DRAFT EVENT GREENING PRINCIPLES FOR THE CITY OF CAPE TOWN



Introduction

When people gather for an event, the host city, country or area experiences additional stresses particularly on, natural resources (e.g. water and energy) and the surrounding communities. However, these same gatherings of people provide unique opportunities to raise awareness around sustainability issues (environmental, social and economic) as well as to encourage people to change their perceptions and behaviour and make responsible decisions that reduce the negative impact on the environment and society.

Greening an event means making environmentally and socially responsible decisions when organising or participating in an event.

Greening an event involves incorporating sustainable development principles into all levels of event organization. The vision is to reduce the consumption of resources, avoid damage to the local and global environment, protect biodiversity and human health, take ecological, social and economic aspects into account for future-orientated city development and offer sustainable development options to the local people and economy. It means ensuring that an event is hosted responsibly. Greening an event is an on-going and continuous process and not just an isolated once-off activity.

It is proposed that the following principles be used in the preparation and implementation of an Event Greening Guideline, which would be a section of the Event Strategy for the City of Cape Town

Osman Asmal Director Environmental Resource Management City of Cape Town

June 2006

Business Case for Greening an Event

Most people do not reflect on the fact that the planning and management of events is highly resource intensive and often has major environmental consequences for the host population. Greening an event has direct cost savings, especially in the hospitality sector. Energy savings and efficiency technology can reduce energy costs significantly. Waste separation and recycling can contribute to the development of local recyclers, and stimulate local economies. Purchasing products with a local nature may reduce costs, as transportation costs are removed.

Examples of Recent Event Greening Activities

Sydney Olympics

During the 2000 Olympic Games in Sydney, Australia, the focus was on making the event as green as possible. A key objective was to make the Games more environmentally friendly and energy efficient. The partnership with EnergyAustralia, who were involved in infrastructure and renewable energy projects, subsequently proved to be a successful best practice example from the games. This made a huge contribution to green the Games, but it also gave Sydney a sports arena that can host "environmentally friendly games" into the future.

Greening the World Summit on Sustainable Development (WSSD)

The WSSD organizers and event facilitators were determined to re-use and recycle as much waste as possible. This determination resulted in the "Greening the WSSD" initiative – a partnership of key agencies involved in the hosting and organization of the WSSD, which aimed to design specific interventions that would collectively reduce the environmental "footprint" of the event.

ICLEI World Congress 2006

The ICLEI World Congress was held in Cape Town in February 2006 and prior to this event it was decided that it should be implemented as a green event. ICLEI's Executive Committee met in Seoul in March 2004 approving a policy on greening events. This policy states, "The preparation and implementation of ICLEI (co-) organized events shall take ecological and social aspects in the host city into account" apart from economic considerations. As the host city for the ICLEI World Congress 2006, the city of Cape Town decided to plan and implement a green event based on basic principles and international standards. The process was acknowledged as a success and a lessons learnt report is available on the congress website.

Objectives

The objective of an event green guideline for the City of Cape Town is to minimize the negative environmental impact that large events will have, and at the same time, to maximize positive social and economic impacts. This objective will further be translated into a national initiative that could be used at larger events hosted by South Africa. In this way, Cape Town could be a leading example of best practice in event greening.

The Principles

The definition of a principle in this context would be an "acceptable norm of conduct". The aim of setting a principle is to define a minimum standard to assist with implementing a specific objective.

Overarching Principle: Sustainability

The overarching principle for the event will be sustainability defined in the Brundtland Report as; "ensuring sustainable management of all resources used we will meet the needs of the present without compromising the ability of the future generations to meet their own needs."

It is essential that these principles are implemented for the **planning**, **operation**, **management and maintenance of events** and are not seen as an "add on", but rather as an integral part of the event with the ultimate goal being the promotion of a more **sustainable** future.

The following ten principles are recommended as the basis for event greening in the Event Strategy for the City of Cape Town.

Principle # 1 Sustainable Procurement

Ensure and promote **sustainable procurement** of all goods and services used for the planning, operation, management and maintenance of events. The uses of **local products and services**, as well as products that have a **minimal effect on the environment** contribute to effective greening. Purchasing **re-useable products and minimising packaging**, also assists with waste reduction and saves on cost. Procurement should also include the selection of **venues** (hotels, conference facilities) and **transport** (buses, airport transfer).

