Sustainable Event Planning Guide

Denver 2008 Convention Host Committee Greening Initiative Fall 2008







Sustainable Event Planning Guide

Whenever, wherever we gather - whether it is for a reception, a festival, a meeting or a convention - we have opportunities to make a positive difference for the environment. Event planners are the central figures in any event, affecting the choices and experiences of a constellation of suppliers, facilities, caterers, sponsors and attendees. This Colorado Sustainable Events Guide was designed for hosts and planners to help lessen negative impacts on the environment and make a positive contribution to the community and the planet.

The content of this guide is drawn from best practices researched and the experience gained by the local Denver Greening Initiative of the 2008 Democratic National Convention. It features ideas and case studies to get any event planner, in any city started in terms of providing green leadership, selecting green event locations, reducing waste and recovering resources, minimizing energy use and contributions to greenhouse gases, moving away from single-use plastic water bottles, and educating participants. This guide also includes helpful resources and case studies unique to Colorado from small, medium, and large events, both indoor and outdoor.

Greening is about progress, not perfection. Sustainability does not happen with one event. Start now and every subsequent decision and action will present opportunities for continuous improvement. Similarly, sustainable event design will evolve with the times and event planners will learn from experience and each other. We hope you will find this guide useful and that you will share the results of your efforts with your peers.

With respect for the work that you do and gratitude for your interest in sustainability,

Parry Burnap, Denver Director of Greening, Office of the Mayor & Denver 2008 Convention Host Committee & Members of the Denver 2008 Resource Recovery Team

Acknowledgments

The following individuals, a subset of the members of the Resource Recovery Team of the Denver 2008 Convention Greening Initiative, collaborated to create this guide:

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We also must take every opportunity to acknowledge the hard work of the 140+ individuals who volunteered to green the 2008 Democratic National Convention.

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This guide is a work in progress. Help create the next version by sharing your comments, knowledge and experience with us at GreenMeetings@GreenConveneStrategies.com.

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Executive Summary

Hosting an event requires great amounts of water, energy, and materials that result in waste and greenhouse gas emissions. Many event organizers and venue managers would like to reduce their impacts on the environment but may not be sure how to start.

The Resource Recovery Team of the Denver 2008 Democratic National Convention Greening Initiative has created this guide to help event planners, venue managers, and caterers reduce environmental impacts, thus making events more sustainable. This guide includes strategies for reducing waste and conserving energy and water that will help small and large events alike. Whether you have already taken steps to make your event sustainable or are looking to take the first step, this guide is designed to help create a truly "green" event. Sustainability is a process of continuous improvement as new ideas and technologies become available to help lessen the impacts that our activities have on the environment.

First of all, it is crucial to involve all of the stakeholders that play a role in the planning or producing of the event. If you don't have commitment from your leadership, your efforts may be ineffective and unnoticed. If you do have commitment from leadership, you need to communicate this fact with all other partners involved to make sure you receive their full cooperation. The sooner you can start this process the better. Planning ahead is the single most important element in achieving a successful event. The first section of this guide focuses on why events should be more sustainable and how to articulate these reasons to all interested parties, including the leadership in your organization. The main section lists a variety of questions, strategies and procedures to help you select a venue, choose a trash hauler, calculate the number of bins needed for recycling and composting, sort waste, conserve energy and water, emphasize alternative transportation, and communicate a consistent message. These activities will vary with different sized events, so we have included reports in the appendix from a variety of events, ranging from a small, indoor meeting to a large, outdoor music festival. The appendix also contains a Resource Guide that lists organizations practicing sustainability and provides contact information for companies and organizations in Colorado that can help create a more sustainable event.

The Resource Recovery Team is pleased to share the results of our best practices research including lessons learned from the 2008 Democratic National Convention. This guide is the result of much hard work put forth by a number of individuals and organizations before, during, and after the Convention. We hope it helps you to make all of your future events more sustainable in every way.



Section I - Why Create a Sustainable Event

According to a 2008 Watkins Research group survey, which evaluates major convention destinations based on interviews with meeting planners, one out of every three meeting planners has been told by their members to only book events in "green cities" and four out of ten said they would pick the greenest city, if all other things were equal.¹ In the same study, Denver was ranked by meeting planners as the third greenest city in the country. Governmental agencies are increasingly requesting green practices in events with which they are associated as hosts or funders. In addition, it is likely that government agencies will increasingly incorporate environmental management practices into their facility and park permit requirements.

SUSTAINABLE EVENTS CAN:

- Save time and money
- Help the environment
- Create positive changes beyond the boundaries of the event
- Improve the experience of your participants
- Position you as a leader

SAVE TIME AND MONEY

You can take many actions to make your event more sustainable, while also saving time and money. Using online registration services, distributing presentations by USB drive or CD, and limiting paper handouts will save considerable printing costs, not to mention paper and trees. Reusing name badge holders or recycling used exhibit booths at trade shows also enhances your events' cost effectiveness, while reducing waste.

HELP THE ENVIRONMENT

The meeting industry is a large consumer of energy and producer of waste, so any effort to reduce, reuse, or recycle materials can have a big impact on the environment.

CREATE POSITIVE CHANGES BEYOND THE BOUNDARIES OF YOUR EVENT

By affecting the management and purchasing practices of your event partners and suppliers, you create a ripple effect of change. Offering environmentally responsible options during your event inevitably raises the awareness of your attendees about similar, simple things they can do at home. Through your efforts to communicate about those actions and their value, you can encourage individuals to continue them after the event is over.

IMPROVE THE EXPERIENCE OF YOUR PARTICIPANTS

Many people are looking for opportunities to improve the health of our planet at their jobs as well as at home. Event attendees often express that sustainable practices, when they are well-organized, enhance rather than detract from the quality of the production, be it a small meeting or a large event.²

POSITION YOU AS A LEADER

Sincere efforts to adopt green practices, even modest ones, enhance relationships with customers and other stakeholders. Many cities, businesses, property owners and consumers are moving in a direction that demonstrates their commitment to environmental sustainability. Clients, promoters, employees, shareholders and other stakeholders are calling for increased environmental responsibility with regard to waste, energy, and cutting back or offsetting greenhouse gas emissions associated with their events. Taking steps to create a more sustainable event or meeting visibly demonstrates your environmental commitment, enhancing your brand and your organization's image. As new standards and best practices emerge, the early adopters will reap the market advantage of enhanced reputations.

FAST FACT

In 2004, the State of California passed AB 2176, a law that requires special events and public venue facilities with over 2,000 participants per day to develop and implement a solid waste management plan and implement recycling and waste reduction strategies. In addition, all California cities and counties must comply with AB 939, which mandates that waste generated in the State be reduced by 50%.³



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Section I - Why Create a Sustainable Event

The next section provides strategies to reduce your event's impact on the environment. You may not be able to accomplish all of them. It helps to start with the easier steps and work your way up to the more difficult steps. Strike a balance by targeting activities that provide the most return for the time and money expended. No matter what you decide to do at your next event, do something. To give you ideas on how to get started, our appendix includes case studies from events of various sizes, an event checklist, sample language for Requests For Proposals (RFPs) from potential vendors, and a Resource Guide with a comprehensive list of organizations practicing sustainability. Plan ahead and document your success.



CASE STUDY EXAMPLE

"During a typical five-day conference, 2,500 attendees will use 62,500 plates, 87,500 napkins, 75,000 cups or glasses and 90,000 cans or bottles...By serving water in pitchers instead of individual plastic water bottles, one conference saved \$25,000." ⁴

Section II - How to Create a Sustainable Event

A. LEADERSHIP

- Articulate sustainable goals to partners early in the planning process
- □ Use written agreements to ensure full cooperation
- Be realistic when devising your strategy and setting your goals
- Document your success

Your leadership role comes with unique opportunities to impact not only your event but venue managers, suppliers, and the partner agencies involved. As a leader, one of your responsibilities is to set sustainable goals to lessen the impact of your event on the environment. The following are guidelines for articulating those goals to stakeholders including sponsors, facility managers, suppliers, and other partners.

ARTICULATE SUSTAINABLE GOALS TO PARTNERS EARLY IN THE PLANNING PROCESS

A successful event begins with communicating goals and objectives to key players involved. This is especially true for organizing a successful sustainable event. The key players, including vendors, caterers, event planners, venue managers, and sponsors, need to understand your intentions from the very start of the process. By making your event more sustainable, you have the opportunity to leave a positive legacy and help all partners move in the right direction.

USE WRITTEN AGREEMENTS TO ENSURE FULL COOPERATION

Written documents and tools can help manage expectations and accountability with your suppliers and partners. Create a Request for Proposal (RFP) with sustainability criteria. Send RFPs to each venue you are considering. (See page 44 for sample RFP language). Once you select the venue, caterers or other suppliers, you can create a contract or memorandum of understanding that restates activities you have agreed to. Incorporate language about sustainable practices into your contracts with venues and throughout the entire supply chain related to your event. Creating a more sustainable event is an opportunity to leave a positive legacy by helping the venue take a step in the right direction. This is precisely what occurred with the Colorado Convention Center in 2006, when the U.S. Green Building Council held their annual Greenbuild Expo and initiated a robust recycling and composting program. Two years later, the Convention Center developed their own program and was able to recycle and compost 70% of the total waste generated at the 2008 Democratic National Convention. Other events held at this venue are also recycling, as well as composting upon request.

BE REALISTIC WHEN DEVISING YOUR STRATEGY AND SETTING YOUR GOALS

Your sustainable goals and objectives will vary from one event to another depending on its size. The diversion rate of an event is the percentage of total waste diverted from the landfill. Events and meetings that offer no recycling options have a 0% diversion rate. An event that captures all of its waste through recycling and composting would have a 100% diversion rate. While 100% may not be realistic, some events have reported rates as high as 98%, which are possible only when the event planners have total control over all materials used. A realistic diversion rate for larger events is 90%.⁵

DOCUMENT YOUR SUCCESS

A successful event leader will define and outline specific green goals, devise a strategy for achieving each goal, and document success. See Page 52 for a Sustainable Events Checklist. Familiarize yourself with this checklist as you are planning an event. It may give you ideas as you go along, and at the end of the event, it will help you summarize your results so others can learn from your efforts. Additionally in the Appendix, we've provided case studies (page 22) which can give you additional ideas when documenting success.



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B. VENUE SELECTION AND LOCATION

When planning a sustainable event, location is one of the most important factors. The facilities, amenities, practices and policies of the chosen venue will have a large impact on the environmental savings that can be realized for any event. Be sure to distribute an RFP to several venues well in advance so you can compare and contrast what each venue is doing to be green.

Make an effort to select a venue that has a stated environmental policy and a management team that is supportive of the venue's environmental efforts. Ask if the venue has an environmental management system certification - a third-party verification that formal procedures and policies are in place to assess and continually improve their environmental performance - or if they have received any environmental awards or accolades. If they haven't received awards, ask about the practices they have in place or are willing to implement. Before choosing your venue, ask if some or all of the following sustainable strategies are available.

PURCHASE RESPONSIBLY

Check to see if the venue is reducing their consumption of non-renewable resources (such as plastic) by purchasing biodegradable (or at least recyclable) products, refillable ink cartridges, energy efficient office equipment, and non-toxic cleaning and pest control products. Ask if the paper materials used contain at least 30% post-consumer products. These can be purchased at little to no increase in cost to the venue. Ask if housekeeping products are Green Seal Certified. To learn more about Green Seal certification, visit www.greenseal.org.

RECYCLE ONSITE

Your venue should offer onsite recycling of paper, cardboard, plastic, glass and metal. An added incentive for choosing a specific venue would be a food/compost collection program. Ask what services are already provided at the facility and to what extent you will need to be involved. In some cases, you may work directly with the waste hauler, while in other situations, it may be handled for you.

- □ Reduce and reuse waste
- □ Purchase responsibly
- \Box Recycle onsite
- □ Offer local or organic food choices
- □ Promote energy efficiency
- □ Conserve water
- □ Encourage public transportation
- \Box Offer carbon offsets

REDUCE AND REUSE WASTE

Ask for the use of reusable linens, china, and cutlery as well as bulk water service, beverages and condiments. If hotel occupancy is part of your event, look for bulk soap and shampoo dispensers. Ask about recycling or donation programs for unused toiletries, food, decorations and display materials.



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B. VENUE SELECTION AND LOCATION (cont.)

OFFER LOCAL OR ORGANIC FOOD CHOICES

Your venue, its concessionaire/caterer, or your selected caterer may be able to offer and highlight healthy meals that include local or organic food and vegetarian options. While organic food may increase your food and beverage costs, local food in season may be comparable in price. Work with the venue concessionaire or caterer. Creative adjustments of the menu through portion control or substitution of less expensive items (e.g. chicken for beef) will help you manage your budget.

PROMOTE ENERGY EFFICIENCY

Ask if the venue has taken steps to measure and reduce energy consumption by installing energy-efficient lighting, programmable thermostats, and implementing other energy-saving strategies.

CONSERVE WATER

Ask about installed water-saving devices, water conservation practices, towel and linen reuse programs, and wastewater recycling.

ENCOURAGE PUBLIC TRANSPORTATION

Choose a location based on proximity to public transportation. Offer information in your promotional materials about nearby entertainment and dining that can be accessed using public transportation or walking. Encourage mass transit, carpooling, walking, and cycling whenever possible. An alternative-fueled shuttle service is also a nice touch that educates attendees at the same time.

OFFER CARBON OFFSETS

Ask the venue if they offer a carbon-offsetting program to their guests, or if they offset their own carbon footprint. A carbon footprint measures of the impact that an activity has on the environment in terms of the amount of greenhouse gases produced, measured in units of carbon dioxide (CO_2). Carbon calculators are web-based tools that use formulas to determine the amount of CO_2 emitted by the facility and activities required to host an event. The formulas calculate the cost of an investment in renewable energy sufficient to balance (or cancel out) the emissions from your event.



Once you select a venue based on the results of your research into the factors listed above, be sure to put your agreement in writing. Your contract should clearly state expectations and the consequences for failure to perform, if any. It may be difficult to impose penalties, but having their commitment in writing should help prevent misunderstandings.

Several new facilities, or those undergoing remodeling or expansion, are increasingly being designed with environmental impact in mind and include the use of natural daylight, efficient heating and cooling systems, the adoption of water collection and reclamation systems, green roofs, comprehensive recycling programs and composting.

C. RESOURCE RECOVERY

- □ Establish partnerships with waste haulers early
- Use electronic or sustainable media for event promotion and registration
- □ Reuse, recycle, or compost food and beverage products
- □ Require vendors to follow your sustainable guidelines
- □ Calculate the number of colocated, clearly marked bins needed
- □ Use (and reuse) signage
- □ Volunteers can help sort recycling, compost, and landfill waste

By encouraging recycling and composting, an event can easily reduce the amount of total waste generated by 50%. Evens should have at least one recycling bin for every trash bin. If composting is part of the waste reduction strategy, there should be two compost bins for every trash bin. Communication and effective signage are crucial for sorting waste, but the best strategy is to also have volunteers stationed at the bins.

ESTABLISH PARTNERSHIPS WITH WASTE HAULERS EARLY

Identify your waste hauler and determine the level of involvement you will have with them. In the case of large outdoor events, you may be working with them more closely than at a small, indoor venue with established waste services. Either way, it is important to build a close working relationship early in the planning process. Communicating with your waste hauler will ensure that recyclables go to the recycling center and compost goes to a certified commercial compost facility. Find out what is and is not possible in your local community to make good decisions about products and resource recovery strategies. Working closely with your waste hauler is as important as signage, volunteers, and communication with participating vendors. If you make the right choices, you may be able to reduce costs considerably. Often, the number and sizes of bins is grossly overestimated in fear that there will not be enough storage for your waste streams. Be aware that your waste hauler may suggest that more is better, so do your research and use the fast facts on this page to help guide your decision.

FAST FACT

Results released in a 2006 California study of 25 different large public venues (zoos, museums, etc.) and events (parades, festivals, etc.) indicated that on average 2.44 pounds of waste are generated per visitor, per day.⁶ The average American generates 4.6 pounds of trash per day, according to the U.S. Environmental Protection Agency and the Christian Science Monitor.⁷

If you are interested in the metrics of your event's waste stream, communicate closely with a reliable waste hauler to help you capture accurate weights for reporting purposes. Some haulers have tare weights – the weight of the vehicle when empty - marked on their trucks for easy weight tracking. Often times, haulers are already reporting weights for internal documentation. If you work closely with your hauler in advance, they should be able to give you accurate weights of the waste streams they handle for your event.

FAST FACT

The waste stream from a large outdoor event typically follows a general ratio of 4:3:2:1.⁸ This informal ratio was developed by ZeroHero Events of Fort Collins after producing sustainable events for 10 years. The ratio relates to an estimation of the amount of compost, recyclables, cardboard, and landfill waste (by weight). For example, if an outdoor event serving food was held that generated 1,000 pounds of total waste, the breakdown for each waste stream may look like this:

- 400 pounds of compost (compostable products, food, paper, etc.)
- 300 pounds of recyclables (aluminum, glass, and plastics #1 #6)
- 200 pounds of cardboard (from food and beverage vendors)
- 100 pounds of landfill waste (tape, plastic bags, contamination, etc.)

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Communication is critical, so make sure to ask your hauler/recycler questions and clarify the following points.

- How many bins, dumpsters, or roll-offs will the event need?
- What is the cost for each?
- Where will bins/dumpsters be delivered?
- Who will place and empty the bins/dumpsters?
- Where will the dumpsters be located?
- How often will dumpsters be emptied? At what time?
- Who is responsible for emptying satellite collection containers?
- Does hauler pick up after business hours and/or on weekends? If so, are there additional charges?
- Does the hauler collect garbage, compostables, and/or recyclables?
- Should recyclables be mixed or separated?
- Does the hauler take waste to a materials recovery facility?
- Which recycling center will the recyclables be taken to and which plastics do they accept?
- Can the hauler pick up and deliver the compost material to the closest commercial compost facility in the area?
- If they cannot haul the compost, is there another company that can?
- Request reporting on weights for each waste stream after the event.
- Ask for references if you are unfamiliar with the company.⁹

FAST FACT

Every event should have at least one recycling bin for every trash bin. If composting is part of the waste reduction strategy, there should be two compost bins for every trash bin. Communication and effective signage is crucial, but the best strategy is to have a volunteer staff all the groups of bins.

FAST FACT

Recycling aluminum requires only 5% of the energy and produces only 5% of the CO_2 emissions as compared with producing new aluminum from raw materials. This reduces emissions and waste going to landfill, but best of all, aluminum can be recycled indefinitely.¹⁰

Trash and recycle hauling is typically full-service, meaning the hauler receives, transports, and processes the waste. However, compost services often are not full service. In the Denver metro area, for example, there is only one commercial facility that receives, but does not transport, compost. Therefore, check with your waste hauler to see if they will agree to deliver compostable waste to a local facility. Some may agree, while others will not. If they refuse to deliver to a compost facility and no other alternative is available, consider renting a box truck to deliver compost to the nearest compost facility. This waste stream can amount to 40% or more of the total waste stream, sometimes as high as 60%. The cost of truck rental may be offset by the fact that you don't need to order as many dumpsters or roll-off containers, which run between \$350 and \$550 for each unit delivered.¹¹



USE ELECTRONIC OR SUSTAINABLE MEDIA FOR PROMOTION AND REGISTRATION

Offering online registration reduces both the amount of paper used and postage costs. Promote events through electronic media such as Web sites and emails. If paper must be used, use recycled paper and encourage or require vendors to limit paper use. Print on recycled paper with at least 30% post-consumer content whenever possible. Expand margins and print double-sided.

Give some thought to promotional giveaways and registration packet inserts. Limit the inclusion of paper and flyers. Consider screening items with criteria based on the following:

- Responsible manufacturing
- Composition of recycled materials
- Usefulness or educational value
- Helpfulness with greening goals, e.g. a flash drive to reduce paper use or a reusable water bottle to encourage the use of tap water
- Reusability no single use items
- Supportiveness of local sustainable business
 enterprises

Responsibly selected giveaways reflect well on both the event and the sponsor or donor of the giveaway. Green options might include reusable tote bags made from recycled materials. A great giveaway for attendees is a stainless steel or reusable, hard plastic water bottle, which can be paid for by a sponsor that would get their logo custom printed on one side with the event name on the other. Discourage plastic bags.

REUSE, RECYCLE OR COMPOST FOOD AND BEVERAGE PRODUCTS

Reuse

Use chinaware, glassware, and silverware before using disposables. Reusable products result in zero waste. The availability of drinking water at your venue may be a factor in your decision.

Recycle

Recyclable products are a good choice. Cups are cost effective, easily recycled, and are not subject to food contamination. Many plastic cups (#1-6) are accepted at most recycling centers along Colorado's Front Range, but plates and utensils with food contamination will usually get

CASE STUDY EXAMPLE

We the Planet Festival

At Oakland's We the Planet festival held in November 2004, a 98% diversion rate was achieved. Over 4,000 attendees, vendors and staff generated 1,028 pounds of waste but sent only 20 pounds to the landfill. Through aggressive source reduction, composting and recycling efforts on the part of organizers, volunteers and musicians, garbage cans were largely empty at the end of the four-hour event.¹²

sorted out and sent to the landfill. Talk to your waste hauler to determine which number (e.g., #6) plastics are recyclable. This may vary in different communities.

If you only plan to offer recycling at your event, expect a 10-20% diversion rate, despite the fact that up to 30% or more of the total waste generated may be recyclable. This can be due to the contamination issues or losing a portion of the recyclable materials in trash bins. If your goal is to reach a higher diversion rate, a third waste stream is needed–compost. When using compostable materials (for all food and drinks), it is possible to capture up to an additional 60% of the total waste stream for composting, increasing the diversion rate to 90%.

Compost

Another option is to purchase 100% biodegradable products, which include utensils, plates, cups, to-go containers, soup containers, deli containers, straws, dome lids, flat lids, soufflé cups and even garbage bags. These products typically break down within 30-60 days at a commercial compost facility, resulting in a nutrient-rich soil amendment that is sold to landscape companies and nurseries. Compostable utensils, plates, bowls, and cups are becoming popular because of environmental benefits and because they simplify the sorting process. Contamination issues are bypassed because the serviceware is disposed of with the food. Some products (e.g., Polylactic Acid cups) may currently cost up to twice as much as their conventional counterparts, but other products, such as utensils, are quite competitive. As demand increases, the supply will increase and prices will come down.

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Sorting

Compostable products should never be mixed with recycling. They damage the recycling process if they get into in a normal plastic recycling waste stream. If compostable cups are used and composting is not offered, put those cups–even though they look and act like plastic– in with the landfill-bound trash. Signage or volunteer support will help your attendees sort the waste streams.

Bulk

Work with the venue to provide water filling stations to minimize the use of plastic water bottles. Provide bulk containers for products, such as ketchup and mustard, to avoid unnecessary waste. Condiments offered in individual packets really add up, particularly at larger events with many food vendors.

CASE STUDY EXAMPLE

Rocky Mountain Sustainable Living Fair

The Rocky Mountain Sustainable Living Fair in Fort Collins offers glass pints for \$3 that can be returned at the end of the day for a \$2 return. This step alone eliminated the need for approximately 10,000 disposable cups, which is equivalent to roughly 10 cubic yards of waste.

REQUIRE VENDORS TO FOLLOW YOUR SUSTAINABLE GUIDELINES

Get cooperation from your vendors up front. Consider drafting a contract or supplying guidelines to ensure accountability. Help connect them with proper resources, if needed. Your guidelines could require that vendors bring only recyclable, reusable or compostable products to your event. It is critical to make sure vendors do not bring products made of Styrofoam or non-recyclable plastic or a 90% diversion rate will not be possible. Require a security deposit that will be refunded only if guidelines are followed. Be aware of all permitting requirements with the municipality and county where the event takes place, if applicable. Make it easy for the vendors to properly dispose of their waste at the venue before they leave by providing information about bin location and posting signage. A well-written vendor contract, preceded by a RFP that states your intentions for achieving sustainable goals, can help your vendors feel they are part of the team.

Encourage food vendors to reduce food waste as much as possible. Typically, food vendors and catering companies overestimate to avoid running out of food for their guests. Verify local health inspection codes that may affect how you manage food donations. Make advance arrangements with a local food bank or shelter to pick up any surplus food. Consider arranging for extra food to be offered to the event staff and volunteers to enjoy after their shift.

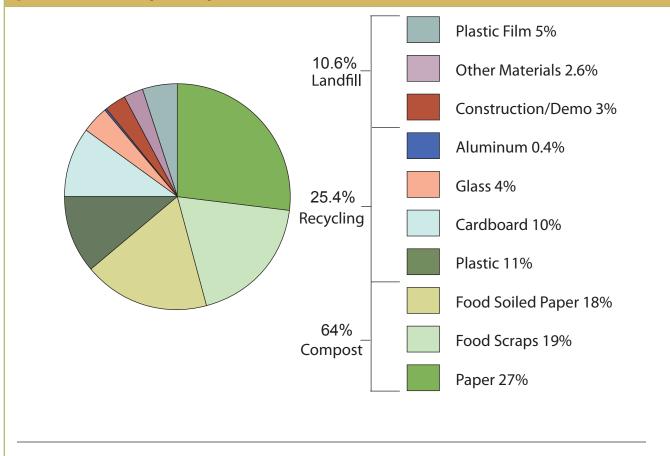
CALCULATE THE NUMBER OF COLOCATED, CLEARLY MARKED BINS NEEDED

Determine the number of 'resource recovery stations' needed. A station consists of at least one recycling bin (and if a compost program is in place, two composting bins) for each trash bin. One station is needed for every 200-300 people, depending on the venue. Typically, waste stations should be no more than 150 feet apart to ensure adequate coverage.

Event organizers have several choices when it comes to acquiring bins for recycling and composting. Will they be used inside a venue or outdoors? If the bins are going to be used year after year, invest in plastic or metal bins that will last longer than cardboard bins. Plastic or metal will be more expensive at first, but will save money over time and look better than cardboard bins.



In 2005, the California Integrated Waste Management Board (CIWMB) conducted numerous waste audits at a variety of special events. After taking the average of these events in 2005, similar results were found, as characterized in the chart below:



USE (AND REUSE) SIGNAGE

Proper signage is critical. Provide clear, consistent signage at each station so attendees can learn about products being used and how waste is diverted from the landfill. Signage may be more effective with pictures rather than just words. Remember, if the recycling bins get contaminated (trash or materials that can't be recycled are mixed in with the recyclables, for example), the whole load may end up at the landfill. Recycling centers vary, but contamination levels more than 1% can be rejected. Reuse always reduces waste. Keep signs, lanyards, name badges, banners, table settings, table cloths, water stations, and dry erase boards to use at another event. Items that can be rented or purchased will be reused for another event. A reusable cup program is a great way to reduce and even eliminate the amount of plastic cups at events.

VOLUNTEERS CAN HELP SORT RECYCLING, COMPOST, AND LANDFILL WASTE

The best way to manage contamination is to add a volunteer at each resource recovery station to keep waste streams separate and offer a deeper understanding of your goals to event attendees. "Front of the House" volunteers are the keys to success. "Front of the House" operations simply means the work happening where guests are present. No matter how simple or complex your resource recovery stations are, an enthusiastic and educated volunteer can keep bins free of contamination, even if it means putting on latex gloves and doing some sorting. This will avoid having to tear apart full bags of trash to sort later, which is labor-intensive and time-consuming. The goal is to separate recycling, compost, and landfill waste before it enters the collection bins.

Use a color-coordinated system to help identify the three waste streams for the "Back of the House" operations. "Back of the House" involves work behind the scenes – in the kitchen, where trash is taken after being removed from bins, etc. It makes sense to use compostable bags for the compost stream. These are usually green or have green writing to indicate they are biodegradable. Recycling should go into another color garbage bag, white for instance, while the landfill waste should go into a black or gray garbage bag. The bags can then be weighed and placed into proper containers. Be sure that you have garbage bags that fit your bins properly. Bags that are too small for your bins can create last-minute problems with pickup that can be easily avoided.

For large events, compacting dumpsters are effective in minimizing the number of times dumpsters need to be emptied. Given the substantial cost of each pick up, significant savings can be realized by using a compactor.



VOLUNTEER COORDINATION

Volunteers will significantly improve your zero-waste goals. Recruit volunteers to help sort what attendees are discarding and educate them on the zero-waste goals of the event. To reach a 90% or higher diversion, you will need one to two volunteers at each station, as well as additional volunteers to roam and service the stations as they fill up. A guideline is to have a waste station every 150 feet, or for larger events, one station for every 200 to 300 people. Planners should make an effort to involve the immediate community members by offering them volunteer opportunities in trade for free entrance to the event.

Spend time communicating with volunteers prior to the event. Not only does this help prepare volunteers, but helps to ensure a good turnout on the day of the event. Each volunteer should go through a brief training prior to their shift to make sure they know what is compostable, what is recyclable, and what is landfill waste at your particular event. Provide volunteers with the tools they need to do an effective job – gloves, hand sanitizer, sunscreen, and drinking water, for example. Keep your volunteers comfortable and happy. Send post-event emails to thank them for volunteering and let them know how they contributed to achieving the sustainable goals of your event.



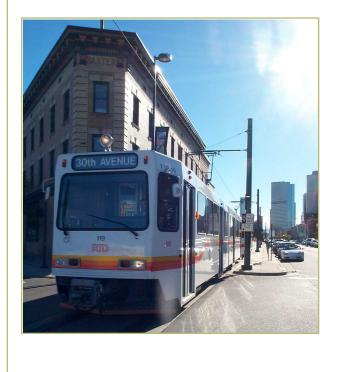
D. ENERGY CONSERVATION

- Select venues that practice conservation and energy efficiency
- Offer opportunities to calculate and offset carbon
- Use cleaner-burning fuels for any trucks, buses, or generators

Energy is required at any event-indoor, outdoor, small, or large. The first step is conservation and energy efficiency. However, the form of energy used can determine the level of sustainability your event can achieve. Choose cleaner burning fuels and use carbon offsets for energy used at the venue, travel of attendees, organizers and suppliers, the disposal of waste generated, and water consumed.

SELECT VENUES THAT PRACTICE CONSERVATION AND ENERGY EFFICIENCY

To achieve your sustainability goals, choose a venue that offers energy efficient lighting and that participates in alternative energy programs. Ask venues to only run escalators and HVAC systems during the event hours. You can also ask them to have lights at 50% during the movein/move-out periods, rather than running lights at 100%.



OFFER OPPORTUNITIES TO CALCULATE AND OFFSET CARBON

After all conservation methods have been exhausted, there will still be CO_2 emissions to account for as a result of necessary activities such as generator use and staff and passenger travel to the event. Calculate your footprint ahead of time so you can find ways to cover the costs of offsetting. Try recruiting a sponsor or include the cost in the registrations fees.

During the 2008 Democratic National Convention, the Denver Metro Convention and Visitors' Bureau launched very simple travel and event online calculators. These calculators are available to any event guest or planner and provide the opportunity to contribute to the Colorado Carbon Fund, a fund that will be invested into alternative and renewable energy projects in Colorado.

To make your event as eco-friendly as possible, use the Denver Events CO_2e Emissions Calculation Tool at http:// www.denver.org/convention/green/event-calculator. It's an easy-to-use online tool designed to calculate Carbon Dioxide (CO_2) Equivalent (e) emissions that result from an event taking place in Denver. It covers all aspects of your event: the energy used at the venue, travel of attendees, organizers and suppliers, the disposal of waste generated, and water consumed. Individual travelers can also be invited to take responsibility for the travel associated with their attendance at your event using the travel calculator at http://www.denver.org/transportation/green-travel. Consider featuring this Web site link in all of your meeting communications. To learn more about carbon offsets, visit the Colorado Carbon Fund at www.coloradocarbonfund.org.

FAST FACT

The percentage of energy saved by using recycled instead of raw materials to manufacture varies from product to product: 31% glass, 45% newsprint, 61% steel, 57%-75% plastics, 95% aluminum.¹³

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D. ENERGY CONSERVATION (cont.)

USE CLEANER-BURNING FUELS FOR ANY TRUCKS, BUSES, OR GENERATORS

Biodiesel

Many large events depend on diesel generators, light towers, forklifts, production trucks, and tour buses. Consider using a cleaner-burning biodiesel alternative, either as a blend or in its pure 100% form, known as B100. The most common blend is 20% biodiesel with 80% regular diesel, known as B20. One of these two products can usually be found from one or more of your local fuel distribution companies anywhere in the country. (The Resource Guide on page 45 provides the National Biodiesel Board Web site, which lists biodiesel distributors in Colorado).

According to a recent National Renewable Energy Lab study, across a life-cycle analysis, biodiesel has a better energy balance than other fuels and the environmental benefits of using B100 are impressive.¹⁴ However, there is much controversy about using crop-based fuels due to food versus fuel concerns, as well as actual life-cycle environmental benefits. Consider all of the facts and make the best decision for your event.

COST CONSIDERATION:

According to a 2008 US Department of Energy study, B20 cost are generally higher per gallon than conventional diesel, but the price gap has been closing in recent years with B20 sometimes costing less than conventional diesel. B100 can cost approximately 15-30 cents more per gallon than conventional diesel. As fuel prices change day-to-day, check with your local fuel stations to find current prices.¹⁵

Solar Power

Solar powered stages are becoming popular at events; however, most are fairly small and can only provide enough power for a small to mid-sized stage (four 20-amp breakers). Larger-scale solar powered stages are being developed as photovoltaic (PV) prices drop. Applied solar technologies are an attractive practical option and produce zero emissions.

COST CONSIDERATION:

Solar stages are unique and cost roughly double the price of a normal stage rental. Carbon emissions and fuel prices may be a factor in selecting this option if a stage must be transported a significant distance.

Hydrogen Fuel Cell

While hydrogen as a transportation fuel may be 20 years out, it is available today for emission-free power generation. Normally quite expensive, a 5 kW demonstration unit is made available by The City of Fort Collins, in partnership with the Governor's Energy Office, to certain events for free or at low-cost as an educational tool. Advanced notice is required because of staffing requirements such as an onsite technician to answer questions and help with troubleshooting. Contact the State of Colorado's Governor's Energy Office (GEO) found in the Resource Guide on page 48.



E. TRANSPORTATION

- □ Choose a venue that reduces transportation needs
- □ Publicize bus and train schedules for attendees
- □ Encourage carpooling, biking, and walking
- □ Use hybrid or alternative fuel-powered buses for tours or airport shuttles

Travel is often the largest carbon contributor to an event. Venue choice will dictate whether public transit can be implemented as a viable transportation option. Planners should encourage strategies to reduce emissions created by any transportation associated with your event.

CHOOSE A VENUE THAT REDUCES TRANSPORTATION NEEDS

Transportation considerations are essential. Venue choice will dictate if public transit is a viable option for your event. Always consider train and bus routes when planning. Once you've done the research, make sure that information is easily accessible to attendees by putting the information on the event and venue Web site home page, adding a map to the back of any leaflets/flyers, or using TV or radio public service announcements (PSAs) to broadcast travel options. It also helps to create an incentive program, along with an effective marketing campaign, to make sure people know they are encouraged to take public transportation rather than individual passenger cars and trucks. For example, a possible incentive is to offer a free beverage or meal ticket or raffle prize to any attendee who turns in a receipt from use of public transportation or who can demonstrate that they have ridden a bike to the event.

ENCOURAGE CARPOOLING, BIKING, AND WALKING

Take advantage of online Ride-Share programs. List these programs on your event Web site so that people can easily navigate to the page where people are looking for or offering a ride to others attending the same event. Some Ride-Share programs even offer logistical support to help make the program work for your particular circumstances. These methods of transportation are always the best options to encourage, if practical. A growing number of cities now have Bike-Sharing programs and pedestrian maps to help visitors navigate around a new city. Once you get to the event, bicyclists should be offered a free secured bike valet parking area that is closest to the entrance. An incentive can be given to bicyclists or pedestrians to say thank you for not polluting.



USE HYBRID OR ALTERNATIVE FUEL-POWERED BUSES FOR TOURS OR AIRPORT SHUTTLES

If you are hiring shuttles or buses for your event, consider alternatively-fueled vehicles. Not only is there an environmental benefit, but the shuttles provide the opportunity to share information about alternative transportation options with your guests.

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F. WATER CONSERVATION

- □ Offer bulk water dispensers or use pitchers of water with glassware
- □ Avoid venues that use excessive plastic water bottles or request that they Discontinue their use for your event

Choose a venue that has installed water-saving devices and implements water conservation programs such as towel and linen reuse programs and wastewater recycling. Encourage your venue to contact the water service provider in their area. These agencies often provide financial rewards or benefits for installation of water-saving devices in kitchens and bathrooms. Ask your venue to request a water audit before your event to ensure there are no leaks in the system. Make sure you minimize the use of plastic bottles.

OFFER BULK WATER DISPENSERS OR USE PITCHERS OF WATER WITH GLASSWARE

Making drinking water available to event attendees has become a standard practice at events and festivals in recent years. In many cases, the only water option available to attendees is to purchase single-use bottles of water ranging from \$3 to \$5 each. To minimize single-bottle use, provide bulk water or refill stations and encourage attendees to bring their own bottles. For events in the Denver Water service area, a water truck is now available for use at events. Visit www.denverwater.org for more information.





AVOID VENUES THAT USE EXCESSIVE PLASTIC WATER BOTTLES OR REQUEST THAT THEY DISCONTINUE THEIR USE FOR YOUR EVENT

If you must provide water in plastic bottles, encourage your attendees to refill them throughout the event. Some event producers make and sell custom printed reusable water bottles. Bisphenol A (BPA, a chemical of public health concern) is being phased out of many plastic reusable water bottles. The revenue generated from selling bottles can help pay for any additional cost associated with providing water stations or making your event sustainable. Many companies offer brandable stainless steel water bottles.

G. COMMUNICATION/EDUCATION

- $\hfill\square$ Send out an early invitation that clearly states your sustainable goals
- $\hfill\square$ \hfill Be consistent in your messaging when talking about green initiatives
- $\hfill\square$ \hfill Be creative and make it fun for the attendees to be more green
- □ Work closely with stakeholders, such as vendors and waste haulers

You want key players, including vendors, caterers, event planners, venue managers, and sponsors to understand your intentions from the very start of the planning process. Clear and consistent communication about your sustainable goals will encourage everyone connected with the event to pass that information along to others.

SEND OUT AN EARLY INVITATION THAT CLEARLY STATES YOUR SUSTAINABLE GOALS

Be sure to communicate what you intend to do to make your event sustainable to event attendees, vendors, and partners through signage, word of mouth, press releases, and other forms of promotions.

BE CONSISTENT IN YOUR MESSAGING WHEN TALKING ABOUT GREEN INITIATIVES

Clear and consistent communication with vendors, sponsors, and contractors working at the event will help communicate your message. These key players are crucial in helping to execute the plan when it comes to waste reduction, energy conservation, and reducing the carbon footprint. While some attendees will be knowledgeable about recycling and composting, it is important to assume that some people attending are not familiar with green practices. There are several ways to communicate to event attendees. Web sites, stage announcements, and consistent, effective signage are good places to start, but you can invent creative ways to communicate the "green" theme to your attendees.

BE CREATIVE AND MAKE IT FUN FOR THE ATTENDEES TO BE MORE GREEN

Make it fun for attendees and get them involved. Empower them to participate in your greening efforts by creating incentives or hold a contest for the most enthusiastic participant. For example, you can offer coupons for food or green door prizes, such as tote bags centered on a "say no to plastic bags" theme. Be creative and have fun with it!

FAST FACT

Some events have engaged their attendees by offering an incentive for each person that collects 50 empty cups off the ground. You can also organize a food drive or a school supplies drive that will help your event leave a positive legacy for the community hosting your event. The patron that brings the largest donation could win a prize with a "green" theme. For children, you can organize a scavenger hunt with an environmental theme. Give away green gifts to attendees willing to help volunteer for 2-4 hours during or after the event. Receiving credit and recognition will make the attendees feel good. After all, they make any event a success or a failure in the end.

WORK CLOSELY WITH STAKEHOLDERS, SUCH AS VENDORS AND WASTE HAULERS

Once you have involved all the stakeholders, your job becomes easier and you are ready for the final stage of communication–getting the word out to the media. It is important to make sure the efforts are well executed before going to the media. If done correctly, the media can be the best promotional vehicle. However, be advised that halfhearted efforts will reflect poorly in the next day's story.

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Conclusion

Sustainable event planning is rewarding. To achieve success, event planners need cooperation from the host organization's leadership, event sponsors, food and craft vendors, fellow staff, and volunteers. By planning ahead and communicating with these key players, you will create a strong team, resulting in an event that has minimal impact on the environment and the host community while reducing costs.

Just as the term sustainability is often described as having an environmental, social, and economic element, green event planning shares these three distinct components. All three are important and contribute to the event's overall success.

FAST FACT

Achieving a 90% diversion rate is clearly a victory for the environment, reducing waste in our landfills, which are now the largest source of anthropogenic (manmade) methane emissions, accounting for 34% of total U.S. methane emissions.¹⁶

On a social level, sustainable events can pull communities together, leading to legacy programs that last long after the event is over. Planners should make an effort to involve the immediate community members by offering them volunteer opportunities that would also get them into the event for free. Bringing the community together to clean up a local venue, be it a park or a river corridor, can have long-lasting benefits that leave neighbors proud and inspired to do more good work in the future.

