



LIVE EARTH

## COMMUNICATION

Use the event to demonstrate sustainability in action.

## PURCHASING

Reduce the impacts of buying supplies, food & beverage, merchandise, printing, & décor.

> MORE

## WASTE

Prevent waste being created. Recycle, compost, salvage and re-use.

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## WATER

Conserve water, reduce production of waste water, and prevent pollution.

## ENERGY

Use sustainably produced energy, reduce demand for energy, and reduce emissions.

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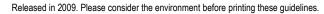
## TRANSPORT

Encourage mass transit, use sustainable transport solution, and reduce product miles.

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Live Earth Green Event Guidelines - Page 1





## TABLE OF CONTENTS

INTRODUCTION	<b>3</b>
Benefits of Greening Your Event	4
Pledge of Sustainability	5
Measure & Report	6
COMMUNICATION	<b>7</b>
Entertainment	7
Marketing & Communications	7
Traders & Eco Villages	8
NGOs & Sponsors	9
PURCHASING	10
Green Event Essentials	10
Purchasing Pledge	10
Purchasing Policy	<b>11</b>
Production	11
Catering, Food & Beverage	11
Marketing, Merch, Gifts, Medals	11
WASTE	12
Green Event Essentials	12
Water Pledge	12
Waste Guidelines Towards Zero Waste Production Waste Audience & Spectator Waste Race Waste	<b>13</b> 13 13 13 13 13
Waste Operations	<b>14</b>
Waste Prevention	14
Production & Trader Waste	15
Audience & Spectator Waste	16
Race Waste	17
Waste Reporting	18

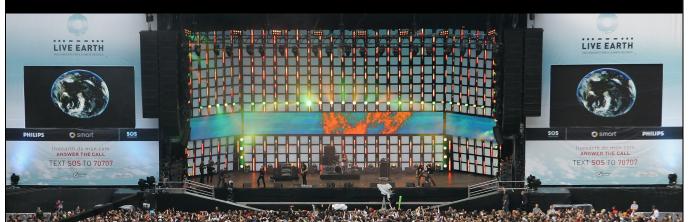
ENERGY	19	
Green Event Essentials Energy Pledge	19 19	
Energy Guidelines Efficiency & Planning Mobile Power Zero Emissions	<b>20</b> 20 20 20	
Energy Operations Efficiency & Planning Mobile Power Zero Emissions	<b>21</b> 21 22 23	
Energy Reporting	24	
WATER	25	
Green Event Essentials Water Pledge	25 25	
Water Guidelines Water Conservation Waste Water	<b>26</b> 26 26	
Water Operations Emissions to Water Waste Water Toilets	<b>27</b> 27 27 28	
Water Reporting	29	
TRANSPORT	30	
Green Event Essentials Transport Pledge	30 30	
<b>Transport Guidelines</b> Production Transport Audience Transport Artist Transport	<b>31</b> 31 31 31	
<b>Transport Operations</b> Production Transport Audience Transport Artist Transport	<b>32</b> 32 32 32	
Transport Reporting	33	
		••••

VOLUNTARY OFFSETTING

34

Live Earth Green Event Guidelines - Page 2





Concerts and events, live shows and outdoor gatherings are an essential part of community life and have a positive effect on society. Unfortunately they can have negative impacts on the environment. Events generate garbage, use electricity, need 'stuff' to run them, along with lots of travel by the audience.

The intent of the **Live Earth Green Event Guidelines** is to help venues and event organizers minimize and reduce the environmental consequences of their events and to embed the concepts of sustainability into their purchasing and operational decisions.

## WHAT ARE GREEN EVENTS?

Any event can be managed sustainably, whether small or large, a house party or large outdoor concert, a one time event or something that is ongoing – the concepts of minimizing impacts of purchasing, energy production, transport, waste and sanitation can be applied in almost any situation.

A sustainably managed live event is one that seeks to minimize its resource use and all the potentially negative impacts on the environment.

"Greening" a concert or event involves all aspects of the planning process, and this guide will take you through the process step-by-step. The good news is that by greening your event, you are not only having a positive impact on the environment, you are educating your audience, leaving a legacy in the community, and being an industry leader.

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### HOW THIS GUIDE IS ORGANIZED

This guide is divided into sections related to live event planning:

- ENTERTAINMENT
- COMMUNICATIONS AND MARKETING
- VENDORS AND ECO VILLAGES
- NGOs
- SPONSORS

Also discussed are the VENUE and VOLUNTARY CARBON OFFSETTING.

Along with the key impact areas:

- PURCHASING
- WASTE
- ENERGY
- WATER
- TRANSPORT

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## THE BENEFITS OF GREENING YOUR EVENT

Historically, concerts and live events have been a stage for protest, progressive ideals, entertainment, and inspiration across generations. The venue was where one would go to be part of a movement or cause, but the venue itself was often only the locale, and was rarely a part of the message. This will change as venues become examples of environmental sustainability in action.

### Sustainability In Action

Events create their own 'world' and through the sustainability measures you put in place, the audience and participants will experience and become part of sustainable solutions, hopefully being inspired to take some of these ideals back into their everyday lives.

### Climate Change

Ultimately one of the main drivers for producing a live event sustainably is to be part of the solution to combating climate crisis and resource depletion. Making sustainable production and purchasing decisions will cause a direct reduction in greenhouse gas emissions.

Environment

Implementing sustainable practices such as recycling and water conservation can have a dramatic effect on our environment. By taking simple steps such as these, concerts and live events can achieve remarkable results in protecting the immediate ecological environment.

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#### **Business Advantage**

By 'going green' you are also giving the audience what it wants, possibly stepping ahead of your competition, and the likelihood of attracting sponsors and media attention. You may also find some financial savings through reduce waste and energy costs.

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#### **Regulation And Standards**

As more pressure on countries, states, cities and local government is felt to meet certain environmental goals, this will flow through to regulations and licensing conditions in staging events. By 'going green' you are getting your house in order in anticipation of future statutory requirements. Standards such as the **British BS8901 Sustainable Events Management System**, and also the **North American Council For Responsible Sport** and **Eco Logo Events** label are examples of country specific standards and acknowledgements that can be achieved. As these and others are taken on by more events, it will become common practice for events to have some kind of labeling, standard or certification.

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#### Measureable Results

By measuring the impacts of your event, you can track areas for improvement and set goals for future events. As an example, Live Earth concerts on 7.7.07 were able to recycle or compost 79 tons of waste out of the total 97 tons that were generated world-wide at the seven venues. That means that 81% of all waste was diverted from landfills. Live Earth 2007 reduced potential greenhouse gas emissions by hundreds of tons by holding events in daylight at outdoor venues.

### **START NOW!**

The most important thing is to just start! Every step towards sustainable event management is important.

- Communicate your objectives
- Engage all stakeholders and negotiate commitment and levels of involvement.
- Measure and report results.
- Set goals and establish commitment.

#### Live Earth Green Event Guidelines - Page 4



## PLEDGE OF SUSTAINABILITY



We are asking all Dow Live Earth Run for Water events to take the Run for Water Pledge of Sustainability. By pledging, you commit to implement environmentally responsible practices in five areas: Purchasing, Energy, Transport, Waste and Water. Upon signing the pledge you will be receive the Pledge logo (left) that you can display on your website and in your marketing materials.

Upon completion of the event, your event reporting to Live Earth will confirm you implemented what you pledged. Athletes for a Fit Planet will then send you a "Verified" Pledge logo for you to use.

The following is a summary of the green event pledges. Click through for more details on pledges here.

## PURCHASING

### I PLEDGE TO ...

**BUY SUSTAINABLY**: Purchase from vendors that have sustainable practices and source products made from sustainable materials. **BUY FAIRLY**: Purchase from companies that have a commitment to equity, fair trade and fair labor/labour relations. **BUY LOCAL**: Purchase from local vendors and buy products manufactured locally.

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### WASTE

### I PLEDGE TO ...

WORK TOWARD ZERO WASTE: Implement practices that reduce the total waste going to landfill. RECYCLE: Provide recycling bins at the event for: paper, cardboard, plastics, metal, glass, timber, and other recyclable materials. COMPOST: Provide compost bins at the venue and for caterers and food vendors to collect food scraps, and use compostable plates, bowls, cutlery, serviettes/napkins, and cups.

MEASURE RESULTS: Collect and report the total weight to landfill/incineration, recycled, composted and salvaged.

### ENERGY

### I PLEDGE TO ...

**USE SUSTAINABLE ENERGY**: Use sustainable alternatives to diesel- and gasoline/petrol-powered generators. **REDUCE POWER CONSUMPTION:** Adopt procedures to reduce the total energy consumed by the event. **MEASURE RESULTS:** Collect and report data on total kWHs of power drawn from the grid/main and fuel used by generators.

### WATER

#### I PLEDGE TO ....

**CONSERVE WATER:** Implement water saving and conservation techniques at the event. **PREVENT WATER POLLUTION:** Ensure there is no chemical contamination of waste water. **MEASURE RESULTS:** Collect and report data on the total fresh water used and total waste water produced by the event.

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### TRANSPORT

### I PLEDGE TO ...

**SOURCE LOCALLY:** Buy products made locally, and use local contractors, vendors & artists to reduce the climate impact of transport. **ENCOURAGE SUSTAINABLE TRANSPORT:** Provide participants, audience, staff, and volunteers with public transport and ride sharing options, and encourage cycling and walking to the event.

**USE SUSTAINABLE TRANSPORT:** Use low-impact, fuel-efficient vehicles to produce the event, and design a loop course for the run. **MEASURE RESULTS:** Compile and report the total distance travelled by staff, volunteers, participants, and spectators/audience.

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#### Live Earth Green Event Guidelines - Page 5



## MEASURE AND REPORT

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Each of the key areas of impact will need to be measured and reported on. Many of these 'Key Sustainability Indicators' will be converted to CO2 emissions. We encourage the measurement of those impact areas where robust data can be gathered and where the resulting figures gathered can be used to set goals for the future. Click here to see the 2007 Live Earth Impact Report. Click through to report your results here.

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## WASTE

Weight Of General Waste. (Plus CO2 emissions from treatment of waste).
Weight Of Recycled Waste. (Zero Emissions)
Weight Of Compostable Waste. (Zero Emissions)
Weight Of Salvaged Waste. (Zero Emissions)

## ENERGY

Landline Power: Kilowatt Hours of Grid Power. (Then converted to CO2 emissions) Mobile Power Generators: Litres of Diesel. (Then converted to CO2 emissions) Zero Emissions Power: Kilowatt Hours.

### WATER

Clean Water Used – total volume (Then converted to CO2 emissions) Grey Water Produced – total volume. (Then converted to CO2 emissions) Sewage/Sullage Produced – total volume. (Then converted to CO2 emissions)

## TRANSPORT

### **Production Transport:**

**PRE-EVENT**: The total distance and mode of travel for production staff in pre-event planning. (Then converted to CO2 emissions) (Log meetings and mode of transport. Report as total distance and mode of transport.)

**SITE TRANSPORT**: The distance travelled at the event for onsite transport. (Then converted to CO2 emissions) (Measure total fuel used in all onsite vehicles. Report on types of vehicles used.)

**CREW TRANSPORT**: The distance travelled by crew to get to the event. (Then converted to CO2 emissions) (Survey all crew and ask them their mode of travel and distance travelled.)

### Participant/Spectator Transport:

MODE OF TRANSPORT: Percentages of audience taking each mode of transport. AVERAGE DISTANCE TRAVELLED: By each mode. (Then converted to CO2 emissions)

### **Artist Transport**

**AIR**: Total distance travelled by air for all performers. (Then converted to CO2 emissions) (Log number of flights booked for the event, and report total air miles).

**GROUND**: Total distance and mode of travel for all performers at the event. (Then converted to CO2 emissions) (Estimate total ground transport based on trips to airports, from hotels, etc)

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### Live Earth Green Event Guidelines - Page 6

LIVE EARTH

## COMMUNICATION



One of the most important aspects to sustainable event management is to understand the power of demonstrating sustainability in action. Creating a very special sustainable experience for your audience, participants, competitors and delegates and encouraging them to take that experience back out to their everyday lives is one of the largest positive impacts you can have.

## **ENTERTAINMENT**

Artists and elite athletes are role models and spokespeople to hundreds of thousands, if not millions, of people across the globe. Through song, action, and public statements, artists are in a position to influence the decision-making process and opinions of their audiences on a daily basis, both on and off stage. Artists can be regarded as more than simply singers or songwriters – they are spokespeople for a cause, social leaders that spearhead initiatives and shape policy, and models of empowerment and inspiration.

Engage the performers, artists, musicians, and other high profile participants in your environmental messaging.

## MARKETING & COMMUNICATIONS

How you place your sustainability credentials and green initiatives at the event in relation to the overall image will impact how it is seen in the minds of your audience. Getting the audience to tune into your green efforts and participating is essential. Inspiring the audience to action at your event and after it is essential. Also important is communicating and involving all other stakeholders with your green goals.

### **Brand the Event Greening**

If your event has a different theme each year, kick off the new sustainability focus by having a green theme across the entire event including the programming and content.

Come up with a name, theme or slogan and 'stamp' all green initiatives with this.

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### **Communicate with Stakeholders**

Not all your green communications need to go to the audience. Many other people and organisations are essential to involve in your event greening. This includes all suppliers and contractors, staff, crew & volunteers, traders, sponsors, NGOs, local government and other agencies, regulating authorities, media, industry associations, venue owner, local community & neighbors, community organizations, interest groups and associations.

Create communications campaigns to engage all stakeholders in your event greening plans.

#### Live Earth Green Event Guidelines - Page 7



## COMMUNICATE GREEN

## **VENDORS & ECO VILLAGES**

What is available to purchase at your event is a visible indicator of the event's commitment to sustainability. You shouldn't promote the event being 'eco friendly' and then give no consideration to ethical and environmentally responsible products, merchandise, food and beverages for sale.

More on environmentally preferable products is in the section on purchasing. In summary, consider the following for anything available for sale at your event.

#### .....

#### **Buy Local**

Support the local farmers and vendors from the community that supports the event.

### Eco-labelled and/or Organic

Sell and use products which have eco-labeling certification meaning they have taken environmental impacts into consideration, or those that have been certified organic.

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#### Fairtrade and Fair Labour

Sell and use products which have consideration for a fair price and fair working conditions for those that produced or have grown the goods.

#### **Sustainable Materials**

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Use and sell products such as food packaging containers and cups that are made from sustainable materials (renewable or recycled) and that can be composted or recycled.

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### Eco Villages & Sustainability In Action

When people attend your event they also go through many of their day-to-day functions – they need to travel, eat & drink, make purchase decisions, discard waste, use power, go to the toilet, and sometimes even take a shower. Therefore every part of your event has the opportunity to give participants an experience in sustainability in action.

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- Invite solar power providers that sell domestic solar power solutions to sponsor or provide the solar power. Often the same contractor will supply wind turbines as well.
- Look for companies which market zero energy products such as solar power phone chargers, hand pump torches, dynamo chargers to put on bikes, etc, that can be used at your event and by the audience at home.
- Set up solar power charging stations for mobile phones.
- Conduct a water conservation campaign at your event to encourage water savings by your audience and crew.
- Conduct a waterways protection campaign at an outdoor event to protect the riparian (water's edge) zone, urination and emissions to waterways.
- Partner with local water conservation or other water groups.
- If you are offering and option for carbon offsetting to your audience, bring in examples of the technology that they will be funding with their offsetting dollars.
- Invite local recycling, composting and reuse campaigns to be part of your event.
- Look for a Zero Waste initiative in your local region and invite them to be part of the event.

#### Live Earth Green Event Guidelines - Page 8



### NGOs

Working in with NGO's who focus on environmental causes, whether local or internationally, is a fantastic way to embed sustainability and concern for environmental issues into your event. They are also a great way of 'keeping you honest' as they will put certain demands on the standards they expect you to keep in order to be associated with the event.

Groups exist to promote issues such as climate change, water conservation, biofuels, renewable energy, recycling, reuse, etc. By inviting groups who are working these issues locally into your event, you get the benefit of their passion for environmental issues, probably some very motivated volunteers, and also a chance to offer their causes some vital exposure to the members of your event.

Also look for local groups who may wish to participate in your green schemes. For example there may be action groups whose objectives are to rejuvenate a stream, or wetlands. There may be community gardens which are well established or a group trying to create one. They could be an action group promoting organic vegetables or a local farmers market. There may be an upcoming 'Clean Up' campaign, or an activist group campaign for non GMO foods.

### SPONSORS

Sponsors can be essential for creating a successful event. Although the most obvious and often the most helpful method of support is through financial contribution, not all sponsors will be interested in or able to donate money. They may be more inclined to donate products or services, so be creative about how they can benefit you.

Of importance is to understand that just as the products, food and beverages for sale at your event, the sponsors who are aligned with it will reflect greatly on your commitment to sustainability. Your environmental profile can rub off on a sponsor or indeed a sponsor's environmental profile can rub off on your event. Choose your sponsors very carefully so as not to undo your good work by choosing the wrong partner. From an environmental point of view, you can gain a lot by having sponsors and partners which have highly visible environmental standards. As you start to focus on demonstrating sustainability-in-action, a whole new range of potential sponsors become possible. Here are some ideas:

- Invite eco-paints, environmentally sound cleaning product brands, recycled toilet paper etc to sponsor and place products.
- Partner with a 'charity' water brand so that all profits from the sale of bottled water go to good causes.
- Broker a deal with a WVO Oil or Pure Vegetable Oil supplier to promote the fuel's use in conjunction with your event. •
- ٠ Invite an energy saving light bulb supplier to sponsor, as well as supply lighting solutions.
- Use and promote eco-labelled food and beverage products. ٠
- Green Energy Suppliers
- Solar power/product companies •
- Eco media/magazines
- **Ethical Investment** ٠
- **Green Retailers**
- Hybrid or Electric Car Companies •
- . Ethical Clothing range

Some other things to consider when inviting sponsors to be part of your event:

- Choose sponsors which complement or enhance your environmental goals. ٠
- Ensure the sponsors also 'green' their participation at your event. •
- Invite local sponsors to participate not just national brands. •
- Ensure any activity at your event has considered sustainability and environmental conservation. No overindulgent and • excessive use of resources and waste creation!
- Contract 'green' requirements into their agreements, including materials use and waste management.
- Flying people around the world to participate in your event as part of a sponsor competition prize is not advised.
- Provide an info sheet to sponsors on all of the sustainability initiatives for your event along with any 'must takes' they need to be aware of.

### Live Earth Green Event Guidelines - Page 9



## PURCHASING GUIDELINES













Fair Trade Logos:

Organic/Sustainable Agriculture Logos:

Eco-labelled: Look out for products which are eco-labelled - certified by independent and authorized agencies.

A mountain of 'stuff' is needed to run most events, much with a once-only use. Purchase decisions are made every day in the pre-production phase of event planning, and the right choices need to be made to reduce the impacts of this purchasing.

Consumption of 'stuff' and its eventual disposal has a massive effect on carbon emissions and climate change and so reducing the impact of your event's purchasing should be part of your greening plans. The key areas of purchasing for live events include:

- Event Supplies, Consumables, Cleaning, Stationary & Printing, Production & Décor.
- Food & Beverage, Service-ware/Takeaway Packaging, Drinking Water.
- Merchandise, Uniforms, Medals & Gifts

To reduce this impact you need to:

- Use products made from sustainable materials.
- Use products which have concerns for equity, fair trade, and fair labour.
- Use products which are manufactured locally and are therefore short-travelled. •

## ESSENTIAL EVENT GREENING – PURCHASING

In each country or region, you will find there are different products and materials available, and not all of the environmentally preferable options are possible.

Rather than put down strict guidelines, we ask you to look into the issues regarding purchasing and to nominate via our online form, which areas you are able to consider to maximise sustainable purchasing at your Dow-Live Earth Run For Water event.

We also ask you to give us your supplier links so we can share the details of great suppliers.



### PURCHASING PLEDGE

By pledging, you commit to implement environmentally responsible practices outlined in the pledge. Upon completion of the event, we ask that you provide Live Earth with documentation confirming you implemented what you pledged. Athletes For a Fit Planet will then send you a "Verified" Pledge logo for you to use.

### TAKE THE PURCHASING PLEDGE HERE

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### Live Earth Green Event Guidelines - Page 10



## PURCHASING POLICY

Following are areas for consideration in purchasing supplies, production materials and merchandise for the event:

### PRODUCTION

Event Supplies, Consumables, Cleaning, Stationary & Printing ALL: Choose eco-labelled products and those produced locally or in your country. CLEANING: Use environmentally sound and chemical free cleaning products. PAPER: Use 100% post consumer recycled paper. If a blended paper use FSC certified virgin pulp. CONSUMABLES: Use toilet roll made from recycled paper, use recycled plastic bin bags/refuse sacks.

### Production, Construction, Set & Décor, Signage

ALL: Use eco-labelled, local, recyclable, and re-usable products made from non-toxic materials.
 PAINT: Use low or zero VOC, non toxic, water-based paint. Source recycled paint.
 TIMBER: Use FSC certified timber or salvaged/recycled timber.
 SIGNAGE: Use alternatives to PVC banners – timber, recycled plastics, fabric, creative re-use.
 RE-USE: Store and re-use products, use salvaged materials, send your used goods for repurposing/reuse.

## CATERING

### Food & Beverage

ALL PRODUCTS: Choose eco-labelled products where possible. LOCAL: Use locally produced produce, beverages & dairy to reduce transport and support your local community. ORGANIC: Use certified organic or local products which are moving towards organic certification. FAIR TRADE: Use fair trade labelled products such as tea, coffee, chocolate, bananas, rice, nuts. DISTRIBUTE: Arrange for un-used food to be sent to local shelters or food banks.

#### **Drinking Water**

USE THE TAP: Supply water from local mains or bulk dispensing. REFILLABLE BOTTLES: Supply or encourage use of refillable bottles. CHARITY WATER: If bottled water is used, choose a charity water product, bottled locally.

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#### Food & Beverage Service-Ware

**RE-USABLE**: Where appropriate, use washable and reusable cups, plates, bowls, and cutlery. **SUSTAINABLE**: For disposables, use sustainable materials - recycled, sugarcane, palm leaf. **BIODEGRADABLE**: Use products which will biodegrade in compost – and collect for composting. **COMPOST/BIOGAS**: Collect packaging and food scraps and compost or send to biogas production.

### MARKETING, MERCHANDISE, GIFTS, MEDALS

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### Printing

PAPER: Use 100% post consumer recycled paper. If a blended paper use FSC certified virgin pulp. PRINTING: Ask your printer to use vegetable inks and varnishes rather than mineral. REDUCE: Don't over-produce the number of products ordered. Minimize waste & packaging. REDUCE: Don't individually wrap programs in plastic bags!

### Merchandise, Gifts, Medals and Awards

SUSTAINABLE: Choose garments and products from sustainable materials.
 LOCAL: Commission creatively produced items from salvaged and recycled materials made locally.
 FAIR TRADE: Choose products with fair trade agreements.
 FAIR LABOUR: Products should be manufactured with fair labour and with appropriate certification.
 SAFE: Choose garments made from organic cotton, and the finished product certified chemical free.
 REDUCE: Don't over-produce the number of products ordered. Minimize waste & packaging. Don't produce frivolous items.

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### Live Earth Green Event Guidelines - Page 11

LIVE EARTH

## WASTE GUIDELINES



Most events create waste. How you minimize the waste created and manage the waste created has an impact on the overall sustainability of your event

The key to successful waste operations at the event is to reduce the amount of waste you produce. Towards zero waste to landfill is the goal. Consider the following:

- Use salvaged and reclaimed materials.
- Store & re-use materials and equipment, or salvage and donate materials for re-purposing/re-use.
- Hire equipment, infrastructure and materials, rather than buy.
- Manage waste created onsite by contractors, traders, caterers, NGOs, sponsors and the audience.

The key questions you need to ask to produce the best waste management system for your event are:

- What types of waste will be generated at the event?
- What waste treatment facilities are there locally and what processes do they use?
- How can you influence or regulate the types of waste generated?
- How can you manage the waste at the event to move it towards Zero Waste?

### ESSENTIAL EVENT GREENING - WASTE

Each country or municipality has its own waste processing and collection techniques, standards and requirements. At a minimum, we require you to take steps to integrate recycling and collection of compostable waste into your waste management plans. We are asking all Dow-Live Earth Run for Water events to take the **Run for Water Pledge of Sustainability** summarised as the following:

WORK TOWARD ZERO WASTE: Implement practices that reduce the total waste going to landfill. RECYCLE: Provide recycling bins for: paper, cardboard, plastics, metal, glass, timber, and other recyclable materials. COMPOST: Provide compost bins at the venue and for caterers and food vendors to collect food scraps, and use compostable plates, bowls, cutlery, serviettes/napkins, and cups.

MEASURE YOUR RESULTS: Collect and report the total weight to landfill/incineration, recycled, composted and salvaged.

We ask you to look into the issues around waste management locally and to share with us how you will be managing waste at your event.



### WASTE PLEDGE

By pledging, you commit to implement environmentally responsible practices outlined in the pledge. Upon completion of the event, your impact reporting will confirm you implemented what you pledged. Athletes for a Fit Planet will then send you a "Verified" Pledge logo for you to use.

TAKE THE WASTE PLEDGE HERE

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## WASTE MANAGEMENT

Following are areas for consideration in purchasing supplies, production materials and merchandise for the event. Operations guides are on the following pages. Click the **+** MORE button to read deeper into the issues around waste management.

### TOWARDS ZERO WASTE

Envisage the end life of everything you purchase to produce the event and all the products you sell there. Where could the waste end up, and how can you ensure it is sent back into the system as recyclable material, compost or re-purposed/re-used?

PROMOTION: Reduce amount of printed material and ban handing out flyers at the event. SPONSORS, NGOS & TRADERS: Do not allow handing out flyers, giveaways and samples. No plastic bags. FOOD & BEVERAGE: Use refillable and/or reusable cups, containers, plates and cutlery. RACE WATER: Use paper cups with water supplied from local mains or bulk storage. RUNNER REGISTRATION: Have paperless registration. Communicate via email and the internet.

When you go step by step through your event, you will be able to identify what rubbish will be created and where. You'll then be able to plan for recycling separation, composting, salvage, and re-use.

## **PRODUCTION WASTE**

As an event is built waste is created, from staging and décor, fencing and barriers, seating, marquees, along with the myriad of deliveries which arrive wrapped, packed and palletized.

PLASTICS: Plumber's pipe offcuts, wrap from pallet deliveries & bottled drinks, fence sheeting, catering containers METAL: Scrap metal, metal bands from pallet deliveries, bulk tins from catering. PAPER/CARD: Cardboard boxes, packaging & trays from bottled drinks. Office paper waste. ELECTRONIC: Damaged equipment, electrical and data cabling, batteries, light bulbs GENERAL RECYCLE: Timber, waste catering oil, fabric, bulb liquid containers.

## AUDIENCE & SPECTATOR WASTE

Most waste at events is created by the audience's participation. Eating and drinking being a big ticket item. Controlling what food and drinks are sold and regulating what packaging they come in will allow you to also manage the creation of waste.

**RECYCLE**: Aluminium & steel cans, plastic & glass bottles, Tetrapak cartons, plastic or cardboard cups, paper. **COMPOST**: Food packaging & drink cups, left over food scrap, napkins, pizza boxes, burger cartons. **GENERAL WASTE**: Cigarette packets and butts, chip/crisp & sweet wrappers, some packaging material. **OTHER**: Abandoned gear and things the audience and spectators bring along such as flags and banners.

## RACE WASTE

Road races produce their own unique type of waste, most of which is recyclable or compostable. Ideally you should design a loop course so you can maximize the efficiency of waste management in the start/finish area. Special attention needs to be given to managing the waste generated at the water/aid stations and by spectators along the course.

SALVAGE: Runner's clothes and shoes discarded at the starting line. Set up donation bins. REDUCE: Set up a kit bag system to allow runners to keep their belongings and collect them at the finish. DRINK STATIONS: Use biodegradable or recyclable cardboard cups at runner drink stations. RECYCLE OR RE-USE: Race bibs, space blankets, race signage, timing chips, banners and bunting. PREVENTION: Encourage spectators not to use balloons, clapping hands, streamers etc.

### Live Earth Green Event Guidelines - Page 13

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To reduce the volume of waste created and to effectively manage the waste that is produced, we have put together some operations guidelines, tips and suggestions for;

- Waste Prevention
- Production & Trader Waste
- Audience Waste
- Race Waste

### **OPERATIONS: WASTE PREVENTION**

Preventing waste from being created in the first place is an obvious step to take to reducing the total waste volumes at your event. There are many ways you can do this. The following are tips to prevent waste being generated at the event.

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### **Registrations & Ticketing**

- Commit to paperless registration, completing it online where possible.
- Communicate all race information online & via email.

Promotions, marketing, merchandise and sponsors

- Reduce the volumes of promotional flyers and posters printed and distributed.
- Be frugal in producing your printed program and other printed materials for the event.
- Eliminate all flyer distribution at your event, by traders, NGOs, sponsors and the event itself.
- Eliminate waste-creating 'give-ways' encourage 'experiential' activities rather than waste creating giveaways.
- Ensure all sponsors meet your waste, purchasing and production guidelines.
- Ensure all NGOs meet your waste, purchasing and production guidelines.

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#### Traders, Catering, Bars

- Use refillable and reusable cups, containers, plates and cutlery. Put on deposits and refunds to ensure they are returned.
- Ask all traders to use bulk dispensing not single sachets of sugar, butter, sauces, salt & pepper etc.
- Ban drinking straws.
- Don't allow plastic bags to be used, instead offer re-usable bags for sale important for merchandise stalls.
- Ban polystyrene packaging from traders (goods packaging as well as cups and burger trays).
- If you must use disposable food service-ware, make sure it is compostable and that you collect it separately.
- If you must use drinks in bottles, cans and Tetrapak's, ensure that they are collected separately and recycled.
- .....

### **Drinking Water**

Bottled drinking water is a major creator of waste. The most environmentally preferable option is to provide water from the town mains supply and dispensed into re-usable bottles.

- Use tap water or bulk stored water where possible.
- Encourage participants to bring re-usable water bottles.
- Sell or provide re-usable water bottles.
- Sell or provide water bottle holders/carriers which will encourage re-filling bottles.

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Live Earth Green Event Guidelines - Page 14



## **OPERATIONS: PRODUCTION & TRADER WASTE**

The main factors in planning your production waste system include:

### **Plan Bin Placement**

- Carefully plan where bulk waste will be created and place bulk containers or 'skips' close by. •
- Don't make the contractors have to walk far to dispose of their recycling correctly.
- If needed put bulk bins in place during the production build and then move them for the show. ٠
- .....

#### Supply Bags, Bins & Signs

- Supply everything the food traders and caterers need to manage their waste properly. This could include;
- A compound to place flattened cardboard.
- A separate bin for compostable kitchen scraps, along with other bins for recycling and general waste. •
- Of most importance is to CLEARLY SIGN ALL THE BINS! •

### **Bulk Materials Recycling**

Put specific materials recycling in place. This could include;

- Plastic sheeting which covers fences and 'masks' areas.
- Recycling of plastic shrink wrap from bottled drink or pallet wrap deliveries.
- Collection and recycling of empty buckets and large containers from caterers. •
- Timber and metal offcuts.
- Plumber's piping.
- ٠ Data cabling, and other electronics recycling.

#### **Bars and Traders**

Put in special systems for bars and traders to suit their specific waste requirements. This could include:

- Recycling and salvage of bar piping. ٠
- Shrink wrap collection for palletized stock and slabs of bottled drinks.
- Metals bins for bottle tops. •
- Flattened cardboard bay.

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## **OPERATIONS: AUDIENCE & SPECTATOR WASTE**

### **Rubbish Psychology**

It's not just rubbish, it's human behaviour you're managing. You need to consider if your audience and spectators are going to be inclined to participate in your recycling and composting schemes. Is your audience used to recycling, or will you be teaching them about it for the first time? Will they actively participate in the recycling – do they have the time, access and inclination? A full to overflowing bin may lead to the immediate disintegration of your well thought out recycling plan, so make sure you never get to that point.

### Operations Tips

Here are some tips to help get your waste separation working and your audience paying attention and participating:

### Bin & Site Logistics

Does your waste contractor or local council or venue supply bins and signs or bin tops or will you need to source them? Consider factors such as the site layout & access for emptying along with number and volume/size of the bins.

Bin Placement

Identify pinch points where foot traffic will converge and high impact areas such as around food stalls and bars Consider crowd density & bin visibility.

Group Your Bins

If you have waste separation make sure you always have each bin option available.

### Use Bin Tops

Cover the top of the bin with a lid, plastic shroud with a hole, or bin cap. This offers a spot for signs and also reduced 'copycat contamination'.

Eye Level & Overhead Signs

Signs on the front of bins may look great when you're sticking them on, but once there's a crowd, who can see them? Place signs at eye level and/or overhead so they can be seen from afar and over the crowd.

Recycling Messaging

Investigate existing recycling messaging and campaigns by local government or recycling agencies in your area. Include them in your recycling plans for maximum impact with your audience.

Creative Display

Consider including theatre in your waste. Set up recycling stations, interactive displays, recycling centres, etc.

Volunteer Bin stewards

Recruit volunteers from recycling organisations to stand by your groups of bins to encourage everyone to put the right thing in the right bin.

Deposits & Refunds

If your country doesn't already have a deposit/refund system on drink bottles, cans, and Tetrapak cartons then charge a fee (10p, 20c, 50c, etc) on each bottle, cup or carton. Then set up refund points to collect the recyclable containers. If you use re-usable cups, then charge more money to ensure they are returned.

Recycle Incentives

Apart from money, you can offer incentives or rewards to your audience to bring back recycling or even their food plates for composting. Have a free drink to give away for 10 bottles returned for example. You can build in the cost to the system if you are selling the drinks yourself. (charge 10% more).

Waste Compound

Creating a waste compound where bulk handling can be done.

### Mini-Materials Recovery Facility (MRF)

Consider putting in a 'mini-MRF' where your volunteers and staff can pre-separate recycling from general waste.

Bulk Containers

Set up bulk containers 'skips' and put big clear signage on them for each sort of waste.

You may collect all the different recyclable materials separately, or you may find that 'co-mingled' or mixed recycling is OK given how your rubbish contractor will process the waste once you deliver it to them.

### Materials and Resources

Make sure you have enough bins! Have spare signs. Have enough bin bags and remember not to have bins too big as you won't be able to lift the bags out of them!

### Live Earth Green Event Guidelines - Page 16

LIVE EARTH

## **OPERATIONS: RACE WASTE**

Here are some tips to help get your waste separation working and your runners participating:

### Starter Line Clothes – Kit Bags

Set up a 'kit bag' system and transport the runner's gear to the finish line. Runners should be given a standardised bag and a sticker which matches their bib/runner number. They should stick the number on the kit bag and place it in a numbered bay/tent/truck (which matches their surname). Then they just need to go to that bay to get their kit bag back, by showing their bib number. They can hand their bib number in then which will allow you to collect them for recycling.

**Donation Bins** 

For those that have brought clothes they will discard, set up donation bins for clothes shoes and bags, and have people on hand to collect up and salvage gear left on the ground at the starting line.

#### Water/Drink Stations

At regular intervals along the race you will need to provide drinking water. This is usually given out in cups that can be raked or swept up and bagged after the race. We discourage handing out plastic water bottles as they can be a safety hazard on the course and are inconvenient for the runners to carry.

If you decide to give out the water in cups, paper cups will be the best option as plastic ones will likely crush and shatter and may also be slippery. When sourcing your paper cups make sure they are either compostable or recyclable. Check with your waste management processor that they can accept the cups for recycling or composting.

Have recycling bins, bags or cages ready to put collected cups in, and keep them separate from other rubbish so that spectators or others don't just throw anything in there.

#### Trackside Signage

Due to the length of the 'site' there will potentially be the need for a lot of signage. Ensure you have a system in place to diligently collect up all of the race signage along the track. Have a signage map so those who are responsible for collecting the signs know where they will be located.

Don't create continuous bunting or banner roll to go all along the course!

Spectator and Cheering Squad Streamers and Paraphernalia

In many countries spectator culture is to bring a lot of banners, balloon, streamers, whistles, horns, large clapping hands and the like, to cheer people on. When registering runners, remember to tell them to tell their fans not to bring 'all that stuff' as it is just waste in waiting!!

### 'Space' blankets

If you are in a cold climate, there may be a real need to keep people warm at the end of the race. Encourage runners to have someone ready with warm clothes or a blanket. (or have the Kit Bag system really slick so there's no waiting!) Resist giving out space blankets unless really necessary and if so, have collection bays and make sure you get ones that can be recycled (if your facilities will take them). Alternatively collect the up and send them for re-use for arts and crafts, or potentially, if washed, for re-use again as a space blanket. Look for these in your local area: <a href="https://www.afminc.com">www.afminc.com</a> - they're recyclable!



## WASTE REPORTING

We require you to let us know what weight of waste was recycled, composted, landfilled and/or incinerated.

### How to Measure

The final volumes of each type of waste will be given to you by your waste contractor. Make sure you have put into their contract to report back on the volumes. Ask them how they will be assessing this. Place someone in your team to monitor the waste being generated and to follow it through to ensure that a system is in place to measure and report the final volumes. If it seems impossible that after the event they will be able to work out the split between general, recycled and compostable waste, then put an audit in at the event. Have someone count the bags and monitor the volumes of waste as it is being created.

## MEASURE THE IMPACT

### **GENERAL WASTE**

Weight Of General Waste. This waste will also have a CO2 emissions factor applied to it from waste processing.

- LANDFILL: The amount of general waste sent directly to landfill.
- **INCINERATION:** The amount of general waste burnt through traditional incineration.
- WASTE TO ENERGY: The amount of general waste burnt and turned into heat & energy.

### **RECYCLED WASTE**

Weight Of Recycled Waste (Zero Emissions)

- CARDBOARD: Boxes, packaging material.
- PAPER: Office paper, programs, flyers, newspapers, magazines, posters.
- PLASTIC: Bottles, containers, film plastic such as shrink wrap or plastic sheeting.
- TETRAPAK: Milk and juice cartons
- METAL: Aluminium and steel cans, metal bands from packaging, broken infrastructure.
- GLASS: Bottles and jars.
- **TIMBER**: Offcuts from construction.
- ELECTRONIC: Damaged equipment, electrical and data cabling, batteries, light bulbs.
- OIL: Used cooking oil from catering and food traders for processing into biofuel.
- TOTAL: Or if it is all sent as co-mingled recycling to a sorting facility, total recycled waste.

### COMPOSTABLE WASTE

Weight Of Compostable Waste (Zero Emissions)

- COMPOSTED: Food waste, green waste, compostable food & beverage packaging.
- ANAEROBIC DIGESTION: All of the above sent for processing into biogas.

### SALVAGE

Weight Of Salvaged Waste (Zero Emissions)

MATERIALS: Sent for re-use or re-purposing which would otherwise have been landfilled or incinerated.

Click through to report your results here.

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### Live Earth Green Event Guidelines - Page 18

LIVE EARTH

## **ENERGY GUIDELINES**



Reducing power consumption and looking for alternative ways to provide power to the event are the pathways to sustainability. Innovation in new ways of powering our lives is moving rapidly and you are encouraged to use the event as a showcase in sustainable energy production.

In looking at how to power the event, the main environmental concerns are whether your power is sourced from non-renewable resources (diesel in generators, coal fired power stations etc), and the resulting greenhouse gas emissions, or whether you are using renewable or zero emissions sources.

We can reduce the amount of energy used at events through:

- Using energy efficient equipment.
- Carry out 'switch off' campaigns.
- Using energy efficient equipment.
- Regulate power consumption by traders and other third party users.
- Careful planning and distribution of mobile power generators.
- Powering mobile generators with sustainable biofuels.
- Using zero emissions energy production such as solar, wind & hydrogen fuel cell.

### ESSENTIAL EVENT GREENING – ENERGY

In each country or region, you will find there are different options available to power the event. However at a minimum, we need you to research what alternatives energy options are available and also make some commitment to reducing the power use at the event. We are asking all Dow Live Earth Run for Water events to take the **Run for Water Pledge of Sustainability** summarised as the following:

**USE SUSTAINABLE ENERGY**: Use sustainable alternatives to diesel- and gasoline/petrol-powered generators. **REDUCE POWER CONSUMPTION:** Adopt procedures to reduce the total energy consumed by the event. **MEASURE RESULTS:** Collect and report data on total kWHs of power drawn from the grid/main and fuel used by generators.

We also ask you to give us links to any fantastic zero emissions power providers you use which you would like to share with others.



### ENERGY PLEDGE

By pledging, you commit to implement environmentally responsible practices outlined in the pledge. Upon completion of the event, your impact reporting will confirm you implemented what you pledged Athletes for a Fit Planet will then send you a "Verified" Pledge logo for you to use.

TAKE THE ENERGY PLEDGE HERE

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### Live Earth Green Event Guidelines - Page 19



## ENERGY MANAGEMENT

Let's now look at how energy is supplied at an event and what you can do to reduce the amount of energy consumed and to supply sustainably produced energy. On the following pages will be tips and idea on energy operation – how to actually achieve your energy reduction goals.

### **EFFICIENCY & PLANNING**

+ MORE

You will reduce the total energy used at the even through thorough and well researched planning of power supply and distribution.

**RENEWABLE ENERGY**: Sign up any grid based power to renewable energy providers **EFFICIENCY**: Use energy efficient equipment such as office, sound and lighting equipment. **REDUCE**: Encourage reductions through carrying out a 'Switch Off' campaign. **DAYLIGHT**: Hold your event during the day and maximise natural light in indoor venues.

