caterer, use local caterers and ask them to work with your green guidelines.• If not hiring a caterer, use local foods (set a % of how much should be locally produced). | <ul style="list-style-type: none">• Use organically produced food and beverages. Products should be certified as meeting regional or international organic standards, to the greatest possible extent. | <ul style="list-style-type: none">• Look for low “food miles” the lower the distance the food had to travel the better. Set a % of how much should be locally produced. |
| Composting and Food Recycling | | <ul style="list-style-type: none">• Provide for composting of scraps and leftovers | <ul style="list-style-type: none">• If leftover food or beverages are expected, make contact with a nonprofit organization to arrange for food donation after the event. |
| Promote Your Green Efforts | <ul style="list-style-type: none">• Educate and engage vendors and event workers to fully support:<ul style="list-style-type: none">• Green aspects of food choices.• Raise awareness of the origins of the food.• The sustainable handling of leftovers. | <ul style="list-style-type: none">• Educate and engage attendees:<ul style="list-style-type: none">• About the green aspects of food choices.• Raise awareness of the origins of the food.• The sustainable handling of leftovers. | <ul style="list-style-type: none">• Report data collected showing results of greening efforts to EPA (see sample metrics). |

Notes on meeting this goal for your event:



Focus Area: Food Choices and Food Serving Items

Goal: Choose food and food service items that are sustainable

| Action Tasks | Green | Greener | Greenest |
|--|---|--|--|
| Use Local and Sustainably Certified Food | <ul style="list-style-type: none">• If hiring a caterer, use local caterers and ask them to work with your green guidelines.• If not hiring a caterer, use local foods (set a % of how much should be locally produced). | <ul style="list-style-type: none">• Use organically produced food and beverages. Products should be certified as meeting regional or international organic standards, to the greatest possible extent. | <ul style="list-style-type: none">• Look for low “food miles” the lower the distance the food had to travel the better. Set a % of how much should be locally produced. |
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Notes on meeting this goal for your event: