

Introduction:

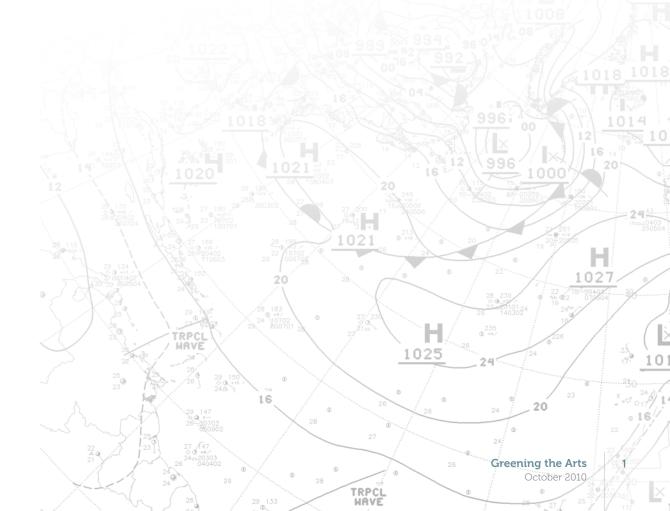
This document is a mapping of some of the activity and aspirations of the culture sector, with international as well as Australian perspectives, as we respond to the condition and impact of climate change across the globe.

It begins with six think pieces by six people who are passionate about the changes we need to make: Kelly O'Shanassy, CEO of Environment Victoria, Wesley Enoch, theatre director at Queensland Theatre Company; Peter Gingold, founder and co-director of TippingPoint in the UK; Judith Knight founder and director of Arts Admin, in London; Michael Kantor, outgoing director of Malthouse Theatre in Melbourne; and myself, Angharad Wynne-Jones, producer of TippingPoint Australia and the Climate Commissions.

The second section is a survey of sustainable arts practice, including information from Australia and around the world on ecological footprints in the arts sector, what activity is likely to cause the most emissions and examples of available tools on how to measure and reduce emissions. We provide some examples of how the sector is responding and include useful publications on the subject.

We need to know more, share more and learn quickly what works. We hope this document will be a step along the way, part of a gathering momentum from the arts sector as we respond to the challenge.

Angharad Wynne-Jones October 2010





Dare us to be brave

Kelly O'Shanassy CEO Environment Victoria

Thinking about our environment can be pretty disempowering.

We live in a world where the polar caps melt as firestorms engulf our land and our friends. Where the mercury rises as our rivers shrink. Where the desert ever expands into our farms and forests. Where politicians lament voters trying to figure out which party would be least bad at running the joint.

We've got too much carbon dioxide, not enough water and too few humans (at least of the political variety) prepared to stand up and say enough is enough.

It's pretty uninspiring stuff... until you spy the pockets of hope.

In every city around the world there's at least one house that produces more energy and water than it consumes. We've got zero emissions cars driven by Hollywood stars. And (believe it or not) we have books that aren't made of trees.

It's not Yes We Can, it's Yes We Are!

But, here's where you come in. Up until now, the changes we've been making have been slow to grow and those pockets of hope are still too few. Now, we can get down in the dumps about it or we can inspire each other to ramp things up.

For too long we've been paralysed by the fear that our environment is beyond hope; that getting our neighbours, friends and even our political leaders to care for our environment is hopeless. It's true that we need enormous changes to safeguard our environment. But the only way we can achieve that is by giving people hope that what they do really matters.

That hope is what the arts can offer in spades!

To get people to change we need to be able to visualise our future. We need to see a world where roofs are made of solar panels, not tiles. Where frogs croak once again in the local creek. Where old growth trees reign supreme. And concern for the environment underpins everything we do.

We can't go forward with the thinking of the past. We need our visionaries to step forward and lead us into the future.

So while those of you in the arts can make many practical changes for sustainability - changing the light bulbs and such - your real contribution (and your responsibility) is so much greater. Please... Inspire us to change our thinking. Show us what that change looks like. Dare us to be brave and give us hope for a brand new future.

Name your children so they belong.

Wesley Enoch, Artistic Director of Queensland Theatre Company

When my cousin had a son in September 1989 he named him Kadjal. In our language Kadjal means "the new leaves in spring'. As he grew up, Kadjal would comment pointing to the new leaves in spring and say "that is me....I am the leaves on the tree". He would watch the coming of the season and know his place in the Landscape.

Many Indigenous languages are built on complex metaphors. If a woman is tall she is a tree. If a man is joyous he is a kookaburra. The more you know about your environment the more specific and precise your metaphor to express your meaning.

These fundamental connections between environment and ways of being, embed you in a land-scape more that just living on it. Custodianship of Land means you never want to see it shrink because to lose an animal or plant species means you are limiting your ability to communicate. Old knowledge's mean we are in constant dialogue with the Land rather than monologue. The old ways mean we have stories that tell us our genealogy, Law, moral structures, survival techniques, history, geography etc etc. Understanding our Land is a way of understanding ourselves. Art is a way of mapping our landscape, story is a way placing ourselves in the continuum of time, dance teaches us to be the animals and plants we live with. Art has a purpose that is beyond distracting you from your life. Art is about personal connections to the world around you...expressing what you have at stake.

I am the river that is choking. We are the confusion of the unseasonal winds. We are the uncertainty of the future of our planet.



The Arts and a Zero Carbon Future – the Experience of TippingPoint

(TippingPoint facilitate unique gatherings between artists and scientists)

Peter Gingold Co-Director, TippingPoint in the UK

"Where are the books? The plays? The god damn operas? Art, like religion, is one of the ways we digest what is happening to us, make the sense out of it that proceeds to action."

TippingPoint's work started as a reaction to this comment from Bill McKibben in response to a dearth of artwork on climate change. We agreed, and still do. We desperately need the help of the most creative people around; to help develop technological and other solutions, of course, but even more importantly, to help us understand what is going on, ultimately to help unjam the logs that have stopped the world from doing anything meaningful about it. And we find, incidentally, that though some might interpret this as a pejoratively instrumental approach to the arts, this is very rarely a response from practising artists, who seem to regard that attitude as being one of missing the point: the subject is so compelling that one simply cannot ignore it, and to hell with the niceties of the last century.

If the problem is a shortage of artistic insight into climate change, what is the solution? Our approach has been to provide the right sort of environment for creative people to meet, to improve their understanding, to compare ideas and experiences, and above all to have the type of experience that leads to important seeds being sown. We don't have any rigid agenda; pretty well our only rule is mutual respect, perhaps with particular reference to the research of climate scientists. Whether what results is contemplative, activist, participatory, visceral, cerebral or political is much less important than that it exists. Quite simply, there needs to be a large body of work.

We have been able to provide some support for this through our own UK-based commissioning process for relevant work. Which has in turn exposed an extraordinary hunger: in 2009 we had 178 applications for 3 awards, and we expect more for our current round in 2010. If the issue is of

unique importance, and if the arts are a vital part of understanding it and helping towards a solution, there is a significant financial element to this, one that the arts funding system needs to respond to.

What has our own work led to - so far? Artworks that we have stimulated, from public sculptures to television thrillers, from novels to drama, from festivals to installations. Those that we have directly commissioned: the Trashcatcher's Carnival, Metis Arts' 3rd Ring Out, and the Lightswitch Project, with more to come. And networks: the eleven strong 20:20 Thin Ice network of producing organisations in Northern Europe, with a vigorous programme of festivals and commissions to explore and express the subject in countless ways, funded by €1m from the European Commission. And the recently born COPART, a South African initiative to provide a meaningful artistic response to COP17, the December 2011 'Conference of the Parties' to the international climate change convention. It is hoped that COP17 will reach a significant agreement after the debacle of the Copenhagen climate summit and the unexciting prospects for the Cancun summit in December 2010.

In Requiem for a Species, Clive Hamilton spells out a number of the coping strategies that humans use for dealing with major challenges, above all climate change, including a variety of forms of denial. One of his most powerful tools is a reference to Camus' The Plague - the story of a North African town suffering from a plague outbreak and the wonderful range of ways the townspeople rationalise or distract themselves from the reality that is killing themselves and their children.

Let us have more works of this sort: the inspiration, the fantasies, the stories, the revelations and the other works of the imagination that will help us understand who we are and how we behave.



The silver lining

Angharad Wynne-Jones
Producer, TippingPoint Australia and The Climate Commissions

As artists, arts producers, audiences, policy makers, funders and journalists we share the responsibility to change the way we live, to change the habits of a lifetime or rather five generations (that's pretty much how long its taken to create this crisis). No easy task, but possible and necessary.

And potentially exciting and liberating.

We can cut our dirty energy consumption and emissions by reducing our activity or we can switch, to cleaner, greener energy and carry on much as we are. No doubt we will we do both, cut and switch, but why not re-imagine some of those relationships in the process? Many of the principles of sustainability – reuse, recycle, reduce – open up new (or rather recycled) ways of engaging with each other as artists and as audiences that will refresh and reframe how and where art is made.

For instance, if the major cause of emission in the arts are the people travelling to see the work, then we can encourage audiences to travel to those venues in the most environmentally friendly way possible: walking, cycling, public transport, electric car, etc. AND we could think about where the art happens, about making work with people in their own homes, streets, neighbourhoods, re-energising and personalising a relationship between artists and audiences in a way that has different meanings and possibilities to the mass congregation of arts consumers in the shops of culture. And we can blow the old prejudices against community theatre out of the water, with leaders of the arts sector taking up the challenge.

If international touring is the lifeblood of an artist and or a company, then we can get smarter about building the tours for longer and offset the

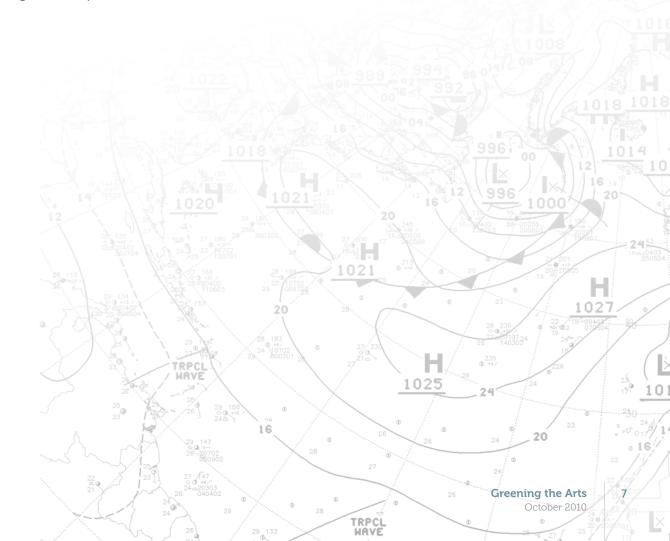
emissions caused by travelling (not a long term solution) AND we can re-imagine how that international connection can happen: scores for performances (orchestras are way ahead of the game), set designs of found objects, flat packs, long term residencies where artists make work on each other companies and are hosted by that community of artists. Nothing need be lost in terms of being part of an globalised cultural and arts network, but our virtual capacity needs to be imaginatively maximised and where face-to-face happens, we need to understand it as a privilege, as a host or as a guest, and harvest all that we can from that valuable opportunity. That sounds like longer, slower, deeper connections to me.

And we can re-value our relationships across Australia – city dwelling artists can spend some time in the country, residencies in arts centres, CSIRO departments, universities and indigenous communities in regional Australia, building connections between people living in cities and living in regional Australia, making sense of and for each other at a time of huge stress and change.

Pop ups, with fit for purpose infrastructure that exist only for the delivery of that idea, are already happening with independent artists. Could it not

be a funding requirement that all existing arts organisations (no matter what their scale) must imagine and plan for their own pop down – how and where their energy and resources could be re-used or recycled in other ways, the value of their activities understood not just in status and longevity but in carbon.

Who better than artists-as-producers to re draw the contracts between artists and audiences, to unhook us from some expensive modes of cultural production to dwindling audiences, and move to a research approach, where exploration is valued and not saddled with a requirement for commercial success, until its proven. Who better than artists-as-producers to re-imagine the cultural infrastructure, funding frameworks and networks we'll need in a zero carbon future, who better than those for whom the bottom line has never been the motivator.





What will international touring look like in a zero carbon future?

Judith Knight, Director, Artsadmin, a London based producing organisation

A carbon zero future? It isn't difficult to imagine working in a reduced carbon future – it's what we should be doing now. But touring internationally in a carbon zero future requires huge technological advances and a bit more imagination!

The first question to ask ourselves is should we be touring at all? Should we be working internationally? Is it ethical to fly our dance and theatre companies backwards and forwards across the world, mostly for the benefit of Western audiences, when the effects of our flights are already felt in Pakistan, in Bangladesh, in China, in Africa...

Is it necessary to move the entire London Symphony Orchestra to New York and bring the New York Philharmonic to London, each with different interpretations of Mahler's 5th? Not wanting to make a comparison between the music they play and something as mundane as biscuits, but there is an absurdity about transporting Oreos from the USA to the UK while crates of Custard Creams pass by in the other direction across the Atlantic.

But we all know – as opposed to biscuits –the arts change lives. We're especially conscious of this, at a time when the funding budget in the UK is about to be decimated. We're all aware of the importance of cultural exchange. And if people have to fly around the world, we would probably prefer they were artists than biscuit salesmen!

Should we then only tour work that encourages political and cultural understanding - for example, the work from the Market Theatre of Johannesburg or plays of Athol Fugard which gave us a much greater understanding of life under apartheid in South Africa? Or the works of avant-garde artists such as Robert Wilson, The Wooster Group or Pina Bausch which have been such an influence and inspiration.

Should we – could we - be choosing what art should tour and what shouldn't?

Inspired by TippingPoint, and guided by Julie's Bicycle, Artsadmin is looking at ways of working internationally in a more sustainable manner. Julie's Bicycle has done the research on touring, measuring carbon footprints of artists and audiences. We now have the means to understand the impact of our touring, so we need to begin to act on that understanding. Not that it's easy, and there are hundreds of obstacles.

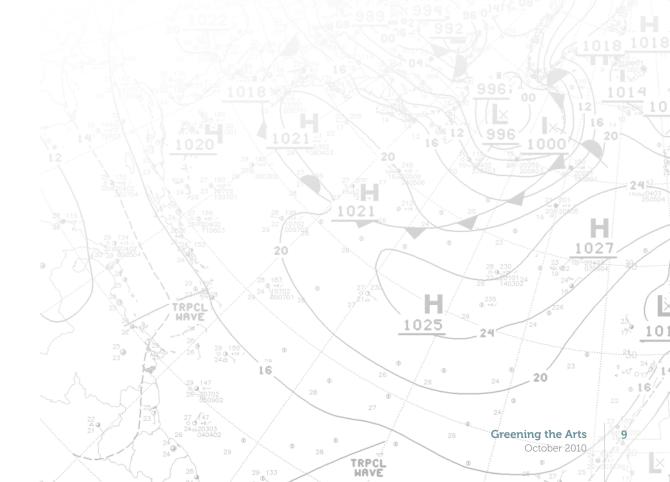
Last year Artsadmin and the British Council held a conference, SLOW BOAT, to talk about the issue with 100 touring theatre and dance companies in the UK. The ideas that came from it were some steps on the way to reducing our carbon footprint, including geographically

proximate tours, longer stays, sourcing sets and performing companies locally, dropping 'exclusion clauses' in contracts, keeping existing works in repertoire longer, collaborating more and possibly simply 'doing less'.

But zero carbon?

Well there are examples of projects such as Station House Opera's Play On Earth, a simultaneous piece performed live and over the internet with nine performers across three continents; Jerome Bel's model of 'sending the score' but not the performers; Dries Verhoeven's Life Streaming involving a one-to-one skype conversation between an audience member and a performer in Sri Lanka. Just a few, and just a beginning.

Two things we do know are that we must maintain international cultural exchange, and we must respond to the challenge of climate change. Let's hope that the imaginations of artists, curators and producers will allow us to do both.





Towards an new environmental theatre: An aspirational manifesto for the theatre community

Michael Kantor, outgoing Artistic Director of Malthouse Theatre

(Caveat – what follows is driven by irrational optimism, naivety, and dangerous idealism.)

Mainstream theatre it seems is dead, or dying. Unclear of its purpose, it continues to flicker less and less meaningful projections of its presumed audience back at itself, in a flawed and failing loop of self-obsession. Maybe this is because the imperatives of the world in which we operate are changing, but the theatre is not.

We know the planet is facing an environmental catastrophe of a scale and impact unlike anything it has faced in the period of human civilisation. Yet we continue to develop and produce our theatre, in our energy intensive theatres, in our energy intensive ways, to our fickle and dwindling audiences, as if we didn't know of this impending catastrophe, business as usual. If there is one thing that is clear about the massive reduction in

resources that we as a species must come to terms with in the future, it is that it requires changes to every part of our lives, as individuals responsible for our own carbon footprint, and as participants in a 'culture industry', that will not be 'business as usual'.

For a theatre to remain culturally pertinent and useful it needs to speak imaginatively to its audience about who they are as individuals, as citizens of a community, and part of the mass of humanity in a complex and potentially frightening world. It needs to be alive to the contemporary dilemma, and adapt its ways, both in process and product. It must have the daring to sift through supposedly universal assumptions that are used to validate the theatre's existence and test them against the requirements of our culture now, not some sentimentalised idea of what our culture should be. The task is to distinguish what theatre is inherently

good at, and manipulate our future endeavours to exploit those strengths.

I would argue that the theatre's greatest strength is that it is a generator and open channel for empathy. In the theatre we are reminded of the commonality of human frailty, the fragility and marvel of existence. Empathy is the glue that will hold together the common goal of saving the planet. Without a global awareness of our interconnectedness to the 6.8 billion people we share the planet with, and an empathetic concern for each and every one of them, the individual is missing a vital tool with which they can take complete responsibility for their actions.

The nuts and bolts task then is that through the mass spreading of empathy we move past the materialism, narcissism, violence, and obsessive self-interest of our current society. The environmental theatre would aim to be consciousness raising, hope building, resilience factories that – at times directly and other times poetically and obliquely – would arm its audiences with the requisite emotional and instinctual skills to cope with radical change.

One of the major assets in the theatre community is also one that can make us resistant to change. Theatre artists are by nature sceptical, and our constant questioning of assumptions and beliefs often keeps us a healthy critical distance from mainstream cultural activity. Our inherent suspicion of ideology and political whitewash is vital, but may restrict us from squarely facing the challenges of the future.

So, in a sceptical free zone, I offer the following mini manifesto for a new Environmental Theatre:

Process

The Environmental Theatre artist and theatre company would be aware of how their working practice impacts on the environment. They reduce their carbon footprint through reduction, recycling, and reusing. They take responsibility for the materials that are used in their sets and costumes – where they are sourced, how they are manufactured, etc. They develop and rehearse locally, and employ technology to engage globally. They think of doing less for longer where possible.

Performance Spaces

Environmental Theatre spaces would employ latest technology to lower energy consumption – particularly lighting, heating and water use. The administrators of these buildings are aware that as a community asset, as many artists and audiences should share them as possible. They may be found spaces that require minimal refitting to become theatres, they may not 'go dark', they may use non-printed means of communication for their marketing, brochures etc.

Product

Environmental Theatre productions would mine the great narratives of the past, present, and future to manufacture empathy. They may record for us what it is to be of the generation that lived at the top of the mountain, as the party stops. They may envision futures not as nightmare dystopias of catastrophe (Hollywood has done this all too much, and fear only leads to flight), nor as idealised utopias where disaster has been averted and all is rosy (there will be no easy technological fix to climate change). Rather these visions would help us think through new notions of progress, would proffer pathways to broader consciousness, and re-engage our curiosity, generosity and compassion about our collective humanity.

Audiences

The Environmental Theatre audience would be alive to challenge, and prepared to take responsibility for their own environmental footprint. The Environmental Theatre audience has to, by necessity, be us all.

In order to imagine this theatre of the future it is maybe useful to look back. The Greek tragedies were not performed to maintain the status quo. They were performed to reinforce the resilience and openness that Greek society needed to be able to cope with uncertainty, both through reminders of the limits of the human condition, and the always-present potential for the Gods to render humanity secondary. We too have to constantly re-imagine our relationship with our world, and we need the theatre to help.

H 1025

_20

Greening the Arts
October 2010

11

TRPCI

Greening the Arts

- Survey of sustainable arts practice

In this survey we include information from Australia and around the world on ecological footprints in the arts sector, what activity is likely to cause the most emissions, examples of available tools on how to measure and reduce emissions. We provide some examples of how the sector is responding and include useful publications on the subject.

This research collection is by no means exhaustive. There is a wealth of additional links and resources on the websites including directories, networks and tools.



Contents

H 1025 1027

1.	Which bits emit the most?	14
	Air versus sea freight	14
	The carbon cost of your computer	15
2	. How can we measure and cut down?	16
	Australian examples	16
	International examples	19
3.	. How is the sector responding to the challenge? Some examples to inspire	22
	Measuring	
	Touring	
	Residencies	
	Venues	
	Funding	30
	Festivals	32
	Other examples	
4	. Food for thought: Some publications	77

1. Which bits emit the most?

Within the cycle of production and consumption in the performing and visual arts, there are lots of activities which result in significantly high greenhouse gas emissions. The standout sources are:

Transportation

- » Freight related to equipment, artworks and sets for touring, exhibitions, performances, events, concerts, etc.
- » For artists and related personnel
- » For audiences (significantly higher for festivals and events with large audiences and limited public transportation)
- » For staff day to day travel for work and work-related events

Production

» Materials – not sourced locally, high toxicity, resource intensive, non-renewable, not modular and/or heavy weight increases energy use in freight

Venues & Events

- » Energy consumption related to temperature control, lighting and electrical components
- » Water consumption
- » Waste

Other

- » Catering
- » Marketing
- » Administration

Sources: Julie's Bicycle, Translocal.org, The Icarus Foundation's Green Festivals and Events Guide, a How To...

Air and sea freight UP IN AIR OR OUT TO SEA?

By Tristan Smith

University College London Energy Institute

Greenhouse gas emissions are inevitable with travel and international touring dependent on the transport of freight and people. Tristan Smith provides an overview of the associated environmental issues related to air and sea travel, indications of where UK government policy is heading and some insights on how to reduce environmental impact. He concludes that it's never straight forward, but gives this graph as a good indication:



Image source: NTM (Swedish network for transport and the environment) – cited in British Chamber of Shipping (2009)

Full article: www.juliesbicycle.com/music/production-team/hard-facts-and-hot-topics/air-and-sea-freight

The Carbon Cost of Your Computer

Computer use has a carbon footprint, from component manufacturing to the global transport of materials to energy use by servers. A recent study by American research firm Gartner suggests that IT now causes up to two percent of global emissions. According to "The Carbon Footprint of an Email Spam Report" conducted by climate change consultants ICF and commission by internet security operator McAfee, one spam message is worth 0.3 grams of carbon dioxide, the equivalent emissions of driving one metre in a car. Two Google searches produce 0.4– 4 grams of carbon dioxide, according to US physicist Alex Wissner-Gross and disputed by Google. This is approximately the equivalent of boiling an electric kettle.