## **MOBILE POWER**

+ MORE

Many events will need to bring in mobile power generators rather than use the grid based power. The key to efficient use of mobile power generation is to Plan Plan Plan Plan.... for:

- Number of outlets requiring power.
- Maximum load for each outlet
- Placement of generators
- Loads and usage patterns
- Distribution of cabling
- Usage peaks and troughs

## **ZERO EMISSIONS**

#### + MORE

Relying solely on fossil fuels is not a sustainable long-term solution to energy supply. Look for alternatives to power your event and mimic developments in zero emissions solutions to not only power your event but to demonstrate what is possible.

Rather than simply replacing mineral with waste vegetable oil biodiesel or other sustainable fuels, it's possible to do without diesel generators at all. This is where we move to truly green energy sources for your event such as solar, wind, pedal, and hydrogen fuel cell.

**SOLAR & WIND**: Use purpose built setups for live events, or create 'rigs' in conjunction with solar/wind providers. **PEDAL**: Perfect for demonstrating power generation and involving your audience.

HYDROGEN FUEL CELL: Some areas may have pioneers in this field willing to demonstrate how the technology works. MICRO HYDRO: If you have a permanent site next to a running watercourse.

**MICRO HTDRO**. If you have a permanent site next to a running watercourse.

**CHP**: Combined Heat & Power – create energy and heat from processing organic matter into methane. **MICROGENERATION**: If you have a permanent site, set up any of the above in a permanent capacity.



## **ENERGY OPERATIONS**

## **OPERATIONS: EFFICIENCY & PLANNING**

The following are ideas to implement to reduce your energy usage and for efficiency planning. These tips work in indoor and outdoor events connected to mains grid power. We will look specifically at outdoor mobile power in the following page.

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### Sign Up To Green Energy

Your offices, and possibly some of your onsite power will come from mains. You will not have much control over the power provider for the event site, but at a minimum, if it is available, your offices should be signed up to green energy.

This works in different ways in different countries, however basically renewable energy (wind, solar, biomass, and in some cases hydro) is generated and 'fed' to the national grid. When you sign up to green energy, you are funding (depending on your country's scheme) for renewable energy to be produced.

You will either directly purchase 'green energy' from an energy retailer or you will purchase your country's version of a Renewable Energy Certificate.

### Use Energy Efficient Equipment

When using mains power supply the use of energy efficient equipment is a direct way of reducing consumption and consequently greenhouse gas emissions. Energy efficient equipment can include:

- Stage and general Lighting (use LED)
- Sound equipment
- Office equipment
- Timing systems and other electronic gear.

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#### Switch Off Campaigns

Ensure that gear is turned off when not in use. This includes:

- Sound equipment left 'humming'.
- Lights on when it's daylight.
- Office and other equipment left on standby mode.
- Battery chargers left charging well over time.

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### **Power Users**

You can influence how those who you have no direct control over power habits by:

- Have financial incentives or penalties relating to energy consumption.
- Make it a policy that all lighting by exhibitors is low wattage and no urns or other high energy consuming equipment.
- Audit all power consumption.

### Daylight Hours

Have your event outdoors during the day is the easiest way to reduce electricity use.

If you do have your event indoors, use as much natural light as you can and be sure to test the light level multiple times to avoid over lighting.

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(Also incorporate efficient light technologies such as LED light bulbs and low-wattage fixtures where you can).

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### Live Earth Green Event Guidelines - Page 21



## **ENERGY OPERATIONS**

## **OPERATIONS: MOBILE POWER**

Powering outdoor events in temporary locations often requires mobile auxiliary power. This usually comes in the form of a diesel generator. We look at zero emissions power generation in the following page.

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### **Energy Efficiency and Mobile Generators**

When using mobile power generators, the use of energy efficient gear does not have so much of a direct impact in eventual CO2 emissions. This is because power generators have an optimal 'zone' that they need to run in, and small drops in power pull, because of energy efficiency, don't necessarily lead to a reduction in fuel consumption (the direct cause of emissions.) 'Unused' capacity in a generator leads to fuel being burnt off.

Very careful planning is required so that the use of energy efficient gear can actually translate to a reduced power generator size, and therefore reduced fuel consumption. Be careful not to make emissions reductions campaigns if you are using energy efficient gear on mobile power generators.

### Use Sustainable Biofuels

Power generators in many countries will be capable of using biofuels. We recommend using on those biofuels which have been produced from a waste product such as used cooking oil. (WVO Biodiesel) There is much campaigning against using arable land for production of crops for fuel not food. Biofuels are made from raw materials such as oilseeds, wheat and sugar, resulting in ethanol (alcohol) and biodiesel. It's believed that only so much land can be set aside to grow biofuels before food supplies and biodiversity are threatened.

Therefore if you use biofuels, make sure it is made from sustainable sources. Keep an eye on the advances of other sustainable biofuels such as Pure Plant Oil and Algae Oil.

- Broker partnerships between WVO biodiesel suppliers and your generator hire company.
- Demonstrate pioneering (yet old) technology and run your generators on pure vegetable oil.

### **Permanent Distribution**

If your event is held on a permanent location but will still be run by mobile/temporary power generation, huge savings in emissions and number of generators needed can be achieved through putting gin permanent distribution. The way power is distributed around your site, if no permanent cabling is present, may be to use many more generators than should be necessary.



Live Earth Green Event Guidelines - Page 22



## **ENERGY OPERATIONS**

## **OPERATIONS: ZERO EMISSIONS POWER**

Relying solely on fossil fuels is not a sustainable long-term solution to energy supply. Look for alternatives to power your event and mimic developments in zero emissions solutions to not only power your event but to demonstrate what is possible.

Rather than simply replacing mineral with waste vegetable oil biodiesel or other sustainable fuels, it's possible to do without diesel generators at all. This is where we move to truly green energy sources for your event such as solar, wind, pedal, and hydrogen fuel cell.

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#### Mobile Solar & Wind Power

Mobile solar set-ups are available to power events, proven and reliable - assuming you have some sun. This can power stages, installations, lighting, stalls.

If there are no 'plug n play' solar power providers in your local market, make contact with those providing solar power for other purposes and invite them to set up a 'rig' for mobile solar power. This will also provide a promotional opportunity for their company. They may also wish to provide solar hot water.

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#### **Pedal Power**

Get your audience involved with powering their entertainment. This can include stages, cinema or mobile phone charging.

If there are no pedal power operators locally, combine with an alternative energy centre and ask them to 'rig' up bikes to provide power. The technology is simple and can be easily replicated.

### Hydrogen Fuel Cell Power

The commercial viability of power supplied by a Hydrogen Fuel Cell generator is increasing quickly. A hydrogen fuel cell is an efficient form of power supply with no emissions and only water vapour from the exhaust. It's a clean and efficient alternative to diesel generators.

Look for organisations that may be pioneering this technology to power a part of your event.

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#### **Micro Hydro Power**

We all know about massive dam-based hydroelectric schemes. Micro Hydro or Run of River Hydro is an alternative for small power requirements. If you happen to have a permanent location and also have a reliable running water course near it, a run-of-river hydro power set up could be for you.

#### **Combined Heat & Power**

If you have a permanent site that is used for other purposes year round, you may consider generating power through a combined heat and power facility. Anaerobic Digestion creates methane which is then burnt to create energy. The heat generated in this process is used to heat buildings and water.

### Microgeneration

Solar, wind, combined heat & power, methane or biogas digesters, and micro-hydro are all examples of micro-generation: permanent energy supply that is off the grid. If you have a permanent outdoor site, you could consider permanent microgeneration that can not only power your event, but offer value to your surrounding community. Businesses and local government are leading the way in micro-generation.



## **ENERGY REPORTING**

We require you to let us know what power was consumed at the event.

### How to Measure

If on landline/grid power, you will need to take a meter reading. You will also need to find out whether the power supply is from traditional power or on a renewable tariff.

If you are using mobile power generators you will just need to get a measure of the total fuel used.

Both kilowatt hours and litres of fuel used can then be converted into CO2 emissions. Use your country's agreed emissions factors to calculate the resulting CO2 impact.

## **MEASURE THE IMPACT**

# LANDLINE/GRID POWER Kilowatt Hours (This is then converted to CO2 emissions)

- GENERAL: The total kilowatt hours of power used.
- 100% RENEWABLE: The total kilowatt hours of power used. (Zero Emissions)

## MOBILE POWER GENERATORS

Litres of Diesel (This is then converted to CO2 emissions)

- DIESEL: Total litres used.
- BIODIESEL: Total litres used. (Zero Emissions)
- PURE VEG OIL: Total litres used. (Zero Emissions)

### ZERO EMISSIONS POWER

Kilowatt Hours (Zero Emissions)

- SOLAR: The total kilowatt hours of power used.
- WIND: The total kilowatt hours of power used.
- HYDROGEN FUEL CELL: The total kilowatt hours of power used.
- PEDAL: The total kilowatt hours of power used.
- OTHER: The total kilowatt hours of power used.