Finally, sustainable event planning can save time and money. Some elements discussed in this document may require an initial investment, but others will result in immediate cost savings. Early adopters are needed more than ever, not only to increase awareness, but also to help suppliers expand sustainability options on a daily basis. As the supply chain becomes more "green," the cost of sustainable products will come down and their markets will continue to expand at even faster rates. The important lesson learned is for everyone to do what they can. Start small and expand your sustainability initiatives over time. Sustainable events are here to stay and the demand for greater environmental responsibility will continue to grow. It is important to recognize that this journey does not happen overnight. For annual or recurring events, planners can start with actions that make sense for the particular situation and improve or add sustainable strategies each year. The journey to sustainability is a team effort.



This section is dedicated to providing event planners and organizers with tools and resources they need to make their events more sustainable. By learning from the past efforts of others, we hope that future events planners can succeed in creating their own successful, sustainable events.

A. CASE STUDIES - 6 EXAMPLES

Over the past several years, there have been several event planners in Colorado that have made great progress in their efforts to reach goals related to sustainability. Their efforts have not come without challenges, so this section is dedicated to a compilation of case studies highlighting the trials and tribulations that these event planners have faced. The events showcased range from small to large, both indoor and outdoor. The table below summarizes the six examples used, which should allow event planners of all types to learn from the experiences of others in the past. The following cases can be used as additional ideas when documenting success. Note, the case studies were developed outside this report.

The case studies will be presented below in the following order:

- 1. EnviroFest
- 2. Booklovers' Ball
- 3. Tour de Fat Denver
- 4. Greenbuild International Conference and Expo 2006
- 5. Convention Media Party
- 6. Telluride Bluegrass Festival

CATEGORY	ATTENDANCE	INDOOR EVENT	OUTDOOR EVENT
Small Events	150 people or less	EnviroFest	(Not Available)
Medium Events	600 - 4,000 people	Booklover's Ball	Tour de Fat - City Park, Denver
Large Events	10,000 - 20,000 people	Greenbuild Expo	Convention Media Party - Elitch Gardens
Largest Events	40,000 - 60,000 people	(Not Available)	Telluride Bluegrass Festival

Sustainable Event Case Study: Envirofest 2008

Date of Event: September 18, 2008

Name of Company/ Event Organizers/ Producers: Rocky Mountain Association of Environmental Professionals & A Creative Environment (ACE)

www.ACreativeEnvironment.com; www.RMAEP.org/Envirofest.asp

Number of Attendees: 200

Number of Vendors (differentiate between food/ craft vendors if applicable): 42 sponsors in total (one was a beverage sponsor; the rest were non-profits or service and product providers related to the environmental profession)

Please describe the venue, the approximate footprint, indoor/outdoor, unique venue features, and considerations in choosing the event location related to your sustainability goals.

PPA Event Center, Denver, Colorado. The venue is located near downtown and is accessible from the Light Rail and municipal buses.

Please explain the product or reasons/motivations behind this event. Is the product or outcome directly related to sustainability or environment-related causes?

Envirofest is an exciting opportunity for environmental professionals to network, learn, and share dinner and cocktails with environmental and engineering organizations and consulting firms, government agencies, academic institutions, and job seekers. This year's theme focused on current public and private efforts to reduce the state's environmental footprint and the resulting impact on the economy. The event had no budget for greening, so partnerships were built with waste haulers (giving them sponsorships), as well as with restaurants (donated compostable products), and Terra Pass, who donated carbon offsets. This was a great example of how effort and enthusiasm allowed greening to have an impact with no budget.

Waste Reduction Initiatives

Were any goals set or initiatives taken to provide sustainable products (biodegradable or recyclable single-use products)?

- Almost zero waste Envirofest composted and recycled everything from the event, with the exception of the plastic garbage bags that were holding the recyclables.
- Green caterer The caterer provided organic food and did not provide any single serving packages. China was used in lieu of disposables.
- Green printing for sponsor posters Envirofest chose a green printer who used soy ink on recycled paper that was mounted on 88% post-consumer recycled board. Those boards are being re-used for future posters.

Was a system in place for recovering recyclables or compostable products?

The event used recycle bins and compost bins – all were clearly labeled. Fifteen total waste stations were placed thought out the venue.

Did attendees find it easy to 'put waste in its place' so waste could be recycled or composted?

Yes, with one exception. Cardboard ended up in the recycling bins rather than the compost bins, as expected. This is not considered contamination, but the event planned to compost cardboard rather than recycle due to less energy being required for composting versus recycling.

Were education and messaging strategies used to help minimize the contamination of the compost and recycle waste streams? Yes, through an announcement on the microphone and through clear labeling of the bins. One lesson learned from stage announcements was to better describe where to put waste, especially placing cardboard in the compost stream and not the recycling stream. The guest speakers from the Denver 2008 Greening Initiative and 'Build Green' programs also helped to spread the green message. The whole event was related to the theme of greening.

How did vendors (both food and craft) respond to and support the sustainability programs? Vendors were very supportive and thought the program was easy to participate in. For example, when the organic tea vendor was asked to pack out the plastic wrapping the teas had shipped in, they fully supported the request.

Was it difficult to find waste haulers that were willing to take the recyclables and compost? What, if any, adjustments had to be made to the waste reduction goals because of the capacities of the haulers? Envirofest worked closely with Alpine and A1 Organics. A1 brought compost bins and educational signs describing waste streams.

Energy and Transportation Considerations

Was the carbon foot print measured (the total amount of carbon in lbs. released into the atmosphere during your event)? Were there attempts to offset your footprint through the purchase of renewable energy credits (REC's) or carbon offsets? Envirofest greatly overestimated the carbon footprint based on a worst case scenario in which each participant drove large, separate cars.

How was the REC or carbon offset program chosen? Terra Pass was used to offset carbon because it had been used in the past by the event organizer.

Were attempts made to minimize the event's carbon footprint through sustainable transportation programs, such as carpooling, encouraging public transportation, selling 'green tags' (a travel-specific carbon offset program), encouraging walking and biking, venue and lodging selection, or other program variations? The event encouraged carpooling and public transportation.

Was the transportation carbon footprint calculated or were miles attendees biked, walked, carpooled or used public transportation tracked? Were there incentives to maximize or encourage these choices?

Miles were not tracked. To take the 'safe route,' organizers assumed that every person would drive an SUV 20 miles each way to the event. 200 people x 40 miles = 8,000 miles in a large SUV = 9,782 lbs total. Envirofest offset more than 7 times that assumption to more than cover transportation, the energy at the venue, and all the preparation for the event. Below are the offsets:

- Offset emissions for panel offset 24,000 pounds of CO₂ in honor of the three panel speakers, which is enough to offset each of their car's emissions for one year.
- Offset emissions for all guests offset 72,000 pounds of CO₂ which more than covered the emissions of all attendees that drove to Envirofest and the energy consumed for the event.

Case Study: Envirofest 2008

Section III- Appendix

Water Conservation

Was drinking water provided to attendees? Were water filling stations or bottled water provided? Were steps taken to reduce the waste produced by bottled water containers? Were reusable containers for drinking water sold or provided at the event? Envirofest provided filling stations and compostable corn cups.

Were additional steps taken towards water conservation and wise water use at the event? Envirofest, in partnership with the bar, banned bottled water. Part of the contract with the venue was to hire bartenders that complied with the greening goals. Overall, the bar was very satisfied with the event and greening programs.

Education, Messaging and Leaving a Positive Legacy

How were sustainability goals communicated to attendees, vendors, sponsors, and community members? Through educational signs posted near the compost and recycle areas, microphone announcements during the event, posting of the carbon offset certificates at the registration table, and by giving carbon offset gifts to speakers after their presentations.

How was the vision of a 'green event' shared with staff? Was the vision supported? The staff completely supported having a green event.

Was the event able to leave a positive legacy in place for the host venue or community? Envirofest encouraged the PPA Center to start offering mixed stream recycling for their events and gave them the contact information they needed to get it going.

Will the event continue to move in the direction of creating low impact, sustainable events? Of course!

Sustainable Event Case Study: 10th Annual Booklovers' Ball

Date of Event: October 10, 2007

Name of Company/ Event Organizers/ Producers: Denver Public Library Friends Foundation

www.DPLfriends.org

Number of Attendees: 647

Number of Vendors: 6

Please describe the venue, the approximate footprint, indoor/outdoor, unique venue features, and considerations in choosing the event location related to your sustainability goals.

Because Denver Public Libraries are the recipient of the funds raised at the event, the event was held at the Denver Central Library.

Please explain the product or reasons/motivations behind this event. Is the product or outcome directly related to sustainability or environment-related causes?

Booklovers' Ball is not necessarily related to the environment or sustainability. This black tie fundraising event is the biggest fundraiser for the library during the year. However, Denver Public Library Friends (DPLF) felt the value in stepping up the environmental practices for the event and knew the patrons and sponsors would respond well.

Waste Reduction Initiatives

Were any goals set or initiatives taken to provide sustainable products (biodegradable or recyclable single-use products)? Was waste reduction encouraged through the use of reusable products?

DPLF eliminated the need for 'single-use' plates, cups, and cutlery by only serving on glass and china with silverware. Using high end products was appropriate for both the black-tie theme and for reducing waste. This dramatically cut back on the amount of waste compared to the use of single-use 'throw away' products.

Was a system in place for recovering recyclables or compostable products?

They used a three bin system at nine bars throughout the event, in addition to recycling and composting on the docks of the library from set up to tear down. Staff and volunteers were aware of the greening efforts and knew where to compost and recycle their waste.

Did attendees find it easy to 'put waste in its place' so waste could be recycled or composted?

Because this was a higher end event, the attendees had little interaction with waste. All tables were bussed and cleared for the guests. However, staff was trained to use the compost and recycling bins and as tables were cleared, the composting and recycling followed.

Were education and messaging strategies used to help minimize the contamination of the compost and recycle waste streams? The Whole Foods Green Team supervised waste recovery stations and staff were trained prior to the event and felt comfortable with the systems that were put in place.

Case Study: 10th Annual Booklovers' Ball

Section III- Appendix

How did vendors (both food and craft) respond to and support the sustainability programs?

DPLF had a very amazing and positive response from the vendors and sponsors! During the earliest phases of the planning, even as far back as the Request for Proposal, each category of vendor was asked to re-think their products and services to best achieve a truly sustainable outcome for Booklovers' Ball. The enthusiasm was inspirational. The production company, Rictor-Scale Productions, found low resolution lighting and Footers Catering stepped up and did their research and sourced as much local, organic, and seasonal foods as they could. Even the florist, Newberry Florist, participated by using living plants instead of cut flowers.

Was it difficult to find waste haulers that were willing to take the recyclables and compost? What, if any, adjustments had to be made to the waste reduction goals because of the capacities of the haulers?

DPLF used Waste Management and A1 Organics. WM hauled and processed the recyclables and A1 processed compost. Even though DPLF had confidence in the waste getting into the right bins, they looked through bags after the event and removed contamination from the waste-streams.

What form of evaluative tools or methods were used to measure waste reduction goals and the final waste diversion rate (how much waste was kept out of the landfill)? Were the event goals met?

This being the event's first attempt at hosting a sustainable event, metrics was a big learning point. While systems were put in place for waste diversion, metrics were not collected. This information would have been very nice to have during postevent media and press follow up. This emphasized the importance in collecting metrics and negotiating this into the plan early on, regardless if it is done by the haulers or by event volunteers with scales during the post-event waste sorting.

Energy and Transportation Considerations

How was the event powered? Were any special energy selections made because of the stated sustainability goals (using solar or biodiesel to power your event, other alternative)?

DPLF did not use generators for the event. Even though biodiesel was available, efforts were made to avoid burning any fuels during the event. The production company used low resolution lighting to conserve power. In addition, the company was encouraged to reuse stage props to reduce consumption, rather than buying new. However, a power shortage did occur.

To meet this need, DPLF decided to invest funds into an upgraded energy system for the library, as the need existed anyway. This not only met the needs of the event, but left a gift the library will value for years to come. This gift was a tremendous legacy of the 'greening' programs.

How was the REC or carbon offset program chosen?

DPLF received great support from Renewable Choice Energy. Renewable Energy Choice measured the carbon footprint from set up to tear down and donated wind credits to offset usage.

Were attempts made to minimize the event's carbon footprint through sustainable transportation programs, such as carpooling, encouraging public transportation, selling 'green tags' (a travel-specific carbon offset program), encouraging walking and biking, venue and lodging selection, or other program variations?

Early in the promotions schedule, 'Ten Ways to Go Green' was published and sent to patrons. This publication included share-a-ride information, encouraged public transportation, and even included a tip to shower with a friend to conserve water! To support the green transportation initiative, a partnership was developed with Metro Taxi to bring a fleet of 10 hybrid taxis to serve the clientèle during the event.

Case Study: 10th Annual Booklovers' Ball

Water Conservation

Was drinking water provided to attendees? Were water filling stations or bottled water provided? Were steps taken to reduce the waste produced by bottled water containers? Were reusable containers for drinking water sold or provided at the event? DPLF avoided bottled water and used pitchers to refill glasses. The parting gift to patrons was a non-leaching water bottle with custom printing for the event.

Education, Messaging and Leaving a Positive Legacy

How were sustainability goals communicated to attendees, vendors, sponsors, and community members? DPLF went paperless as much as possible by communicating via email. Online ticket sales and web promotion were also utilized. The paper tickets that were sent out were printed on 70% post-consumer paper with soy based ink, a decision made because of the event's sustainability goals.

Was the event able to leave a positive legacy in place for the host venue or community?

DPLF partnered with the Mile High Million tree planting program by first decorating the event with live trees, then later planting the trees at Denver library branches, a program they called Branches to Branches. The City greenhouses also helped with decorating Booklovers' Ball with live plants.

Will the event continue to move in the direction of creating low impact, sustainable events?

When DPLF started this project, they thought this would be an impossible undertaking. However, the event ran very smooth and was extremely well received. The process of measuring and investigating each area of the event and challenging themselves and their vendors to reduce the event's environmental impact improved the quality of the event.