Sources: http://news.cnet.com/8301-1023_3-10220363-93.html#ixzz127TAsfiD and www.celsias.com/article/calculating-the-carbon-footprint-of-an-email and http://news.bbc.co.uk/2/hi/technology/7823387.stm)

For the arts sector, various organisations are looking at creative methods to reduce their ecological impact and some are turning to technology. Technology cannot replace the intimacy and physicality of a live performance or concert, but it may offer more sustainable choices in communicating and operating in this era of globalisation and climate change. For instance, using videoconferencing is an alternative to sending people internationally to deliver papers or to participate in forums. Other solutions include hosting exhibitions online in virtual galleries, hosting remote concerts, the acceptance of online applications rather than snail mail conventional methods and choosing carbon neutral web hosting such as with Digital Pacific (www.digitalpacific.com.au). There are many sides to this issue and the debate will continue on whether 'by being less bad, are we being more good?' However, the first step an organisation can do to lessen their greenhouse gas emissions with technology is to turn off all computers after work.

Picture: Todor Iolovski



2. How can we measure and cut down?

The challenges of climate change require arts organisations to practically assess how their infrastructure, assets, staff and ways of conducting business are impacting the environment. The carbon inventory of every organisation is different and there is no one-size-fits-all solution. The first step an organisation can take is an environmental audit, to determine their overall greenhouse gas emissions and key areas for reductions. They will need to work out what to count. E.g. Should a performing arts festival include the emissions from the rehearsal and development of a work or just from its final presentation? The second stage is coming up with an action plan corresponding with the organisation's environmental policy.

Here are some of the many carbon calculators available to individuals and businesses, along with resources, guides and tools to help you make conscious sustainability choices.

Australian examples

Sustainability Victoria's Sustainability Events Tools Review

Sustainability Victoria reviews four leading sustainable event resources and services, summarising how they work and who they are suitable for.

- 1. EPA Victoria's Carbon and Ecological Footprint Calculator
- 2. Sustainable Living Foundation Event Planner
- 3. Sustainable Event Management System
- 4. Climate Friendly (a carbon offset provider)

 $http://www.resources mart.vic.gov. au/documents/090709_Sustainable_events_tools_review.pdf to the contract of the contract o$

Environment Protection Authority (EPA) Carbon and Ecological Footprint Events Calculator

This calculator measures the ecological footprint and emissions from your event, and helps you identify the bits with the biggest environmental impact and to prioritise actions.

www.epa.vic.gov. au/ecological footprint/calculators/event/introduction. as present a present of the cological footprint of the

Sustainable Living Foundation Event Planner

The Sustainable Living Foundation (SLF) is a community based, not-for-profit organisation promoting sustainable event practice. The Sustainable Events Planner aims to assist in all stages of planning and implementation of events, and also includes tools, links, templates, a directory of service and product providers and a forum to share ideas within the events community.

www.slf.org.au/eventplanner

Sustainable Event Management System (SEMS)

Sustainable Event Solutions is dedicated to promoting and strengthening best practice within the events industry. To do this, they developed a comprehensive web based reporting system called 'SEMS'.

SEMS provides a best practice pathway for an event to measure, communicate and improve its sustainability. It focuses on educating event organisers, contractors and the supply chains on sustainable best practice, and enables organisers to track, report and compare events. It offers consistency with British Standard 8901, soon to become an ISO (international standard).

SEMS includes a modular series of questions along with carbon and waste calculators. There is an optional external third party audit stage and certification (upon the release of an industry benchmark in 2010).

www.semssolution.com

Climate Friendly

Carbon offset provider

Climate Friendly is a 'profit for purpose' company providing tailored carbon management solutions to businesses and individuals. Through measurement and offsetting, Climate Friendly can assist organisations to reduce their carbon footprint. Free online carbon calculators are available to allow individuals to calculate their personal footprints from their household, vehicle, flight and holidays.

Carbon Friendly for Business is a service where a specialist prepares an independent carbon emissions audit customised to the client company's needs. Once the carbon footprint is established, Carbon Friendly will assist with the process of purchasing offset credits.

www.climatefriendly.com

Sustainable Event Alliance

Sustainable Event Alliance is a group of industry stakeholders engaged with sustainable event management.

www.sustainable-event-alliance.com

Waste Wise Events

The Waste Wise Events easy-to-use guide is a resource to plan and implement an effective waste management and recycling program at your event. Divided into three stages: Before, During and After, the guide provides a checklist and useful tools, sample documents, surveys and media releases to keep track of your waste management planning.

www.environment.nsw.gov.au/warr/wwe_home.htm

The Green Gallery Guide

The Green Gallery Guide is a joining initiative of the Australian Commercial Galleries Association and the Australian Conservation Foundation. It assists gallery owners and managers to identify simple changes that will save energy and water use and reduce waste, and provides information to artists and clients on sustainable choices.

www.acga.com.au/resources/cid/41/parent/0/pid/41/t/resources/title/greengallery-guide

Edge Environment's Life Cycle Assessment of Commonly Used Materials

Edge Environment is a research, consultancy and education business providing organisations with tools and applications to prosper in a sustainable economy. They provide custom carbon footprinting and energy efficiency solutions for everyone from start-ups to multi-nationals. Their website includes a presentation on the life cycle assessment of commonly used materials in the performing and visual arts sectors, including glass and acrylic sheets, MDF, plywood, plasterboard and low sheen acrylic paint.

Creative Environment Enterprises (CEE)

CEE provides sustainability services to various organisations in the business and government sectors, including festivals and events. They offer customised sustainability strategic development, sustainability audits and educational tools.

www.creative-environment.com.au

Monash University's sustainable events and catering guides

http://fsd.monash.edu.au/files/MU%20Sustainable%20Catering%20Guide%20On%20Screen_1.pdf http://fsd.monash.edu.au/files/MU%20Sustainable%20Events%20Guide%20On%20Screen_1.pdf

Business Events Green Checklist

Produced by Tourism Australia.

 $www.business events. australia. com/Files/GREEN_CHECK-LIST_fact_sheet.pdf$

Ecospecifier

Ecospecifier is online database tool designed for building professionals and "keen homeowners" that allows you to assess the environmental impact of products and materials related to, but not limited to, the built environment. Ecospecifier provides links and resources from around the globe assisting in eco-material research and sourcing.

www.ecospecifier.org

The Green Directory

The Green Directory covers sustainable building products and services, water saving and energy efficiency products, organic food and beverages, sustainable and organic clothing, etc.

www.thegreendirectory.com.au

International examples

Event Sustainability (UK)

The Event Sustainability website shares resources, tools and ideas with the aim of increasing the positive impact events have on our economy, society and environment. It includes a guide for implementing sustainability and measuring the impact of an event.

www.eventsustainability.com

The Climate Group (UK and International)

The Climate Group is an independent, non-profit organisation working internationally with business and government leaders to advance clean technologies and policies to cut greenhouse gas emissions. Their main objective is to demonstrate through economic and political evidence that action on climate change can grow the economy and create job opportunities.

www.theclimategroup.org

Transportation Direct Carbon Dioxide Emissions Calculator (UK)

A simple online tool for estimating the carbon dioxide emissions from different forms of travel (car, train, plane and coach). The site was created by the UK Department of Transport, and the Scottish and Welsh Assembly Governments.

www.transportdirect.info/web2/journeyplanning/journeyemissionscompare.aspx

Arts Energy (UK)

Arts Council England has developed a free self-assessment toolkit for UK arts organisations to help them implement an effective energy management program to reduce energy cost by up to 20%.

The Energy Management Toolkit consists of a number of modules that identify energy efficiency opportunities, develop good energy management practices and set up an action plan. Registered users can track their performance over time.

www.artsenergy.org.uk

Chrysalis Arts and Public Art Sustainability Assessment (PASA)

PASA is an initiative by Chrysalis Arts and supported by Arts Council England. It is a free online tool for use by artists, public art commissioners, government and environmental specialists at any stage in the development of a public art project. The website provides three downloadable files including guidelines, templates and case studies. Chrysalis also provides professional development training, mentoring and support and training on public art projects.

www.chrysalisarts.org.uk/ www.pasaguidelines.org www.pasaguidelines.org/Checklist.aspx

Julie's Bicycle's Industry Green tools (UK)

Julie's Bicycle combines research with practical support to help the music industry build climate-responsible businesses. Industry Green is a simple voluntary certification program that complements other environmental accreditation schemes. The benefit of IG is that the program is specifically designed to reflect the activities of creative industries, including comedy, music, performing and visual arts.

The free and easy-to-use online set of tools focus on greenhouse gas emissions, but they also provide information on other environmental impacts including energy and water use, waste generation and travel.

www.juliesbicycle.com/ig-tools

The RSA WEEE man (UK)

The RSA WEEE man was developed in partnership with the Bristol City Council and the RSA (Royal Society for the encouragement of Arts, Manufacturers and Commerce). It is a seven metre tall, 3.3 tonne robotic figure built from the 'waste electronic and electrical equipment' (WEEE) that one average UK citizen throws away in their lifetime. An educational opportunity to understand your impact and calculate your ecological footprint for mobile and PC usage is available on their website.

http://weeeman.org/html/impact/index.html

Building Excellence in the Arts - A Guide for Clients (UK)

Published by the Commission for Architecture and the Built Environment and Arts Council England, this is an online step-by-step guide for anyone procuring arts buildings, from minor projects through to entirely new buildings.

www.cabe.org.uk/publications/building-excellence-in-the-arts

A Greener Festival (UK-based/International)

A Greener Festival is a not-for-profit company committed to helping music and arts events and festivals around the world adopt environmentally efficient practices through providing information and education resources and swapping ideas. Links, message boards and resources are all available online.

www.agreenerfestival.com

The Green Theatre Plan (UK)

Julie's Bicycle facilitates the Green Theatre Network. The Green Theatre Plan aims to reduce the carbon dioxide emissions of London theatres. It is a tool for anyone working in the theatre industry from small production companies to large commercial theatres. It guides you through practical and effective ways to reduce energy use. Alongside the guide is a carbon calculator developed for theatre productions. They are continuing to add and update resources.

www.greeningtheatres.com

Make Me Sustainable (USA)

Make Me Sustainable offers a free online tool called the Carbon and Energy Portfolio Manager (CEPM) to calculate your carbon footprint, manage your energy costs, view real-time carbon savings and track your results over time. You can implement personalised actions and share your results and networks through social networking.

www.makemesustainable.com

Green Museum (USA)

Greenmuseum.org is an online museum of environmental art featuring artists, opportunities, links and writing. They offer an online set of resources to groups engaged with environmental sustainability and art.

http://greenmuseum.org

The Icarus Foundation's Greening Your Festivals and Events Guide (Canada)

The Icarus Foundation is a Canadian not-for-profit environmental, policy, research and education organisation focused on sustaining a climate friendly tourism industry. They provide information, programs and research to support groups to minimise their emissions. Their guide provides practical information and 'how to's for a carbon neutral event.

 $www. the icarus foundation. com/pdf/Greening_Festivals_and_Events.pdf$



3. How is the sector responding to the challenge? Some examples to inspire

MEASURING

The Edge (Brisbane, QLD)

The Edge is an initiative of the State Library of Queensland, providing young people with a place for experimentation and creativity. Through training, research, mentorship and workshops, The Edge gives contemporary tools to young people to explore critical ideas, design, sustainability and media making.

The Edge uses a power monitor (Satec BFM 136) to measure how much energy their building consumes. Working with Nicta, they are exploring how this sensory data can be translated into visual representations.

http://edgeqld.org.au/about/energy-consumption

Arts House (Melbourne, VIC)

Arts House is a City of Melbourne contemporary arts initiative located at two sites – North Melbourne Town Hall and The Meat Market. They present a curated program of contemporary art and operate as a resource hub for artists in producing, programming, support and funding.

Arts House in consultation with researchers at RMIT University are investing in green initiatives at both sites, including installing rainwater tanks and an energy saving heating/cooling system at North Melbourne Town Hall, hosting 'Green Matinees' where the audience members using public transport or foot/bike power are rewarded with free tickets (advance booking required), and landscaping the Meat Market garden with water-wise plants. They are also conducting research on energy saving technical infrastructure with the view to replace existing equipment.

Since July 2010, 1245 patrons have participated in Green Matinees, traveling a total of 17, 019 km and saving a total of 3.83 tonnes of greenhouse emissions.

www.melbourne.vic.gov.au/artshouse/Pages/Default.aspx

Seven Thousand Oaks Festival (Melbourne, VIC)

Seven Thousand Oaks is a space where art and sustainability connect. It is an online resource of artists, green arts suppliers and information on sustainable arts.

The inaugural Seven Thousand Oaks Festival hosted over 20 artists exploring the issue of sustainability through music, visual art, performance and installation throughout winter 2010 at venues across Melbourne. Organisers used the SEMS (Sustainability Event Management System) Self-Assessment Reporting and Auditing System to monitor and assess the sustainability of their events. For each event, curators and artists were supported and encouraged to employ best practice sustainability choices for water and waste management, transport and production materials and services. The festival also included an initiative with Australian Landcare group Project Playpus called 'Plant Out', where volunteers from Melbourne spent two days tree planting in regional Victoria.

www.seventhous and oaks.org/index.php?page=festival

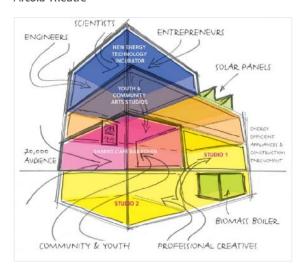
Musica Viva (Surry Hills, NSW)

Musica Viva is a not-for-profit organisation bringing over 2,200 music concerts to around 400,000 people each year across Australia. Musica Viva engaged Net Balance Foundation to better understand its carbon footprint and to highlight opportunities to reduce its impact. An estimated 585 tonnes of greenhouse gas emissions were emitted as a direct consequence of Musica Viva's operations in 2007. The largest source was associated with the air travel (70.7%), followed by electricity (19.7%) and car travel (8.9%).

The Net Balance Foundation is a not-for-profit entity that conducts research and provides sustainability advisory services to not-for-profit organisations.

www.musicaviva.com.au/ www.netbalance.com/foundation.html

Arcola Theatre



Source: www.arcolaenergy.com/contribute

The Arcola Theatre is London's largest theatre studio. Arcola's mission is to become the world's first carbon neutral theatre through their initiative Arcola Energy. Their actions range from bottle recycling to building facilities from old sets, to the hydrogen fuel cell powering the LED lighting in the cafe/bar and lighting rigs.

Future Arcola is an expanded and reconfigured space using green building techniques including on-site renewable power generation, a roof garden, bicycle hub, green gym and more.

Arcola Energy is a multi-disciplinary agent for sustainable innovation operating in the development of commercial low-carbon products (hydrogen fuel cells) and as a not-for-profit project of Arcola Theatre, engaging sustainability in the arts sector.

www.arcolatheatre.com www.futurearcola.com www.arcolaenergy.com

Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA) (UK)

RSA is a multi-disciplinary charitable institution founded in 1754 in the UK. They encourage public debate on leading issues by providing platforms for experts and the public to contribute. The RSA's venue consists of five buildings with office spaces, an auditorium, conference spaces, a library and dining spaces. They have done an environmental audit report providing a concise summary of environmental issues and recommendations.

www.thersa.org

Julie's Bicycle (UK)

First Step - Report

UK Music Industry Greenhouse Gas Emissions for 2007

Jam Packed - Report
Part 1: Audience Travel Emissions from Festivals

Julie's Bicycle in collaboration with Oxford University's Environmental Change Institute did a study of the carbon footprint of the UK music industry. The study, called the First Step Report, found that 43% of greenhouse gas emissions from the UK music industry are from audience travel to events. Julie's Bicycles also did a travel report investigating the attitudes and behaviours of audiences traveling to festivals as the first shift required towards lowering travel emissions in the music industry. Their Moving Arts report looks at the carbon impact of touring by bands, orchestras and theatre companies.

www.juliesbicycle.com/media/downloads/jb-first_step-e-report-revisedjan09-sm.pdf www.juliesbicycle.com/media/downloads/jb-TravelReport-execSummary-june09.pdf www.juliesbicycle.com/about-jb/research/moving-arts-bands www.juliesbicycle.com/about-jb/research/moving-arts-orchestras www.juliesbicycle.com/about-jb/research/moving-arts-theatre

TOURING - LESS FOR LONGER

Sound Emissions (Australia)

Sound Emissions is an Australian music community website specifically developed to assist artists, fans, band managers, festival producers, tour promoters and record companies address issues of climate change. It provides tools, tips and information.

www.soundemissions.com.au

Sustainable Touring (UK)

Sustainable Touring is a team of specialist music and media sustainability consultants working on carbon and environmental footprints in the live music and media industries.

www.sustainabletouring.com

The Slow Boat and the 2020 Arts Transition Handbook (EU)

The 2020 Network of eleven organisations in Europe examines the role of the cultural sector in reducing carbon emissions, mitigating climate change and building resilience to the effects of peak oil.

The 2020 Arts Transition Handbook is an expanding web publication providing information and guidance to assist the European arts sector in the transition to be more ecologically sustainable.

The Slow Boat – Finding an Environmentally Responsible Future for International Touring is a downloadablePDF on the 2020 Network website from the Slow Boat Conference held in 2009.

www.2020network.eu

Cirque du Soleil (Canada, also including Amsterdam and Melbourne)

Cirque du Soleil is a Canadian entertainment company with over 4,000 employees, including over 1,000 artists. Cirque du Soleil's touring shows have visited over 250 countries with close to 100 million spectators since 1984.

In 2006, Cirque du Soleil adopted a proactive environmental policy based on sustainable development in order to communicate its commitment to the environment. The policy addresses major issues including: water management, air quality and climate change, waste management and hazardous waste disposal. This policy applies to their international headquarters in Montreal, the touring shows division, the resident shows division and their Amsterdam and Melbourne commercial offices.