Click through to report your results here.



Live Earth Green Event Guidelines - Page 24

## WATER GUIDELINES



Water is a valuable, scarce, necessary, highly sought after and protected commodity. Including water conservation and waste water management into your event will be an integral part of its sustainability, now and in the future.

While providing water is a safety and health issue for road races, to be sustainable you must put practices in place to manage the use of water so you reduce water waste. At the same time, you want to reduce the strain on sewer systems and water treatment facilities, and prevent contamination of natural water systems.

The big three when looking at sustainable water management at your event are;

- Water Conservation.
- Emissions to Water.
- Waste Water Management.

#### Water is used and waste water produced at events through:

- Catering & Food Stalls
- Cleaning, Toilets & Showers, and Hand-wash facilities
- Standpipes and free drinking taps
- Misting stations at hot & dry events
- Dust settling, Grounds preparation & gardens

### ESSENTIAL EVENT GREENING - WATER

Depending on the venue and the permanent and temporary facilities available, at a minimum, we require you to undertake water conservation and prevention of water pollution, based on your local situation. We are asking all Dow-Live Earth Run for Water events to take the **Run for Water Pledge of Sustainability** summarised as the following:

**CONSERVE WATER:** Implement water saving and conservation techniques at the event. **PREVENT WATER POLLUTION:** Ensure there is no chemical contamination of waste water. **MEASURE RESULTS:** Collect and report data on the total fresh water used and total waste water produced by the event.

We also ask you to give us links to any fantastic toilet providers, water suppliers or grey water management systems you use which you would like to share with others.



### WATER PLEDGE

By pledging, you commit to implement environmentally responsible practices outlined in the pledge. Upon completion of the event, your impact reporting will confirm you implemented what you pledged. Athletes for a Fit Planet will then send you a "Verified" Pledge logo for you to use. **TAKE THE WATER PLEDGE HERE** 

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### Live Earth Green Event Guidelines - Page 25



## WATER MANAGEMENT

Let's now look at how water is supplied to an event and what you can do to reduce the amount consumed and the volume of waste water produced. On the following pages will be tips and idea on water operations – how to achieve your water goals.

### WATER MANAGEMENT

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- Water used and waste water created at an event can include:
- Clear Water potable drinking water.
- Blue Water clean water used for washing and irrigation (not for drinking).
- Grey Water water from washing and cleaning, with no organic contamination.
- Black/Brown Water catering sullage and sewage.

#### **Drinking Water**

Of importance is the way you supply drinking water. This is dealt with in the purchasing and waste sections of this guide.

#### **Health & Safety Regulations**

Safety and hygiene are paramount to any decision an event makes about water supply, management and treatment. Each country and indeed each local council will have regulations on what can and can't be done with water. The Environment Agency in your country will also direct what you can do.

#### Water Harvesting

If you have your own event site year round, it is advised you consider capturing rain water and storing it in tanks for use.

#### **Behaviour Change**

A great way to ensure that all users of water think about conservation and protection of waterways is to create a messaging campaign at your event.

### WATER CONSERVATION

Clean water may be supplied to your event by tankers, through the mains water supply, or you may harvest it off roofs and stored in tanks. Whichever method you choose, water conservation should be the goal.

Ways to reduce water consumption includes;

- Reduced water pressure.
- Using low-flow/water saving showerheads and taps.
- Using tap fittings that have an automatic stop mechanism.
- Use dust suppressant additives to reduce water volume used on dampening dust.
- Have central standpipes and require water to be carried to food stalls.
- Using water-free toilets & urinals.
- Supplying water free hand sanitizer.
- Reduce water usage through 'water wise' grounds preparation and gardening.
- Ensure sustainable irrigation practices are used for grounds preparation.
- Use hand held misting sprays not constantly running misting stations.

### WASTE WATER

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Waste water may disappear down the sink and into a city's sewer system or it may be in-your-face with 'suck trucks' carting grey water and sewage away. Some grey water can make its way straight into the ground water using soak-aways. How you manage waste water is a primary environmental concern.

Chemical free waste water should be your event's goal. Sustainable solutions for waste water management, includes management of emissions to water, waste water processing and grey water recycling.

Live Earth Green Event Guidelines - Page 26



Released in 2009. Please consider the environment before printing these guidelines.

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## **OPERATIONS: EMISSIONS TO WATER**

Sources of potential hazardous emissions to water at events include:

- · Personal products in showers and from hand wash
- Urination
- Cleaning Products
- Catering waste water
- Paint wash up water
- Toilet Treatment Products

#### **Use Chemical Free Products**

- Food outlets should use chemical free cleaning products to ensure waste water is not polluted.
- Chemical free cleaning products & disinfectants will be used for bathroom cleaning.
- Use biological toilet treatment products rather than chemical.
- Use non-toxic paints so wash up water is not full of toxic pigments.

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#### **Protect Waterways**

• If disposing of grey water through run off or soak-aways, ensure it is chemical free and 100m from a water way to protect the riparian zone, the region between land and a waterway, from any activity or impact.

- Set up a grey water catchment system, storage and treatment so it can be recycled and used again at your event site.
- Ensure the supply of adequate toilets to avoid urination on land and waterways.

### **OPERATIONS: WASTE WATER MANAGEMENT**

Waste water can either be disposed of through a sewage treatment plant or directly onto the land. Events that are not connected to municipal sewer lines will need to arrange for their waste water to be pumped into tankers and taken by road to sewage treatment plants, or to work out a way to dispose of it onsite.

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### Soak-aways

This is basically a big hole dug in the ground which fills up with waste water, and naturally drains away back into the water table. Soakaways need to be positioned away from water ways. The soil acts as a natural filter, and as the water drains away, any residue that was in the water, will be left in the soil. In using this system for water disposal, it is very important that no chemicals or other contaminant are in the water.

### **Grey Water Treatment & Re-Use**

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If you have decided to give the waste water another chance to do its job by recycling it for one more use then and there on your land, you will need to store, treat, re-store it. Having prevented it from going to the sewer works, it can be used to flush toilets, for dust suppression or irrigation.

Grey water treatment processes can use a completely natural system such as a reed bed, or a system of chambers and filters. Depending on volumes, consistency of use, etc, a more technical grey water treatment set up may be the way you end up going. Temporary events that are getting volumes of water at once, need to treat it and get it used, even if it is to give the event grounds a good old watering over a couple of weeks. If you wish to tackle grey water treatment and re-use at your event, you are advised to seek out an expert and have them work on this project with you. If you own your own event site, you could consider putting in reedbeds, an excellent natural treatment process.

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## **OPERATIONS: TOILETS**

Toilets at any event with large numbers of people invariably end up in a terrible state and are often a key operational challenge.

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The key areas of impact which must be considered when looking a 'sustainable' toilet management at your event include:

- Water use
- Chemical use
- Transport of kit and sewage
- Treatment of sewage
- Emissions both methane & CO2

For outdoor events, we are in a whole different universe. There are a myriad of portable toilet options including:

- Portaloos
- Cabin toilets
- Long Drops
- Urinals
- Compost Toilets

#### The key to reducing the impact of toilets at the event are to:

- Use water free toilets. (Compost loos/Dry Toilets)
- Use low flushing toilets.
- Use biological treatments rather than chemical products.
- Use recycled toilet paper
- Environmentally sound hand soap & cleaning products.

Look for toilet suppliers in your region that can offer 'eco' loos.



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## WATER REPORTING

We require you to let us know what water was consumed and how much grey water and sewage was produced.

### How to Measure

If water is trucked in and provided in bulk storage tanks, and if waste water and sewage is pumped, stored and carted away, it will be easy to get volume figures off your contractor.

If you are taking water directly from the mains and sending waste water directly back to the sewer system, it will be much more difficult. If it is possible, have meters put on in order to calculate the volume of clean water you use and the volume of waste water you produce.

## MEASURE THE IMPACT

### **CLEAN WATER**

Total volume. (This is then converted to CO2 emissions)

- CLEAR WATER: The cubic metres of potable water used from mains.
- BULK WATER: The cubic metres of potable water used from bulk storage.

### **GREY WATER**

Total volume. (This is then converted to CO2 emissions)

- PRODUCED: Total volume of grey water produced.
- RECYCLED: Total volume of grey water re-used at the event. (Zero Emissions)

### **BROWN/BLACK WATER**

Total volume. (This is then converted to CO2 emissions)

- SEWAGE: Total volume of sewage.
- SULLAGE: Total volume of catering waste water produced.