Case Study: Tour de Fat

Sustainable Event Case Study: Tour de Fat

Date of Event: September 13, 2008

Name of Company/ Event Organizers/ Producers: New Belgium Brewing Company & ZeroHero Events

www.NewBelgium.com; www.ZeroHeroEvents.com

Number of Attendees: Approximately 3,000

Number of Vendors (differentiate between food/ craft vendors if applicable): One beer vendor, two food vendors, ten craft vendors

Please describe the venue, the approximate footprint, indoor/outdoor, unique venue features, and considerations in choosing the event location related to your sustainability goals.

The event is held in an open space in Denver's City Park, a central meeting place for the Denver community and a venue easily accessible by public transportation and - more encouraged for this event - the bicycle.

Please explain the product or reasons/motivations behind this event. Is the product or outcome directly related to sustainability or environment-related causes?

The festival spreads the good word about the myriad of benefits of cycling and celebrates mankind's greatest invention: the bike. Over the last eight years, Tour de Fat has captured the imagination of thousands with record-setting parades, eye-popping entertainment, and death-defying contests of bicycle skill and precision.

Opening each show with a costumed bike parade, Tour de Fat celebrates the power of the bike. Born in Ft. Collins, Colorado to increase awareness and participation in cycling as a sustainable form of transportation, Tour de Fat has grown into a national rite of passage for cycling advocates and bon vivants alike.

Waste Reduction Initiatives

Were any goals set or initiatives taken to provide sustainable products (biodegradable or recyclable single-use products)? Was waste reduction encouraged through the use of reusable products?

All beverages are served in compostable corn cups, known in the industry as PLA cups (polylactic acid), a product that breaks down in a commercial compost facility in under 100 days. Compost in this facility heats to approximately 140 degrees and is considered a hot compost. All food is served with other compostable serviceware.

Was a system in place for recovering recyclables or compostable products?

New Belgium worked together with ZeroHero Events to staff the "composting offices" - tents that were dedicated for recovering compost, recyclables, and landfill waste.

Did attendees find it easy to 'put waste in its place' so waste could be recycled or composted?

The ZeroHero waste station tents are very viable and immediately stand out as "something different" for recovering waste. Placing volunteers at each tent to assist attendees through the process creates great opportunity for success.

Was it difficult to find waste haulers that were willing to take the recyclables and compost? What, if any, adjustments had to be made to the waste reduction goals because of the capacities of the haulers?

Because the amount of compost, recyclables and landfill waste were very manageable for an event of this size, ZeroHero brought down one box truck and hauled everything together back to Fort Collins (one hour north of Denver) where they separated the waste into the proper roll offs (for later transportation to the recycling center and a commercial compost facility).

What form of evaluative tools or methods were used to measure waste reduction goals and the final waste diversion rate (how much waste was kept out of the landfill)? Were the event goals met?

Tour de Fat seeks to leave as small an environmental imprint as possible and composts and recycles waste from each tour stop. The waste diversion goal for this year was 95%. ZeroHero used hand scales and weighed each bag of compost, recyclables, and landfill waste before removing them from the waste-stations. Live "waste diversion" statistics were put up on a score board near the main stage and stage announcements were made celebrating the current diversion rates. At the end of the festival, 93% of waste was diverted from the landfill out of 297 lbs of waste produced: 7% landfill, 23% recycling and 70% compost (over 90% of that was compostable cups).

Energy and Transportation Considerations

How was the event powered? Were any special energy selections made because of the stated sustainability goals (using solar or biodiesel to power your event, other alternative)?

All musical acts perform on a solar-powered stage, trucks and transport use biofuel that is sourced from recycled waste oils, and all vendors operate off the grid.

Were attempts made to minimize the event's carbon footprint through sustainable transportation programs, such as carpooling, encouraging public transportation, selling 'green tags' (a travel-specific carbon offset program), encouraging walking and biking, venue and lodging selection, or other program variations?

One volunteer in each city will commit to live car-free for one year as part of the Car-for-Bike Trade Program. The dedicated individual will sign over their car title and receive a hand-built New Belgium commuter bike in exchange. The selected candidate will chronicle the trials and triumphs along their car-free journey. The volunteer is chosen after submitting a video or essay describing their desire to live car-free.

Tour de Fat 2008 has a new revival stage for performers with 100% solar-powered sound and decorations made from recycled materials.

Were fuel-efficient or alternatively powered vehicles selected?

The stage will be transported in solar-powered trailers and the Tour de Fat crew will travel on biofuel that is sourced from recycled waste oils

Was the transportation carbon footprint calculated or were miles attendees biked, walked, carpooled or used public transportation tracked? Were there incentives to maximize or encourage these choices?

At the Team Wonderlounge, participants can join Team Wonderbike, New Belgium's bicycling commuter advocacy program. Team Wonderbikers pledge to commute by bike, not car, as often as possible. Currently, 12,000 people have pledged not to drive more than 11 million miles in the next twelve months.

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Case Study: Tour de Fat

Section III- Appendix

Water Conservation

Was drinking water provided to attendees? Were water filling stations or bottled water provided? Were steps taken to reduce the waste produced by bottled water containers? Were reusable containers for drinking water sold or provided at the event? The Tour de Fat has a free water tent for all to use.

Education, Messaging and Leaving a Positive Legacy

How was 'buy in' of the event's sustainability goals encouraged to attendees? Festival-goers can participate in the pre-event bicycle parade and try out new rideable art bikes. This is a pro-bike celebration, not an anti-car rally – non-cyclists are more than welcome to join the festivities.

Was the event able to leave a positive legacy in place for the host venue or community?

Tour de Fat is free to participants, but drinks and merchandise proceeds from the Denver stop will go to several organizations: The Derailleur Bicycle Collective, a free community-run bicycle shop with a 100% volunteer staff; Bike Denver, which encourages people to put away their car keys and bike while traveling within the City and County of Denver; and Flight for Life Colorado, which transports patients seeking urgent medical care. New Belgium's philanthropic cycling circus helped 26 non-profit organizations in 2007 and raised more than \$245,000.

Will the event continue to move in the direction of creating low impact, sustainable events? This positive style of event management is expected now at all New Belgium events and they continue to be a leader in sustainable events. This will continue well into the future!

Sustainable Event Case Study: Greenbuild International Conference and Expo 2006

Date: November 15 -17, 2006

Name of Company/ Event Organizers/ Producers: U.S. Green Building Council (USGBC)

Number of Attendees: 13,350

Please describe the venue, the approximate footprint, indoor/outdoor, unique venue features, and considerations in choosing the event location related to your sustainability goals.

The event was held at the Colorado Convention Center in Denver, Colorado. The host city of Denver, Colorado was partially selected on the basis of Greenprint Denver, which is a 5-year citywide action plan to promote the importance of sustainable development and ecologically friendly practices throughout the community. The conference agenda gave profile to various Greenprint Denver projects.

Waste Reduction Initiatives

Were any goals set or initiatives taken to provide sustainable products (biodegradable or recyclable single-use products)? Was waste reduction encouraged through the use of reusable products?

The Colorado Convention Center agreed to institute recycling and food composting for Greenbuild 2006. They were great partners and supporters in Greenbuild, willing to try new things. Glass, aluminum, plastic, paper and cardboard was accepted as part of this program. In all 20 tons of trash were taken to the landfill, while 5.46 tons were recycled and 4800 lbs were composted. The convention center further agreed to maintain a recycling program following the event. 618 lbs of left-over food were donated to the Food Bank of the Rockies, including 160 lbs of whole fruit and 149 lbs of pastries. Catering made use of both china service and disposables. Disposable packaging was used for 10% of meals and was made by BioMass Packaging, which provides food serviceware derived from corn starch and sugar cane that is compostable.

As part of their exhibition contract Stetson provided instructions for exhibitors to assist with recycling. They also provided green booth options for exhibitors and a donation area for giveaways and building supplies. The exhibitors used recyclable carpet, re-usable signage, EnergyStar lighting and earth-friendly cleaning products. All exhibitors were requested to participate in recycling, minimize packaging and the amount of collateral materials distributed. To affirm this message Stetson, Meeting Strategies Worldwide developed with support of USGBC a Green Exhibitor Performance Award. The purpose of the Green Exhibitor Performance Award was to recognize the outstanding efforts of exhibiting companies who successfully minimized the negative environmental effects of participating in the exposition. Each participating exhibitor earned points based on their environmentally responsible practices and products incorporated into their display. The rating system was specifically designed so that every company had the opportunity to attain the highest recognition level regardless of booth size. The Award was won by HOLCIM Inc. Left over exhibition materials were provided to Habitat for Humanity.

Of the conference hotels selected, at the time, nine properties confirmed they had a recycling program that included paper, plastic, glass, aluminum cans, cardboard, and grease. One property was unable to recycle grease. These properties used either clearly marked recycling containers in common areas including the lobby & hotel guest rooms, or sorted recyclables back of house. Two hotel properties were only able to recycle paper in guest and meeting rooms while two properties did not provide recycling.

Case Study: Greenbuild International Conference and Expo 2006

Twelve of the fourteen conference hotels selected did not replace consumable amenities unless gone. Three properties donated unfinished amenities to a local charity. Seven of the host hotels provided china service, and no polystyrene. Three of these seven properties gave preference to disposables that were either biodegradable or at a minimum used recycled content paper.

As in previous years the USGBC sought to engage attendees in greening measures through conference communications including the Greenbuild web site. Delegates were encouraged to:

- Use public transportation.
- Pass along newspapers to someone else or make sure it's recycled.
- Participate in the towel and sheet reuse program at the hotel.
- Carry a reusable drink container.
- Recycle materials in appropriate bins.
- Turn off hotel room lights, heat/air and television when leaving rooms.

What form of evaluative tools or methods were used to measure waste reduction goals and the final waste diversion rate (how much waste was kept out of the landfill)? Were the event goals met?

5.46 tons of waste recycled and 4800 lbs of food waste composted, achieving a 27% waste diversion rate. 543 delegates were GreenRiders, saving and estimated 12,400 vehicle travel miles and 11,300 lbs of CO2. 618 lbs of food, including160 lbs of whole fruit and 149 lbs of pastries, were donated to Food Bank of the Rockies. As part of Greenbuild, the Denver Convention Center implemented and committed to leave in place a recycling program. The Center also trialed a food composting program for the event supported by Whole Foods. As part of USGBC's ongoing measurement of the event's environmental footprint they use the MeetGreen[®] Calculator and process developed and administered by Meeting Strategies Worldwide, USGBC's green meeting consultants.

Energy and Transportation Considerations

Were attempts made to conserve energy in order to meet sustainability goals?

The Colorado Convention Centre reduced lights, power and HVAC during move in and move out times in the exhibit hall. In addition, hotels were selected within walking distance of the convention center to minimize transportation needs. 12 of the 14 conference hotels confirmed staff were instructed to shut blinds and turn down heat/AC during the day.

Total energy consumption at Greenbuild continues to increase as participation at the event climbs. Average per participant use of fuel by transportation continues to decrease, dropping from a high of 48 gallons per participant in 2004 to 40 gallons per participant in 2006.

It is important to note that energy and emissions numbers are dependent on the location of the event and utility emission rates for that location (some states' utilities are more coal dependent than other states that might have hydro-power in their mix). The data reported here are estimates and could be made more location specific should USGBC choose to direct Leonardo Academy to factor in these local considerations into their calculations.

Were attempts made to minimize the event's carbon footprint through sustainable transportation programs, such as carpooling, encouraging public transportation, selling 'green tags' (a travel-specific carbon offset program), encouraging walking and biking, venue and lodging selection, or other program variations?

Greenbuild aimed to both reduce emissions and offset those produced as a result of the conference and expo. Delegates were encouraged to use public transit and also consider participating in GreenRide, a ride-sharing service. 543 delegates participated in GreenRide, saving an estimated 11,300 lbs of CO2 and 12,400 vehicle miles. Free, designated hybrid vehicle parking was also provided near the convention centre. In addition, the transportation company providing shuttles was asked to and operated shuttles using bio-diesel.

Two offsite parties for Greenbuild were also sustainably powered, making use of fuel cells to provide on-site entertainment.

In addition to reducing emissions, the USGBC also provided delegates and exhibitors with the option to offset their greenhouse gas emissions through a program managed by the Leonardo Academy. The Leonardo Academy calculated 13,415,677 lbs of emissions associated with Greenbuild 2006. This includes carbon dioxide, sulfur dioxide, nitrogen oxide, particulates and mercury and translates into an estimated 1005 lbs of emissions per participant.

Donations received enabled offsetting of 228% of total emissions. This includes 228% of carbon dioxide, 266% of sulfur dioxide, 32% of nitrogen dioxide, 10% of particulates and 174% of mercury. Donations to the program were received from Milliken & Company, Wind Current, Sterling Planet, Green Mountain Energy, Dupont, National Offsets, Leonardo Academy, Philips Lighting, Johnson Controls and individual donors. Please note that total emissions per participant are based on generalized data and may contain a 10 - 15% margin of error.

Water Conservation

Was drinking water provided to attendees? Were water filling stations or bottled water provided? Were steps taken to reduce the waste produced by bottled water containers? Were reusable containers for drinking water sold or provided at the event? Water was conserved by providing bulk water stations and reusable containers were given to participants. Also, at the catered functions the use of saucers for cups was avoided and water glasses were not pre-filled. Eleven of the fourteen conference hotels provided a linen and towel re-use option for guests while twelve confirmed they use cleaning products that do not introduce toxins into the air or water.

Other Environmental Considerations

The Colorado Convention Center's food service management company contributed to energy efficiency and water quality by providing vegetarian meal options and a minimum of 31% local and organic food.

Lessons Learned

Measuring and comparing the waste stream.

USGBC was successful in re-instituting more extensive waste tracking in 2006. This was helpful in comparing the effectiveness of their efforts to divert landfill waste over successive years. Their most successful diversion rate was 48% in Portland in 2004, with 2006 diversion falling to 27%. USGBC learned that training and communication prior to the event is a key to success.