Rationale: Sustainable procurement is one of the most important principles in greening events. It ensures that the products and services used during the event have minimal impact on the environment – i.e. suppliers of products and services used need to demonstrate that they have been produced / supplied in an environmentally friendly way. It also promotes the local sourcing of goods and services – i.e. ensuring that local people are involved in the process by maximizing the utilization of local goods and services, ultimately leading to local job creation.

This principle includes the:

- Purchasing of local products/services where possible
- Purchase of environmentally preferable goods, with a maximum re-use and/or recycling potential to reduce waste.
- Purchase of food from organic sources where possible
- Purchase of fair trade products, for example, ensuring and promoting that fair trade coffee and tea is served
- Purchase of local manufactured fair trade goods for gifts and conference bags
- Purchase of goods with minimal packaging (bulk or reusable packaging)
- Selection of venues (hotels, conference facilities) that operate energy and water efficiency systems, and contribute to local economic development.
- Selection of venues (hotels, conference facilities) accessible via public transport or within walking distance of accommodation.
- Selection of service providers in transport that have vehicles with alternative fuels and technologies that minimize energy consumption and pollution.

Principle # 2 Waste Reduction (Reduce, Re-use and Recycle)

A key element of event greening and organisation is to promote awareness and change behaviour around all aspects of waste management. This involves interventions to **minimize** waste generation in the planning, operation, management and maintenance of events, and includes waste prevention, waste reduction, waste re-use, and recycling. A further aspect is minimizing the environmental and health impacts by reducing toxicity, and ensuring environmentally sound treatment and disposal of remaining waste.

Rationale: Events are highly resource intensive. By including a principle around sustainable consumption and waste minimization, the event will help to prolong the lifespan of landfills and save money on waste disposal costs.

This principle includes the:

- **Reduction of waste** as part of sustainable procurement interventions and improved resource management, for example, using a website for registration and e-mail for communication rather then paper when possible, printing double-sided to minimise amount of printing and distributing presentations electronically.
- Use of **re-usable items**, permanent cutlery and crockery is better than disposable items., Other examples include printing on the reverse side of paper that has been used and providing a water dispenser with bottles rather than with disposable cups.
- **Recycling** and **separation of waste** to promote recovery of recyclable products in the waste stream. This can be achieved through using a twin-bin or multiple-bin system.

Principle # 3 Water Reduction

Interventions to promote awareness and behaviour change around water **use and management,** including water demand management and water efficiency technologies should

be a key aspect of event greening. Water usage in all aspects of planning, operation, management and maintenance of events should be minimized and monitored.

Rationale: Water is becoming a scare resource and by 2025, two thirds of the global population is expected to live in water-stressed areas. Over the past century, freshwater consumption has risen at a rate double that of population growth. By incorporating a principle around water, the greening campaign will be able to raise awareness around the value of water and thereby teach people the importance of using water wisely.

This principle includes the:

- Use of low flow showerheads/water saving toilets
- Use of waste water (grey water) or rain water for irrigation at venues
- Selection of appropriate service providers (hotels and venues) that will minimize the water required by guests through raising awareness around issues such as only changing laundry on request

Principle # 4 Energy Efficiency

Promote awareness of energy efficiency in order to change the way people use energy. Promote energy saving technologies, management systems and behaviour, in all aspects of planning, operation, management and maintenance of events. Promote the use of **renewable energy** where possible.

Rationale: Since 1970, global energy use has increased by 70% and since most of the world's energy comes from burning non-renewable fossil fuels (coal, petrol, LPG) a large stress is placed on the environment and problems such as air pollution and green house gas emissions become more evident. Retrofitting of lamps and implementation of other no- or low-cost energy measures can typically reduce the energy bill by up to 80%. This is very important to emphasize because energy underpins social and economic activities, especially in the context of the event.

This principle includes the:

- Use of energy efficient lamps, globes and appliances
- Use of rooms that have natural light and air flow
- Well-managed use of air-conditioned or heated venues
- Use of renewable ("green or alternative") energy sources, such as wind or solar energy
- Raising of awareness around energy consumption during the event as well as alternative energy sources
- Selection of appropriate service providers (hotels and venues) that will minimize the energy required by guests through raising awareness around items such as not leaving lights or appliances on when not being used

Principle # 5 Air Pollution Reduction

Strive to minimize air pollution, production and impact through limiting **motorized transport** (including aeroplanes) and using **renewable energy**.

Rationale: Greening focuses on decreasing the levels of pollution generated through an event. Pollution reduction is an outcome of many of the above principles, but the threats of air pollution are so extreme it needs special attention. During major global events delegates produce vast amounts of air pollution in the form of carbon emissions through their air travel annually one billion urban residents are exposed to health threatening levels of air pollution. It also threatens ecosystem health and the viability of natural resources and contributes to climate change.

This principle includes:

- Using carbon tax / carbon mitigation measures to raise awareness around the impacts of CO₂ emission and climate change and the funding of carbon offset projects
- Development and implementation of a transport plan that minimizes emissions, e.g. coordination of transport, use of low emission vehicles, etc.
- Infrastructure planning
- Promoting the use of "green" or "alternative" electricity, such as wind or solar energy

Principal # 6 Biodiversity Conservation

Ensure the event's **impact** on biodiversity (the natural environment) is minimized. Make delegates aware of the **importance** and value of biodiversity in ecosystem functioning as well as its contribution to human health and wellbeing. Highlight local biodiversity hotspots. Highlight biodiversity conservation measures both onsite and within the host region.

Rationale: In the last 30 years, biodiversity and the availability of natural resources has declined by 33%, while demand for resources has doubled. Loss in diversity limits the ecosystem's ability to deliver key services. The importance of biodiversity in sustaining human life as well as its role in maintaining healthy, functioning ecosystems needs particular attention as part of event greening. Biodiversity conservation is directly related to the sustainability of food production and disease control.

This principle includes:

- Arranging participant tours to local biodiversity conservation projects / hotspots
- Ensuring the event uses indigenous plants inside and outside the event venue
- Awareness raising initiatives targeted towards biodiversity value, use and conservation
- Highlighting major innovative biodiversity initiatives within the host region

Principle # 7 Poverty alleviation

Ensure the event contributes to poverty alleviation within the host region. Provide short-term and permanent job creation through the event greening activities (e.g. training in waste separation, tour guides, translators, use of local suppliers of goods and services etc). Alleviate poverty through legacy projects.

Rationale: Greening an event must view poverty alleviation as a key outcome for two main reasons. Firstly, the organizers of major events have a responsibility to address poverty directly through the event as well as through spin-off activities (e.g. travel in the region by delegates after the event. Today more than one billion people in the world live on less than one dollar a day.

This principle includes:

- Local job creation initiatives through event greening and hosting activities
- Legacy projects, projects with long term sustained benefit
- Training in greening initiatives (e.g. waste separation, tour guides, etc.)
- The use of local suppliers of goods and services (catering, hospitality, travel, etc.)

Principle # 8 Participation and communication

Encourage the public, delegates, service providers and industries involved in the event, to actively **participate** in the greening process. Industry staff and conference participants should be **informed** of what has been done to green the event and where possible **trained** in relevant aspects of greening. The broader public needs to be **aware** of greening plans around the event in order to raise awareness and facilitate behaviour change beyond those directly participating in the event.

Rationale: One crucial issue around greening is encouraging event participants to become actively involved in greening initiatives and to ensure that the general public is aware of the process. Raising awareness is a critical element of leaving behind and creating a legacy of sustainable development best practice. The incorporation of a principle that addresses participation and communication will ensure that appropriate interventions (ones that facilitate broader involvement and awareness and encourage and support appropriate behaviour change) are included in an event greening plan.

This principle includes:

- Development and implementation of a broad communication strategy and action plan
- Involving local media before, during and after the event
- Organizing competitions that create awareness and acquire or require active participation from the local community
- Certificates for industry participants
- Training programmes for staff and service providers

Principle # 9 Monitoring & Evaluation

Ensure that information is gathered on the **impacts of event greening interventions.** This is essential for learning, promotion of the model and awareness raising activities. This principle should however be an integral part of the process and should not only be part of the final evaluation.

Rationale: Monitoring and evaluation is an essential and vital component of event greening. A plan needs to be in place to ensure that information is gathered on all aspects of the event.

This process ensures that information is available to understand the effects of greening interventions and that improvements can be made to future event greening initiatives following an evaluation to assess whether the aims and objectives of event greening where achieved. It also helps ensure that there is a dissemination of lessons learnt for future events. The collection of this information is also a key element of awareness raising processes.

This principle includes:

- Undertaking a baseline survey before the event
- Undertaking a knowledge survey during the event
- Monitoring all aspects of event greening before, during and after the event
- Publicizing findings from all surveys during the event both at the event and to the broader public
- Collecting lessons learnt from participants after the event

Principle # 10 leaving a positive greening legacy

Ensure that both the short and the **long-term impacts** of decisions and actions are positive. Implement activities that lead to sustainability. Raise public awareness and encourage behaviour change as a result of intervention implemented throughout the event.

Rationale: Leaving a positive legacy from a major event in the host city is an important element that brings the long-term view of sustainability into the picture. Through ensuring the mitigation of negative impacts that arise from hosting a major event, and through actively promoting positive legacies, the issue of accountability is raised. The event is not simply a "once-off" in the city, but contributes to longer-term change that promotes the social, environmental and economic aspects of sustainability. Many of the preceding principles would contribute to leaving a positive legacy but at the same time, activities can also be initiated that highlight specific legacies from the event.

This principle includes:

- Carbon offset projects funded through carbon emission certificates purchased by delegates
- Ongoing awareness raising initiatives, campaigns, competitions and events in schools
- Improved transport systems and reduced emissions from transport as a result of changes made to reduce the environmental impact of transport during the event
- Improved water use by industry through interventions made during event greening
- Retrofitting of energy efficient and water efficient technologies in venues and hotels

Conclusion

Events are highly resource intensive and often have associated negative environmental and social impact on the host city. Greening an event attempts to reduce the negative impacts that the event has on the host city or region by intervening in the planning and management stages of the event, in a manner that contributes to long term sustainability.

Glossary of Terms

Audit – An assessment of the efficiency of a system (in conference greening this could include aspects such as water, waste and energy)

Biodiversity — Biological diversity is the variability among living organisms from all sources including terrestrial, marine and other aquatic ecosystems. It includes biodiversity within species (genetic diversity), among species, and within and among ecosystems.

Carbon Tax – This is a payment which is made to counteract the emissions that are produced through a specific action (such as flying a plane), by promoting an alternative action (such as a solar water heater project) that could reduce greenhouse gasses.

Clean Development Mechanism – CDM is one of the mechanisms for reducing the greenhouse gas emissions as committed to in the Kyoto Protocol. It enables northern countries to achieve a portion of their obligations through investing in greenhouse gas reductions projects in southern countries. Northern countries can effectively "buy" carbon credits from southern countries through their investments and this is known as carbon trading.

Cleaner Production – It is the continuous application of an integrated preventive environmental strategy to processes, products, and services to increase overall efficiency, and reduce risks to humans and the environment. Cleaner Production can be applied to the processes used in any industry, to products themselves and to various services provided.

Climate Protection — It is the action to deliberately reduce the emission of greenhouse gasses in order to reduce the impact on our environment.

Ecological Footprint - It is the amount of renewable and non-renewable ecologically productive land area that is required to support the resource demands and absorb the wastes of a given population or specific activities.

Eco-efficiency – It is the balance reached by the delivery of competitively priced goods and services improving the quality of life while respecting the carrying and regulation capacity of Earth's ecosystem. The goods and services must progressively realise their impact on environment and resource intensity throughout the life cycle.

Event Greening — Hosting an event, and associated services, in such a way that it has a minimal effect on the environment and maximum benefit to the people.

Fair-trade - Fair-trade is about partnership, based on dialogue, transparency and respect, which seek greater equity in international trade. It contributes to sustainable development by offering better trading conditions to, and securing the rights of, marginalized producers

Green electricity is electricity that is generated with technology that minimises the impact on the environment and which uses primary energy sources that are renewable. This results in an electricity generation process that is carbon neutral.

Greenhouse gasses – Greenhouse gasses (such as carbon dioxide, methane and nitrous oxide) are produced when any fossil fuel (such as used in an aircraft or car) is burnt and which contributes to global warming and has a negative impact on the environment and on our lives. Almost eight billion tones of greenhouse gasses go into the atmosphere each year.

Grey water – Any water that has already been used and has the potential for reuse without treatment.

Indigenous Plants – A plant belonging naturally to or occurring naturally in a country or area. **Legacy Project** – A project that is used to promote a specific principle or good example.

Life Cycle Assessment is a systematic set of procedures for compiling and examining the inputs and outputs of materials and energy and the associated environmental impacts directly attributable to the functioning of a product or service system throughout its life cycle

Kyoto Protocol – Negotiated in December 1997, the Koyoto Protocol sets new legally binding greenhouse gas emission reduction targets.

Organic Products – Products produced according to the principle of sustainability and without the use of chemicals that might be harmful to human health or the environment.

Pollution Prevention is the use of processes, practices, materials or products that avoid, reduce or control pollution, which may include recycling, treatment, process changes, control mechanisms, efficient use of resources and material substitution.

Procurement – Acquisition of goods and/or services. Sustainable procurement is purchasing of products that have minimal negative impact on our environment, either directly or indirectly.

Retrofitting — The amendment of buildings and fittings to make it more sustainable such as changing normal light bulbs with CFL light bulbs, or using low flow taps that manage water use.

Sustainable Development — Meeting the needs of the present generation without compromising the ability of future generations to meet their needs.

A **Tradable Renewable Energy Certificate** (TREC) is a unit that represents the 'environmentally friendliness' of electricity that is generated from resources such as biomass, wind and solar energy.

Twin Bin system – The twin bin waste system is used for the separation of <u>dry and mixed recyclables</u> together (e.g. paper, glass, plastics, cans) from the <u>non-recyclable and wet rubbish</u> fraction (e.g. including soiled paper plates, dirty paper towels and napkins, organic waste, non-recyclable packaging materials etc).

WSSD – The World Summit on Sustainable Development. The United Nations (UN) summit that brought together leaders from government, civil society and business to assess sustainable development progress since the last world summit (UNCED / The Earth Summit) held in Rio de Janeiro in 1992. The WSSD was held in Johannesburg, South Africa, from August 26 to September 4, 2002.

More info

For more information visit the following websites:

- www.undp.org.za/iucn/index.asp (Guidelines for Event Greening)
- http://www.iclei-europe.org/766.html (ICLEI Greening Events)
- www.iclei.org/worldcongress2006 (ICLEI World Congress)
- www.iclei.org (Athens Call for Greening Events, Nov 2003)
- www.fedhasa.co.za (FEDHASA and Imvelo Awards)
- <u>www.sustainable.org/information/susevent.html</u> (How to plan a sustainable event?)
- www.myclimate.org (My Climate Ticket)
- http://www.fairtourismsa.org.za/ (Fair Trade in Tourism)
- www.greenseal.org/greeninglodge.htm (Green Seal)

Did you know?

- A full bus, carrying 60 people, gets 40 cars off the road and saves approximately 18 tons of air pollution from being released?
- A flight from Frankfurt (Germany) to Cape Town (South Africa) is a distance of 18 766 kilometres (return) and creates approximately 3 800 kg of CO² emissions. For the same amount of CO², you could take a train ride of approximately 375 320 km.
- You should plant (at least) one tree for every 1 000 km that you fly by plane to offset the emissions created.
- The biggest energy use in Cape Town is transport (54%).
- 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.
- 2004 was recorded as the hottest year since measures of global warming began in 1861.
- One good sized tree exhales enough O₂ to keep a family of 4 breathing for a year
- Producing 1 ton of paper requires about 2 to 3 tons of trees
- 40% of landfill waste is paper
- Recycled paper uses 64% less energy, 60% less water, 74% less air pollution
- A tap dripping of one drop per each second can waste 36.4 liters water per day, which is over 14 320 liters per year
- 280 species of mammals have been evicted to make way for three cows, sheep & goats
- It requires 500 times as much land to produce 1kg beef as 1kg vegetables
- 10% of the grocery bill goes towards packaging of products, which is generally more than farmer receives
- There are more than 46 types of plastic in common use
- It takes 500 years for polystyrene to decompose and 1 million years for glass.