Click through to report your results here.

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## TRANSPORT GUIDELINES



The transport of the participants, spectators, audience volunteers, crew and gear to any event is generally the largest CO2 contributor for live events. Artists, production crews, equipment, supplies, food exhibit booths, audiovisual equipment, audience members and participants all travel to an event, and although transport may never be completely sustainable, it is a necessity.

Transport impacts at a live event come through:

- Transport of supplies and equipment to the event.
- Business transport in planning the event.
- Transport of crew, staff, performers, volunteers etc.
- Transport of audience.
- Onsite transport.
- Transport of waste and sewage.

You will reduce the transport impact of your event through:

- Using sustainable freighting, goods transport and expediting.
- Encouraging the use of mass transit.
- Reducing air travel through teleconferencing.
- Using sustainable solutions for ground transport.

## ESSENTIAL EVENT GREENING - TRANSPORT

In each municipality, city, state, and country there will be different transport infrastructure, availability of mass transit, cycling lanes and various transport options. At a minimum, we require you to take steps to reduce the transport impacts of audience travel, freighting and site transport as is relevant in your local region. We are asking all Dow-Live Earth Run for Water events to take the **Run for Water Pledge of Sustainability** summarised as follows:

**SOURCE LOCALLY:** Buy products made locally. Use local contractors, vendors & artists to reduce transport climate impact. **ENCOURAGE SUSTAINABLE TRANSPORT:** Provide participants, audience, staff, and volunteers with public transport and ride sharing options, and encourage cycling and walking to the event.

**USE SUSTAINABLE TRANSPORT:** Use low-impact, fuel-efficient vehicles, and design a loop course for the run. **MEASURE RESULTS:** Compile and report the total distance travelled by staff, volunteers, participants, and spectators/audience.



### TRANSPORT PLEDGE

By pledging, you commit to implement environmentally responsible practices outlined in the pledge. Upon completion of the event, your impact reporting will confirm you implemented what you pledged. Athletes for a Fit Planet will then send you a "Verified" Pledge logo for you to use. TAKE THE TRANSPORT PLEDGE HERE

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## TRANSPORT MANAGEMENT

While we wait for innovations in transport infrastructure, vehicle technology, sustainable fuels etc to present themselves, in the events industry we need to look to the here and now and that includes looking at ways of changing people's transportation behaviour to be more sustainable. The ways to reduce the climate change impact of your event due to transport is through:

- Using sustainable freight and expediting services.
- Purchasing locally and using local contractors.
- Using electric, hybrid and sustainable biofuelled vehicles.
- Encourage the use of public transport and discouraging car and air travel.
- Promoting car pooling/lift sharing, cycling & walking.
- Offsetting transport impact.

### **Reduce Pre-Event Production Travel**

- Teleconference rather than travel to meetings.
- Use public transport for site visits and meetings.
- Cut all but essential air travel.
- Use electric, hybrid or sustainable bio-fuelled vehicles.
- Use 'green' couriers.

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#### Reduce Freight & Production Transport

- Reduce freight miles by purchasing locally.
- Use local contractors and service providers.
- Encourage sustainable transport solutions such as load sharing.
- Use couriers with fleets run on sustainable fuels or electric vehicles.
- Holding your race on a loop course to reduce site transport.
- Reduce crew miles by hiring locally.
- Encourage car pooling.

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### **Reduce Artist and Performer Transport**

- Book local artists and performers.
- Co-ordinate artist travel to maximise occupancy in hire cars, taxis and shuttles.
- Use hybrid, electric or biodiesel fuelled vehicles for ground transport.
- Measure and report artist transport air travel and ground miles.
- Carbon offset travel where possible.

### Reduce Participant and Spectator Transport

- Provide information, maps and schedules for public transport.
- Create incentives for the audience to use public transport.
- Provide shuttle buses to link up public transport hubs with the event site.
- Provide bike racks and encourage cycling to the event.
- Set up deals with local public transit operators to encourage use.
- Encourage car pooling.
- Hold the event near a mass transit hub.
- · Measure and report on audience transport impacts.
- Offer options for the audience to purchase carbon offsets for their event travel.

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### Live Earth Green Event Guidelines - Page 31

## TRANSPORT OPERATIONS

To reduce audience transport impact, you need more bums on seats in all vehicles travelling to the event. That means bus and coach travel, train travel and full cars. Of course cycling and walking should be promoted if appropriate for your event. The following are ideas on how to reduce the impact of transporting people at and around your event.

### Crew, Contractor, Trader & Volunteer Transport

- Place car parking quotas on each group of participants.
- Put on shuttle buses on for crew arriving early from key transport hubs linking public transport to your event.
- Promote the impacts of transport and promote alternatives.
- Set up lift share schemes specifically for crew, staff and volunteer stewards.
- Ensure ground transport for performers, participants and VIPs is well co-ordinated to maximise occupancy rates in vehicles and minimise unnecessary runs.
- Put on shuttle bus transport to event locations for participants to avoid taxi use.
- Supply site bikes to get people around the event.
- Use electric vehicles, hybrid, or vehicles running on biofuels rather than petrol ones

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#### Public Transport Access

Ask the following questions and consider the following points when devising your audience transport strategies:

- What public transport options are available adjacent to the venue?
- Identify the modes of transport, routes, timetables, and bus stops.
- Assess capacity if your event adds significantly to occupancy. Could it cope?
- Meet with local public transport authorities to establish a plan.
- Will you need to put on additional public transport such as shuttle buses, in order to 'join the dots' between transport hubs and your event's location?

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### Encourage the Use of Public Transport

- Get more people on mass transport.
- Promote the benefits of public transport including avoiding car park congestion and traffic jams.
- Create a project to encourage or reward public transport use.
- Link public transport hubs with shuttle buses to your event and hold your event close to transport networks.
- Take advantage of existing sustainable transport initiatives.
- Communicate examples of CO2 impact from different types of travel.
- Promote public transport access and ensure all options to get to the event are available on your website so people can
  plan before they come.
- If you have group registration, work with group organisers to ensure coach travel is also arranged.
- Promote the benefits of coach travel including reducing congestion, the bus stop being very close to the event gates as opposed to car parks, and of course the environmental benefits.

### Discourage Driving and Reward Full Cars

- Charge for car parking, with a price point chosen to dampen demand, but not alienate.
- Sell pre-purchased car passes.
- Limit the number of cars, even if you have the space.
- Reward those that arrive in full cars.
- Charge a green tax to all cars or those cars that arrive less than full.
- Offer premium parking spots to full cars, including fast tracked exit at the end of the event.
- Promote lift share schemes.

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### **Encourage Cycling and Walking**

- Forge partnerships with walking and cycling clubs.
- Have secure bike parking, bike workshop for puncture repairs and tune ups.
- Offer incentives or rewards for those that cycle or walk.
- Put together a special walk or cycle campaign to promote this to your audience.

### Live Earth Green Event Guidelines - Page 32



#### We require you to let us know the transport impacts of the event.

#### How to Measure

The main things you need to find out to be able to assess the travel impacts are distance travelled and mode of transport. For events that have sold tickets it is an easy process to measure the transport impact of audience travel. This is because you can use your ticket data to estimate distance travelled.

For free events, particularly those held in urban locations where existing mass transit infrastructure is likely to be used, the most effective way of assessing transport impact is through conducting audience surveys. An example of the survey is on the click through in the appropriate section below.

## MEASURE THE IMPACT

### **PRODUCTION TRANSPORT**

**PRE-EVENT**: The total distance and mode of travel for production staff in pre-event planning. (Log meetings and mode of transport. Report as total distance and mode of transport.)

**SITE TRANSPORT:** The distance travelled at the event for onsite transport. (Measure total fuel used in all onsite vehicles. Report on types of vehicles used.)

**CREW TRANSPORT**: The distance travelled by crew to get to the event. (Survey all crew and ask them their mode of travel and distance travelled. See sample survey <u>here</u>.)

### **ARTIST TRANSPORT**

**AIR**: Total distance travelled by air for all performers. (Log number of flights booked for the event, and report total air miles).

**GROUND**: Total distance and mode of travel for all performers at the event. (Estimate total ground transport based on trips to airports, from hotels, etc)

### PARTICIPANT AND SPECTATOR TRANSPORT

MODE OF TRANSPORT: Percentages of audience taking each mode of transport. AVERAGE DISTANCE TRAVELLED: By each mode.

(Conduct a survey of a minimum of 10% of your audience to ask where they have travelled from and mode of transport. See sample survey <u>here</u>.)

Click through to report your results here.

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