Exercising influence and using purchasing power.

Greenbuild coordinators have a history of using their purchasing power to promote greener business practices. In keeping with this trend the convention center was requested to institute recycling and composting and make use of minimum 20% recycled products for hand towels and toilet paper and minimum 50% of environmentally responsible cleaning products for carpets, floors, kitchens and bathrooms. The food service management company was also requested to provide locally grown and organic foods as well as shade-grown and fair trade coffee wherever possible and affordable (minimum 20% of meals), purchase condiments and beverages in bulk, and participate in a food composting program.

Greenbuild organizers used name badges printed on recycled paper and recycled name badges following the event. Conference bags and giveaways made use of recycled materials and programs were printed on recycled post-consumer paper with soy-based ink. As attendance at Greenbuild grows, opportunities for USBGC to be an agent of change for continuous improvement in supplier practice will grow... This is especially illustrated in the area of accommodation selection. In the past their surveying and itemization of hotel practice has been rather passive, relying on self-surveys after the selection of hotels had occurred, with no repercussions for breaches of environmental practice. With sufficient lead time and effort, there are opportunities to encourage hotels and meeting venues without green programs or specific practices to become more proactive in this area. In addition there was a lack of on-site verification of hotel practice and follow through to ensure practices are adhered to. In 2004 Greenbuild's success in engaging hoteliers in green practices in Portland lead to a legacy of greening at these properties. On-site verification and the provision of a waste audit did help to engage properties and might be considered for future conferences, along with other incentives.

Impact on delegates and growing the green meetings movement.

Throughout the history of Greenbuild USGBC has attempted to actively engage delegates in the greening of the event. An opportunity exists to seek delegate feedback on green practices, how event greening may contribute to delegate satisfaction with the event and how these practices might contribute to learning by delegates and adoption of similar practices by other groups.

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Sustainable Event Case Study: Elitch Gardens Media Party, The Denver Host Committee Democratic National Convention Welcome Party

Date of Event: August 23, 2008

Name of Company/ Event Organizers/ Producers:

Denver 2008 Convention Host Committee supported by Alem International. Greening activities facilitated by local Convention Greening Initiative and Events Team.

Number of Attendees: Approximately 9,800

Number of Vendors (differentiate between food/ craft vendors if applicable): Primary vendor was Elitch Gardens Theme Park who manages their own concessions. Others included Epicurean Catering, Coors Brewing Company, Pepsi and Diageo.

Please describe the venue, the approximate footprint, indoor/outdoor, unique venue features, and considerations in choosing the event location related to your sustainability goals.

Elitch Gardens Theme Park footprint covers several city blocks, 64 acres and is configured in several mazes and fingers of streets and alleyways that lead to rides, concessions and booths. This layout presented several challenges to achieving zero-waste management. The venue was chosen for a number of factors including event concept, existing build out of facilities, price, and the fact that Elitch's is a Denver landmark. In responding to the original Host Committee RFP, Elitch's Management indicated their commitment to the environment and to working with event producers to make the event as green as possible.

Please explain the product or reasons/motivations behind this event. Is the product or outcome directly related to sustainability or environment-related causes?

The Media party was the Denver 2008 Convention Host Committee's welcoming celebration. The event was attended by thousands of media and other convention participants from around the world.

Waste Reduction Initiatives

Were any goals set or initiatives taken to provide sustainable products (biodegradable or recyclable single-use products)? Food and beverage services were spread out throughout the facility and included VIP 'fine food' service located at various catering setups as well as the traditional theme park food stands. The commitment was made early, with tremendous support from the staff at Elitch Gardens, to go 'zero-waste.' This included changing all conventional un-recyclable products to compostable and recyclable serviceware. The menu from the caterer consisted of many finger foods, so serviceware was not required. Pepsi donated the biodegradable cups for soft drinks and wine. Coors donated a corn cup with their logo on it.

Was a system in place for recovering recyclables or compostable products?

ZeroHero Events helped with the resource recovery effort. Their strategy centered around 80 waste-recovery stations that offered the attendee the chance to either recycle, compost, or send the very little trash produced to the landfill. Stations were clearly identifiable because they were located in tan, two man tents adapted for this purpose. 'Back of the house' composting stations were included for caterers.

Case Study: Elitch Gardens Media Party & Kick-off Party

Did attendees find it easy to 'put waste in its place' so waste could be recycled or composted?

The feedback was positive and 80 stations seemed to meet the needs of this large venue. The most critical strategy to meet the goal of 'easy recycling and composting' was to remove ALL stand alone trash cans from the venue. In ZeroHero's experience, the attendees do participate and will compost and recycle if they have the option. By removing all stand alone trash cans and presenting a full three bin station in its place, the attendees do find it easy to 'put waste in its place.'

Were education and messaging strategies used to help minimize the contamination of the compost and recycle waste streams? This objective was achieved by placing volunteer educators at each of the waste recovery stations. The volunteers interacted and educated attendees on 'zero-waste' and monitored for contamination problems. Two training opportunities were offered to Media Party volunteers. The first was a large Host Committee training at a local university one week prior to the event and a more specific training at Elitch Gardens on the day of the event. All waste recovery volunteers received complete information about compostable vs. recyclable products, what the numbers represent on the bottom of plastic cups and containers, how bio-plastics are composted, and where waste was hauled to at the end of the event. Customer service was key to all interactions between the attendee and the volunteer at the waste-stations.

How did vendors (both food and craft) respond to and support the sustainability programs?

The vendor communication started several months before the event. All partners were very enthusiastic. The Greening Initiative facilitated several all- team planning meetings that included staff from Elitch's management, the event production team, the caterers, and beverage companies, as well as the "green service providers" which included Zero Hero, EDS- the waste hauler, Denver Water Department, and Xcel Energy. ZeroHero's focus would be on 'front of the house' education and management of the zero-waste system. All 'back of the house' processing would be done by Elitch Gardens facility management. Different bag colors were used to identify each waste-stream - black for trash, clear for recycling, and green (biodegradable) bags for compost – in order to make it easy for facility management to know what roll-off container each bag would go in. The program worked and very little contamination occurred. Denver Water supported a strategy to reduce the use of single use water bottles by providing a water filing station and Coors Brewing Company and Pepsi provided compostable cups.

Was it difficult to find waste haulers that were willing to take the recyclables and compost? What, if any, adjustments had to be made to the waste reduction goals because of the capacities of the haulers?

The hauling side worked very well, with no issues reported. Coordination was required to get the compost waste-stream out to A1 Organics, close to an hour away in Platteville, Colorado, as A1 Organics does not have any hauling capacities. In support of the Media Party greening goals, EDS, agreed to take the compost to A1 at no extra charge. Elitch Gardens already had a recycling program in place with EDS. Coors took the glass products to recycle.

What form of evaluative tools or methods were used to measure waste reduction goals and the final waste diversion rate (how much waste was kept out of the landfill)? Were the event goals met?

Volume estimates were used to collect waste totals in cubic yards. By tracking how full containers were and how many were used, ZeroHero was able to determine that 81 percent of waste by volume (not weight) was diverted from the landfill: 50% was composted; 31% was recycled leaving only 19% to go to the landfill.

All parties were happy with these diversion rates and goals were met. Community feed back was very positive as well.

Energy and Transportation Considerations

How was the event powered? Were any special energy selections made because of the stated sustainability goals (using solar or biodiesel to power your event, other alternative)? Xcal energy donated wind credits to offset all of the electricity used by Elitch's during the media party.

Xcel energy donated wind credits to offset all of the electricity used by Elitch's during the media party.

Case Study: Elitch Gardens Media Party & Kick-off Party

How was the REC or carbon offset program chosen?

Xcel donated the wind energy credit. The amount of electricity offset by the Xcel wind credit was measured using real time billing information to which Xcel had access. In addition, the Elitch's carbon footprint was also included in the full Host Committee footprint calculated by Camco Global, the official carbon advisor to the Host Committee.

Were attempts made to minimize the event's carbon footprint though sustainable transportation programs, such as carpooling, encouraging public transportation, selling 'green tags' (a travel-specific carbon offset program), encouraging walking and biking, venue and lodging selection, or other program variations?

Elitch's is located at a light rail stop. Guests and volunteers from the Denver area were encouraged to walk if possible, to use this transit option, or to carpool using a special convention-tailored, web-based program created by the RideArrangers Program of the Denver Regional Council of Governments. Shuttle busses from 7 hotels and the Convention Center were either bio-diesel or hybrid vehicles.

Were fuel-efficient or alternatively powered vehicles selected?

Most of the event guests were shuttled from their hotels in buses powered by bio-diesel or hybrid. The transportation company that managed transportation for the convention, Event and Transportation Associates, is a member of the CarbonFund (http://www.carbonfund.org/).

Special note: Elitch's waste cooking oil is picked up by Rocky Mountain Sustainable Enterprise in Boulder and recycled into bio-diesel for reuse.

Water

Was drinking water provided to attendees? Were water filling stations or bottled water provided? Were steps taken to reduce the waste produced by bottled water containers? Were reusable containers for drinking water sold or provided at the event? Denver Water was present with their water truck for attendees to fill cups or to re-fill the single use water bottles available in buckets throughout the facility. All cups were made out of compostable polylactic acid (PLA) and were composted. All bottles were recycled.

Food

Did the event offer local or organic and vegetarian food options?

70%-90% of the ingredients in the items offered by the caterer were bought locally, fresh, and never frozen. The menu had a variety of vegetarian options.

Education, Messaging and Leaving a Positive Legacy

How were sustainability goals communicated to attendees, vendors, sponsors, and community members?

The City of Denver and the Host Committee made an early commitment that the Democratic National Convention in Denver would be the 'greenest' convention ever. The announcement of this goal spread like wildfire inside and outside the networks of the Convention. The goal then became how to communicate the sustainability initiatives correctly and how to achieve operational success of the initiatives. Guests were educated about greening efforts on the back of the badge and largely through communication with volunteers at waste stations. The badges were printed on recycled paper, along with parking / shuttle bus schedule. The lanyards were provided by Vail Resorts and "I used to be a plastic bottle" message printed on the lanyards. Early coordination efforts with the venue, event planners, caterers, and other planning participants provided an ideal opportunity not only to share greening goals, but to build them into the event.

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Sustainable Event Case Study: 35th Annual Telluride Bluegrass Festival

Date(s) of Event: June 19-22, 2008

Name of Company/ Event Organizers/ Producers: Planet Bluegrass

www.BlueGrass.com

Number of Attendees: 10,000 people per day for 4 days. Nearly half camped in Planet Bluegrass-run campgrounds in and around Telluride. Many arrived several days before the festival. Telluride Bluegrass is truly an international event with folks coming from Europe, Canada, and Australia/New Zealand.

Number of Vendors (differentiate between food/ craft vendors if applicable): 18 food, 24 craft

Please describe the venue, the approximate footprint, indoor/outdoor, unique venue features, and considerations in choosing the event location related to your sustainability goals.

The Telluride Bluegrass Festival has been held in Town Park in Telluride for the past 35 years. This park is located adjacent to Main Street in Telluride on the east end of town. It features a permanent stage, numerous ballfields, and a year-round campground. The natural scenery in Telluride's Box Canyon is almost unrivaled in Colorado. This natural beauty is truly inspiring and has certainly contributed to the dedication to sustainability.

Please explain the product or reasons/motivations behind this event. Is the product or outcome directly related to sustainability or environment-related causes?

Serious investigation of sustainability issues began in 2003 when Planet Bluegrass became partners with New Belgium Brewing Company. New Belgium inspired Planet Bluegrass to take a leadership role in the sustainable festival movement and provided lots of insights and assistance in getting started. Given the gorgeous outdoor settings of the festivals (Telluride and Planet Bluegrass Ranch in Lyons), it is a natural fit. Festivarians at the events have the time of their lives while they're at the festival. Thus, they're very receptive to new ideas which they then take home to their everyday lives.

Waste Reduction Initiatives

Were any goals set or initiatives taken to provide sustainable products (biodegradable or recyclable single-use products)? Was waste reduction encouraged through the use of reusable products?

- Planet Bluegrass now requires all vendors inside the festival to use only compostable materials. Staff is available to answer any questions they have about distributors and expect that they will not be handing out any materials (plates, utensils, cups, etc) that are not compostable.
- Incentive programs for reuse of products (cups, for example).
- Planet Bluegrass had a big push in 2008 to get rid of bottled water in small plastic bottles. Free water stations were really stepped up by adding filters to the tap water and providing 8 taps.
- In 2008, Planet Bluegrass did away with plastic bags in the festival merchandise/CD store. Instead, reusable bags were sold (made from recycled materials) for \$1 or were included with purchases over a certain price.

Was a system in place for recovering recyclables or compostable products?

The sustainable volunteer 'festivation crew-members' at each waste station are provided with long 'grabbers.' They keep tabs on their bins throughout the day, grabbing anything that has been placed in the wrong bin (compost, recycling, or trash).

Case Study: 35th Annual Telluride Bluegrass Festival

Did attendees find it easy to 'put waste in its place' so waste could be recycled or composted? There are several large waste stations in and around the festival grounds. Each of these stations has very clearly labeled bins for compost/recycle/trash. Each station is staffed throughout the day by 1 or 2 "sustainable festivation" crewmembers (volunteers) in order to advise people on what goes where. These crew-members help educate and work hard to eliminate contamination.

Were education and messaging strategies used to help minimize the contamination of the compost and recycle waste streams? Inside the festival, the sustainable festivation crew-members do a great job of preventing contamination. In the campgrounds, signage is used to show people what goes where.

How did vendors (both food and craft) respond to and support the sustainability programs?

Rather than implementing numerous changes at one time, a few new sustainability practices are implemented each year. The first year, compostable plates and utensils were strongly encouraged and the next year it was required. This year, Planet Bluegrass limited the size of bottled water to 1 Liter or larger. Next year, there will likely be a ban of single use bottles of water from any of the vendors. This strategy eases partners into the process, rather than overwhelming them with a great number of changes.

Was it difficult to find waste haulers that were willing to take the recyclables and compost? What, if any, adjustments had to be made to the waste reduction goals because of the capacities of the haulers?

This has been an ongoing issue for Planet Bluegrass because of the remoteness of Telluride. Planet Bluegrass constantly balances the emissions cost of trucking with the importance of waste reduction. The Telluride community has been an instrumental partner and is working to get a local compost facility.

What form of evaluative tools or methods were used to measure waste reduction goals and the final waste diversion rate (how much waste was kept out of the landfill)? Were the event goals met?

Every year, Planet Bluegrass looks closely at the waste data from the trucking companies. Generally, about a 60% diversion rate is achieved. However, for the past several years Planet Bluegrass hasn't been confident with the data received from the trucking companies. Again, being in the more rural location of Telluride, options for trucking companies is limited.

Energy and Transportation Considerations

How was the event powered? Were any special energy selections made because of the stated sustainability goals (using solar or biodiesel to power your event, other alternative)?

Every year Planet Bluegrass investigates powering the stage generators with biodiesel, but it is still not available in Telluride. For years there have been solar demonstrations in the 'Greentown' area, but nothing significant has been powered from these panels.

Were attempts made to conserve energy in order to meet sustainability goals?

Last winter, Planet Bluegrass had 2 separate, independent groups provide thorough eco-audits of the year-round offices (Green Heart Institute and the Brendle Group). They both helped find opportunities for Planet Bluegrass to conserve energy. The biggest conservation project last year was to completely rebuild the walk-in cooler used by the food service and all the vendor in order to dramatically increase its efficiency.

Was the carbon foot print measured (the total amount of carbon in lbs. released into the atmosphere during your event)? Were there attempts to offset your footprint through the purchase of renewable energy credits (REC's) or carbon offsets? Planet Bluegrass has been doing this since 2003. Beginning in 2007, the scope of the carbon footprint was increased to include the travel emissions from all artists/crew/festivarians to get to Telluride. This turns out to be more than 90% of the event's total emissions.

Case Study: 35th Annual Telluride Bluegrass Festival

How was the REC or carbon offset program chosen?

Planet Bluegrass has adopted a partnership model for all our sustainability initiatives. Rather than outsource the sustainability practices, Planet Bluegrass controls all of it in-house and then brings in outside partners for certain areas of expertise. In the case of offsets and RECs, Planet Bluegrass has been working with Renewable Choice Energy in Boulder. They help with education and computing carbon footprints, as well as the purchase of RECs and carbon offsets. In 2008, Planet Bluegrass purchased a combination of these – RECs for the power consumed by the festival and carbon offsets for the travel emissions.

Were attempts made to minimize the event's carbon footprint through sustainable transportation programs, such as carpooling, encouraging public transportation, selling 'green tags' (a travel-specific carbon offset program), encouraging walking and biking, venue and lodging selection, or other program variations?

- Planet Bluegrass has a ride-share board on the online "festivarian forum" that sees lots of traffic.
- Biking to all their events is promoted and Planet Bluegrass partners with New Belgium Brewing and several local biking groups to facilitate this.
- Between Clif Bar and Renewable Choice, Planet Bluegrass has been selling "green tags" at all the festivals for the past several years.

Were fuel-efficient or alternatively powered vehicles selected?

- Planet Bluegrass used electric cars for all the on-site artist transportation.
- Bicycle rickshaws are used for artist and food transportation.

Was the transportation carbon footprint calculated or were miles attendees biked, walked, carpooled or used public transportation tracked? Were there incentives to maximize or encourage these choices?

- For the past few years Planet Bluegrass has been computing the transportation carbon footprint by using a combination of surveys and the ticket sale data to identify where people are coming from, how many people are coming in cars vs planes, and how many passengers per car.
- Planet Bluegrass has provided incentives for biking to any of their festivals. This year, a nice bike corral was added in Lyons for bikers. A variety of prizes are offered to bikers, including camping and festival passes. All bikers were invited to a party in the campground the night before the festival. New Belgium Brewing donated beer for this event.

Water Conservation

Was drinking water provided to attendees? Were water filling stations or bottled water provided? Were steps taken to reduce the waste produced by bottled water containers? Were reusable containers for drinking water sold or provided at the event? Planet Bluegrass provides free drinking water. This is local water from the tap, which is then run through several filters to remove any sediment and the byproducts of the water treatment process. Reusable stainless steel bottles were sold at the festival and were provided to every performer. Vendors were limited to only selling bottled water in larger than 1 liter sizes. Next year, Planet Bluegrass will likely not allow vendors to sell bottled water at all.

Were additional steps taken towards water conservation and wise water use at the event? Planet Bluegrass performed several eco-audits this past winter to look at their power and water usage. As a result, they now use low-flow shower heads. Dual-flush toilets are being investigated, as well.

Education, Messaging and Leaving a Positive Legacy

How were sustainability goals communicated to attendees, vendors, sponsors, and community members? Planet Bluegrass always includes some sustainability info in their twice monthly emails to festivarians. In the 6 weeks leading up to Telluride, a "sustainable festivation tip" is included in each email. This campaign began with a detailed description of the "sustainable festivation manifesto" for 2009. Www.sustainablefestivation.com is a blog devoted to sustainability issues at Planet Bluegrass events.

At the events, sustainability issues are very visible. There is a "greentown" area where the sustainability partners are on-hand to talk with festivarians about a variety of sustainability issues. In addition, there is a sustainability toast on Sunday afternoon.

How was 'buy in' of the event's sustainability goals encouraged to attendees?

When Planet Bluegrass introduces a new program – like reusable plastic cups – they try to provide an incentive for a couple years to get people to change their habits. In the case of the cups, prizes were given to people who used the same cup for all 4 days of the festival. This year, a "sustainable camping" challenge was started in which festivarians nominated campsites and daily winners were chosen to receive prizes including festival tickets. This contest generated a lot of interest in advance of the festival on the online "festivarian forum." In past years, \$5 carbon travel offset have been sold as an option when (or after) tickets are purchased. The first year saw a 10% rate of response.

Did the event experience success in telling the sustainability 'story' to the media? Did the media pick up on and support the efforts? Planet Bluegrass has had some success with this. In the past year, feature-length interviews have taken place on several national public radio programs – Living On Earth, Weekend America, and Colorado Matters. More locally, the Rocky Mountain News and the Lyons and Telluride papers have done features on Planet Bluegrass' sustainability initiatives with a focus on what they're doing new each year. In 2007, Colorado Governor Bill Ritter issued a proclamation naming June 23 "Colorado Bluegrass Day" in honor of their sustainability initiatives over the years.

How was the vision of a 'green event' shared with staff? Was the vision supported?

Year round staff have regular "green" meetings where they brainstorm and analyze every aspect of their operation. They each walk away with assignments of areas to research. For the larger festival staff and volunteers, Planet Bluegrass has orientation meetings with each division, which includes a discussion of green issues.

Was the event able to leave a positive legacy in place for the host venue or community? The best example of this would be pushing the Town of Telluride for better recycling and compost facilities. Planet Bluegrass has a close relationship with the City.

How were the results of the sustainability program reported?

Planet Bluegrass's sustainable festivation blog is the main place for sharing analysis and data about their sustainability efforts. They firmly believe in transparency on these issues and the importance of dialog. Between the main Web site's green area, the blog, and the forum, they try to feed dialogs about these issues and share as much information as they can.

Will the event continue to move in the direction of creating low impact, sustainable events?

People have come to expect Planet Bluegrass to push a little further every year. This past year it was the drinking water, the previous year it was offsetting for travel emissions, etc. These issues have become deeply ingrained in their festival experience to where folks come to expect it.

The other sustainability issue they are currently tackling is local and organic food. Last year, Planet Bluegrass partnered with Organic Valley for most of their produce for the backstage catering (1,000 meals per day). In addition, they worked with several local producers – Redbird Chicken (local all-natural chicken) and Allegro Coffee (locally roasted organic coffee). This is an area where they see lots of opportunities for improvement in the coming years.

B. SAMPLE INSERT FOR REQUEST FOR PROPOSAL INSERT FOR FOOD VENDORS:

The purpose of this section is to provide samples of RFP language that can be used to encourage vendors to implement greening practices. By stating expectations ahead of time, your vendors can plan their activities and cooperate with your sustainability goals.

Below is an excerpt from a Denver 2008 Host Committee Catering RFP. This sample should be used as a starting point and should not be considered complete. There may be other practices to consider or items to add specifically for your event.

Sample RFP Language

Planning Committee Green Mission

In support of the Convention's "green" mission of planning an environmentally responsible convention, preference will be given to Vendors that have a proven commitment to "green" practices and that consider and minimize the life-cycle environmental impacts of catering and food service.

The Vendor must demonstrate experience with greening events and/or willingness to support the Green priorities of the Planning Committee and Mayor's Office by making every effort to accomplish the following:

- 1. Offer, highlight and promote local and/or organic food and vegetarian options
- 2. Use re-usable service ware such as china, porcelain, glassware, and metal flatware. Use cloth napkins and tablecloths instead of paper.
- 3. When reusable serviceware is not a feasible option, make sure the disposable products you use are made out of recycled materials and are recyclable plastic OR compostable bioware. Be consistent in your selection so that the waste stream is easier to manage after the event. Do not mix compostable plastic with recyclable plastic.
- 4. Be thorough. Understand the proper management approach for all of the materials you are using. Recycle or compost all trash that can be recycled or composted.
- 5. Donate food waste to local food banks. Compost all food that cannot be donated.
- 6. Do not serve plastic bottled water. Serve tap water in large dispensers or in pitchers to be served upon request.
- 7. Encourage work staff to take alternative transportation such as walking, riding a bike, carpooling, or taking public transportation. Discourage single occupancy vehicles.
- 8. Use the event carbon calculator at http://www.denver.org/convention/green/carbon-calculator. You can use the calculator to estimate your entire footprint ahead of time, include the estimated cost to offset in your planning budget, and find a sponsor to pay the whole amount; or you can choose to cover only travel by inviting your attendees to take responsibility for their own travel by using the calculator at http://www.denver.org/transportation/green-travel.
- 9. Communicate your green activities to your attendees creatively while generating the least amount of waste. Be sure that any necessary documents, signage or banners are made of highest content possible post-consumer recycled content and are able to be re-used or re-purposed.
- 10. Work with the Planning Committee greening staff to document and measure your efforts.

Staff and volunteers for the Planning Committee's greening initiative and Mayor's Office Greenprint Program will help you find the knowledge, services, vendors and volunteers that you need to implement the above greening strategies.

C. SAMPLE INSERT FOR REQUEST FOR PROPOSAL FOR EVENT PRODUCERS:

As stated earlier, selecting the right venue will be essential for you to meet your goals for creating a sustainable event. No matter how large or small your meeting is, be sure to develop your thoughts and put your expectations into an RFP before contacting any possible venues. It is best to prepare a written RFP, instead of contacting hotels or other venues by telephone. The RFP will act as a valuable tool, allowing you to give consistent information to each venue, while receiving consistent information from each venue for evaluation purposes.

Benefits of creating a clear and concise RFP will also:

- Save the planner time, which translates into cost savings,
- Provide justification for site selection, especially when others are involved in the decision,
- Act as purchasing documentation for future reference,
- Set the stage for a successful event with clearly stated expectations, and finally
- Help keep the planner(s) organized.

Below is an excerpt from a Denver 2008 Host Committee Venue Selection RFP. This sample should be used as a starting point and should not be considered complete. There may be other practices to consider or items to add specifically for your event.

Sample RFP Language

The City and County of Denver, in coordination with the Host Committee, defines environmentally preferable products and services as having a lesser or reduced effect on human health and the environment when compared with competing products and services that serve the same purpose. Applicable environmentally preferable product considerations will be a factor in the evaluation process of this Proposal. Therefore, vendors are strongly encouraged to describe any environmentally preferable attributes of the goods or services they offer to the City.

At a minimum, proposals must include the following:

- Provision of recycling services for glass, aluminum, paper, plastic, grease, and cardboard.
- Use of products with high recycled material, post-consumer waste content and compostable material (e.g., compostable or recycled-content event materials, dinnerware, and food serving products)
- · Procurement of some locally grown and organic foods and products
- Donation of left-over food to a local food bank.
- Commitment to work with Convention Greening Committee members to create a "green" event.

Preference will be given to proposals that also include any of the following:

- Minimization of waste materials (i.e., materials should be reduced, recycled, or reused)
- Composting food waste
- Purchase in bulk and products with minimal packaging (e.g., purchase and serve condiments, drinks, and other applicable food products in bulk)
- Procurement of environmentally responsible cleaning products
- Procurement of recyclable or reusable food and beverage packaging
- Staff awareness and training to implement environmental policies
- Degree to which china or other reusable service ware can used to minimize waste

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D. RESOURCE GUIDE – ORGANIZATIONS PRACTICING SUSTAINABILITY:

A1 Organics

http://www.alorganics.com/ (303) 506-5965

A1 Organics has been in the organic recycling and commercial composting business for three decades. Composting and organic recycling is their only business. A1 is the largest organic recycler and producer of quality composts in the Rocky Mountain region. The company has evolved from one location to six major sites along the Front Range. A1 currently produces in excess of 350,000 cubic yards of high quality compost and soil amendments per year.

The Alliance for Sustainable Colorado

http://www.sustainablecolorado.org/ (303) 572-1536

The mission of Alliance for Sustainable Colorado is to catalyze the shift to a truly sustainable world by fostering collaboration among nonprofits, businesses, governments, and academia. They are working to advance economic, environmental, and social sustainability in Colorado by building cross-sector alliances and networks. Alliance for Sustainable Colorado pursues sustainability through major program areas that value education, coalition building, and the promotion of sustainable policies and practices.

Bike Denver

http://www.bikedenver.org/

The mission of Bike Denver is to promote and encourage bicycling as an energy-efficient, non-polluting, healthy, and enjoyable transportation alternative within the City and County of Denver. Please visit Bike Denver's Web site or stop by the office at the Alliance at 1536 Wynkoop St. suite. 801.

Colorado Association for Recycling (CAFR)

http://www.cafr.org (970) 535-4053

CAFR is the leading independent, nonprofit organization in Colorado that is actively working to promote and encourage recycling through programs that educate the public, local governments, businesses, and Colorado's elected officials and through programs designed to provide technical assistance to those wishing to recycle. Their mission is to bring together individuals and leaders in business, education, nonprofits, and state and local governments to take action to turn ever greater amounts of waste into resources.

Colorado Carbon Fund

http://www.coloradocarbonfund.org/ (303) 866-2309

The Colorado Carbon Fund provides high quality carbon offsets to consumers as a way to support new energy efficiency and renewable energy projects to reduce greenhouse gas emissions in our state.

Resource Guide

Colorado Convention Center

http://www.denverconvention.com/ (303) 228-8000

The Colorado Convention Center is one of the most practical, user-friendly and technologically advanced meeting facilities ever constructed. SMG manages, operates and maintains the Colorado Convention Center in Denver, on behalf of the City and County of Denver. With over 200 properties worldwide, SMG is the world leader in venue management, marketing and development.

Colorado Renewable Energy Society (CRES)

http://www.cres-energy.org (303) 806-5317

The Colorado Renewable Energy Society is a nonprofit membership organization that works for the sensible adoption of cost-effective energy efficiency and renewable energy technologies by Colorado businesses and consumers.

Denver Metro Convention and Visitors Bureau (DMCVB)

www.denver.org (303) 892-1112

The DMCVB is a private, nonprofit trade association that is responsible for marketing metro Denver as a convention and leisure destination. The Bureau is contracted by the City and County of Denver to act as the official marketing agency for Denver.

Denver Recycles

http://www.denvergov.org/DenverRecycles/ (720) 913-1311

The staff of Denver Recycles offers information on how to participate in Denver Recycles' residential recycling collection service, special programs, and information on waste reduction and recycling at home, work and school.

Denver Regional Council of Governments (DRCOG) RideArrangers

http://www.drcog.org/ridearrangers (303) 458-POOL

For more than 30 years, RideArrangers has been making life easier and saving money for residents and businesses in the Denver region with carpool matching, vanpools, telework programs, schoolpools, Guaranteed Ride Home, and Bike to Work Day. RideArrangers helps businesses and individuals avoid traffic congestion and reduce pollution by promoting and providing transportation options. Using the latest transportation management ideas to keep traffic moving, RideArrangers maintains air quality and preserves the quality of life that Denver metro area residents know and expect.

Denver Water

http://www.denverwater.org/ (303) 628-6009

Your company can earn up to \$40,000 for improving process efficiency! Denver Water provides incentives for business customers to convert to water-efficient equipment and practices. Denver Water also offers a variety of rebates for commercial customers who install water saving equipment such as toilets, urinals and more, as well as a water truck for use at events.

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Eco-Cycle

http://www.ecocycle.org/ (303) 444-6634

Eco-Cycle partners with local communities to provide weekly, monthly, or annual collections of recyclables, compost, and hard-to-recycle materials typically collected only at the CHaRM. View our schedule of upcoming special collections and learn more about how you can help at these events.

Eco-Friendly Hospitality Destinations

http://www.itsagreengreenworld.com/

Eco-Friendly Hospitality Destinations is a green hotel and accommodation portal for global sustainable travel destinations, eco friendly travel, green holidays, and green vacations.

EPA Mobile Source Program

http://www.epa.gov/region8/air/rmcdc.html (303) 312-6757

EPA has several programs that help reduce fuel consumption. EPA's SmartWay Transport Partnership targets the freight industry and offers numerous opportunities for reducing fuel consumption and lowering emissions. EPA supports idling reduction practices, which save fuel and lower emissions. This is true for all industries – freight, construction, agriculture, school buses, and others. EPA has grants available to reduce emissions (including through idling reduction) from diesel engines.

EPA ENERGY STAR® for Hospitality

http://www.energystar.gov/ (303) 312-6464

ENERGY STAR[®] is a government-backed program helping businesses and individuals protect the environment through superior energy efficiency. Improving the energy performance of hotels/motels requires managing energy strategically across the entire organization. EPA provides strategies, tools, professional assistance, and recognition opportunities to help meet your goals and contribute to ENERGY STAR's nationwide challenge to improve the energy efficiency of facilities by 10% or more.

EPA WasteWise

http://www.epa.gov/epawaste/partnerships/wastewise/index.htm (303) 312-6524

WasteWise is a free, voluntary, EPA program through which organizations eliminate costly municipal solid waste and select industrial wastes, benefiting their bottom line and the environment. WasteWise is a flexible program that allows partners to design their own waste reduction programs for their needs.

Resource Guide

Food Bank of the Rockies

http://www.foodbankrockies.org (303) 371-9250

Food Bank of the Rockies, a non-profit organization, distributed over 22 million pounds of food last year through over 700 partner agencies feeding people in need throughout Metro Denver, Northern Colorado, and the entire state of Wyoming. FBR's Denver's Table program is a green solution for your hotel. Last year, thanks to donors, over 1.6 million pounds of food that would otherwise have been thrown away was rescued.

Governor's Energy Office (GEO)

http://www.colorado.gov/energy/ (303) 620-4292

GEO's mission is to lead Colorado to a New Energy Economy by advancing energy efficiency and renewable, clean energy resources. The New Energy Economy embraces energy conservation as an important component in our energy future, yet requires a broader mission to meet the goals of expanding renewable and clean energy resources and opportunities for the state's economy, environment, and energy independence.

Green Hotel Association

http://www.greenhotels.com/ (713) 789-8889

The Green Hotel Association is committed to encouraging, promoting and supporting ecological conscience in the hospitality industry.

Green Meetings Industry Council

http://www.greenmeetings.info/ (888) 450-2098 The Green Meeting Industry Council is leading the meeting industry in improving meeting management by supporting collaboration and the development and dissemination of resources and opportunities that improve the environmental performance of meetings and events.

Greenprint Denver

http://www.greenprintdenver.org/ (720) 865-9017

Greenprint Denver is Mayor John Hickenlooper's sustainability initiative, demonstrating that local government can be an effective force to promote environmental innovation and leadership. Greenprint supports and further integrates sustainable practices into all of the City's programs and policies and communicate sustainable development as a core value in Denver.

Resource Guide

Green Restaurant Association

http://www.dinegreen.com/ (858) 452-7378

The Green Restaurant Association[™](GRA), a national non-profit organization, provides services in research, consulting, education, marketing, and community organizing. The GRA utilizes a collaborative strategy that involves restaurants, manufacturers, vendors, grassroots organizations, government, media, and restaurant customers. The GRA's model provides a convenient way for all sectors of the restaurant industry, which represents 10% of the U.S. economy, to become more environmentally sustainable.

National Biodiesel Board

http://www.biodiesel.org/ (800) 841-5849

The National Biodiesel Board (NBB) is the national trade association representing the biodiesel industry in the United States. Biodiesel is a domestic, renewable fuel for diesel engines derived from natural oils, like soybean and canola oil, which meets the specifications of ASTM D 6751. On the Web site, you can find biodiesel at retail or wholesale locations anywhere in the country.

National Renewable Energy Laboratory

http://www.nrel.gov/ (303) 384-6566

The National Renewable Energy Laboratory (NREL) is the nation's primary laboratory for renewable energy and energy efficiency research and development (R&D).

ReDirect Guide

http://www.redirectguide.com/denver/ (303) 459-7885

The ReDirect Guide is a green business directory and resource guide for each of the three regions served. These annual directories of healthy and sustainable businesses are chock full of substantially better options for everyday purchases, presented alongside regionally appropriate educational articles and community resources.

Rocky Mountain Sustainable Living Association

http://www.sustainablelivingassociation.org/ (970)224-FAIR

The Rocky Mountain Sustainable Living Association is a non-profit organization committed to applying their vision and expertise toward a sustainable future for all. They are a solution-driven organization with the distinguishing quality to move people toward powerful and profound choices in an effort to stave off complacency about issues affecting our community. The educational programs and workshops offer creative challenges, delivering valuable, long-term benefits for a wide range of community interests that improve the relationship between people and the environment.

Smart Meals Program

http://www.cdphe.state.co.us/ (303) 692-2572

The Colorado Department of Public Health and Environment (CDPHE) Smart Meal Seal was created by the Colorado Physical Activity and Nutrition Program to establish nutrition requirements specifically designed for restaurant meals. Restaurants can showcase those entrees that are lower in fat, calories, and sodium and include components such as beans, whole grains, fruits, or vegetables by highlighting them with the Smart Meal Seal. The Smart Meal Seal is one of four initiatives from CDPHE's Small Steps for Healthy Leaps Program.

ZeroHero Events

http://www.zeroheroevents.com/ (970) 224-ZERO

ZeroHero is dedicated to creating sustainable events through zero-waste management, renewable energy, and education. With more than 10 years of experience, ZeroHero has proven that even the largest events in the country can be 90% zero-waste and 100% carbon-neutral. Our services include zero-waste management, volunteer coordination, educational programming, carbon offsets, biodiesel deliveries, and sustainable product sourcing (SPS) for events and restaurants in Colorado and beyond.

E. REFERENCES

- 1. "Green is the New Gold for Convention Industry." Watkins Research Group, 2008. (Contact: Rich Grant, Denver Metro Convention and Visitor's Bureau)
- 2. Wilson, Nancy J, and Amy Spatrisano. "Why Green Meetings? Myths Exposed", Meeting Strategies Worldwide, Inc., 2007. http://www.meetingstrategiesworldwide.com/resources/myths/.
- 3. "Venues and Events, Reducing Waste." California Integrated Waste Management Board, 2004. http://www.ciwmb. ca.gov/Venues/Mandates/Default.htm
- 4. Wilson, Nancy J, and Amy Spatrisano. "Why Green Meetings? Myths Exposed", Meeting Strategies Worldwide, Inc., 2007. http://www.meetingstrategiesworldwide.com/resources/myths/.
- 5. ZeroHero Events, Interview with John Long on September 27, 2008.
- 6. Targeted Statewide Waste Characterization Study: Waste Disposal and Diversion Findings for Selected Industry Groups". California Integrated Waste Management Board, 2006. http://www.ciwmb.ca.gov/venues
- 7. The Christian Science Monitor, United States, Web site last updated in April 2008. http://features.csmonitor.com/ environment/2008/04/24/todays-number-46/
- 8. ZeroHero Events, Interview with Lucas Erickson on October 2, 2008.
- 9. Stop the Waste Partnership, "Special Event Best Practices Guide", p.8 California, 2007. http://www.stopwaste.org/ docs/specialevents-swp.pdf
- 10. "Table 1: Energy Savings and CO₂ Impacts: Recycling and Incineration." National Resources Defense Council, 1997. http://www.nrdc.org/cities/recycling/recyc/recytbls.asp.
- 11. ZeroHero Events, Interview with Lucas Erickson on October 2, 2008.
- 12. "Festival Report: We the Planet 2004 Festival," Circle of Life, Oakland, California, 2004. http://www. circleoflifefoundation.org
- 13. "Table 1: Energy Savings and CO₂ Impacts: Recycling and Incineration." National Resources Defense Council, 1997. http://www.nrdc.org/cities/recycling/recyc/recytbls.asp.
- 14. Sheehan, John, et al. "Life Cycle Inventory of Biodiesel and Petroleum Diesel for Use in an Urban Bus." Prepared by the National Renewable Energy Lab, 1998. http://www.nrel.gov/docs/legosti/fy98/24089.pdf.
- 15. 15. "Historical Alternative Fuel Prices Compared to Gasoline and Diesel." United States Department of Energy, November 17, 2008. http://www1.eere.energy.gov/vehiclesandfuels/facts/2008_fotw545.html.
- 16. "Methane: Sources and Emissions." United States Environmental Protection Agency, 2006. http://www.epa.gov/ methane/sources.html.

F. CONSOLIDATED SUSTAINABLE EVENTS CHECKLIST

Leadership

- □ Articulate sustainable goals to partners early in the planning process
- □ Use written agreements to ensure full cooperation
- □ Be realistic when devising your strategy and setting your goals
- □ Document your success

Venue Selection & Location

- \Box Reduce and reuse waste
- □ Purchase responsibly
- \Box Recycle onsite
- \Box Offer local and organic food choices
- \Box Promote energy efficiency
- $\hfill\square$ Conserve water
- □ Encourage public transportation
- $\hfill\square$ Offer carbon offsets

Resource Recovery

- □ Establish partnerships with waste haulers early
- □ Use electronic or sustainable media for event promotion and registration
- □ Reuse, recycle, or compost food and beverage products
- □ Require vendors to follow your sustainable guidelines
- □ Calculate the number of colocated, clearly marked bins needed
- \Box Use (and reuse) signage
- □ Volunteers can help sort recycling, compost, and landfill waste

Energy Conservation

- □ Select venues that practice conservation and energy efficiency
- □ Offer opportunities to calculate and offset carbon
- □ Use cleaner-burning fuels for any trucks, buses, or generators

Transportation

- □ Choose a venue that reduces transportation needs
- □ Publicize bus and train schedules for attendees
- □ Encourage carpooling, biking, and walking
- □ Use hybrid or alternative fuel-powered buses for tours or airport shuttles

Water Conservation

- □ Offer bulk water dispensers or use pitchers of water with glassware
- □ Avoid venues that use excessive plastic water bottles or request that they discontinue their use for your event

Communication/Education

- □ Send out an early invitation that clearly states your sustainable goals
- □ Be consistent in your messaging when talking about green initiatives
- □ Be creative and make it fun for the attendees to be more green
- □ Work closely with stakeholders, such as vendors and waste haulers
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NOTES



This guide is a work in progress. Help create the next version by sharing your comments, knowledge and experience with us at GreenMeetings@GreenConveneStrategies.com.