In addition to these measures, Cirque has instituted employee training programs.

www.cirquedusoleil.com/en/about/global-citizenship/environment.aspx

RESIDENCIES: SLOWER AND DEEPER

6 Degrees

6 Degrees is an initiative of Arts House. It is an exchange and residency program based on the concept of 'six degrees of separation' or the 'human web'. The program is focused on sound-art as a response to climate change, supporting artists with space to create and funding.

www.melbourne.vic.gov. au/Arts House/funding grants/Pages/6 Degrees. as px

Avoca Project:

http://www.avocaproject.org/

is an international art project in regional Victoria, led by artist Lyndal Jones

The Banff Centre (Canada)

The Banff Centre provides programs, accommodation, and/or food services to over 25,000 participants and 50,000 audience members a year, through conferences, artist residencies, concerts and theatre events. The Centre allocates \$20,000 per year for specific environmental projects related to training and communication. Larger-scale environmental projects are funded by the centre's operating and capital budgets within the departments where those projects occur

www.banffcentre.ca/environment/

Cape Farewell (UK)

Since 2003 Cape Farewell has led seven expeditions to the Arctic, taking artists, scientists, educators and communicators to experience the effects of climate change firsthand. As a result of these expeditions, a large body of artworks, exhibitions, publications and educational resources have been produced.

www.capefarewell.com

Floda 31 (Sweden)

Located near the Arctic Circle in North Sweden, Floda 31 is a laboratory for creative exploration and innovation. It is a location for specialists from various disciplines to meet, collaborate and create solutions to address the challenges of sustainability. They run two curated residencies per year and offer additional residencies throughout the year.

www.floda31.com

Slow Flow - Te la Kōrero - 2010 (New Zealand)

"Slowflow imagines living in a post carbon future where physical transport has slowed to human speed, energy use is constrained and renewable, production is collaborative and relocalised."

Slowflow 2010 was a trip down the Whanganui River, Aotearoa/New Zealand and will run again in 2011. Artists, technologists, writers and environmentalists embark on a 10 day journey down the Whanganui River by double hulled 22 person waka haurua (canoe) and bicycle, creating a setting for a flow of conversations - Te Ia Kōrero. Participants are asked to bring a project to make or experiment with on the trip, resulting in a collection of works for exhibition at The Green Bench.

http://greenbench.org/project/slowflow/2010

VENUES – GREENER and CLEANER

National Gallery of Victoria (Melbourne, VIC)

The National Gallery of Victoria is Australia's largest and oldest public gallery and museum with over 60,000 works of art housed in two locations – the Ian Potter Centre (NGV Australia) at Federation Square and on St. Kilda Road (NGV International).

The Ian Potter Centre location was developed with energy efficiency in mind, using a world leading passive cooling system called the Labyrinth. The system meets the strict climate control requirements for art galleries and museums, but also generates less than 1/10 of the greenhouse gas emissions of conventional cooling systems. Other energy efficiency initiatives include movement sensors for lighting in offices, storerooms and loading docks and implementing a 50% reduction in electrical lighting in naturally lit areas.

Water initiatives at both locations now save approximately 12 million litres of water each year. The water wall at NGV International runs on recycled storm water. They use flow reduction valves on stinks, troughs and showers and use a waterless bio-enzyme urinal system.

www.ngv.vic.gov.au

www.sustainability.vic.gov.au/www/html/2447-national-gallery-of-victoria.asp

Heide Museum of Modern Art (Bulleen, VIC)

The Heide Museum of Modern Art occupies the site of a former dairy farm. Established in 1981, the museum is a blend of indoor and outdoor environments used as gallery spaces to exhibit contemporary art.

Heide has a list of the resource efficiency changes on their website resulting in *Heide* reducing its electricity consumption by 70,830kWh, gas consumption by 503,592MJ and water usage by 561kL in twelve months.

www.heide.com.au/About_Heide/Sustainability

Malthouse Theatre (Melbourne, VIC)

Malthouse Theatre is non-profit organisation dedicated to the development, production, and promotion of contemporary Australian theatre.

Malthouse Theatre and The CUB Malthouse developed Malthouse Greenlight, an initiative to become an ecologically sustainable company. The goal is to reduce ecological impacts through infrastructure and behavioural changes to "move beyond carbon neutrality to become a carbon positive business".

They are achieving this by charging 50c on every ticket sold and \$2 on every subscription package to offset the energy used to create the event. Additional offsetting is done for travel for staff, artists and audiences. Funds collected are directed wholly and directly to environmentally sustainable developments through Climate Friendly.

Malthouse Greenlight also includes a green policy for purchasing, marketing, waste disposal and recycling.

www.malthousetheatre.com.au/page/MALTHOUSE GREENLIGHT

Carriage Works (Eveleigh, NSW)

Carriage Works is a multi-venue centre focused on the creation and presentation of contemporary art and culture. Opened in January 2007 through development by Arts NSW, Carriage Works is housed in the old Eveleigh Rail Yards. From the beginning, creative sustainability is a core value of the organisation. The Sustainable Works Project is their initiative aimed at reducing their environmental impact. Their website highlights their measures to reduce their energy, water and waste along with a summary of achievements. Some of these include implementing new infrastructure to monitor and calculate exact energy consumption per event, an edible office garden for staff and residents, and a 'lock down' procedure to ensure the facility is turned-off rather than 'sleeping' after hours.

www.carriageworks.com.au/?page=Sustainable-Works-Project-Greening-CarriageWorks

Sydney Theatre Company (Sydney, NSW)

Sydney Theatre Company (STC) is one of Australia's premier theatre companies, operating since 1978. It presents an annual twelve-play program from a classic repertoire to contemporary writing to audiences in an excess of 300,000 annually. The 'Greening the Wharf' project is an initiative to transform the STC's theatre home at Pier 4/5 into a sustainable one. Pier 4/5 will become home to the second largest capacity rooftop solar energy system in Australia, allowing the STC to derive up to 70% of its energy needs from renewable sources.

www.sydneytheatre.com.au/news/greening-the-wharf

Museum of Contemporary Art (Sydney, NSW)

The Museum of Contemporary Art is Australia's only museum dedicated to exhibiting, interpreting and collecting contemporary art from across Australia and around the world, with a changing program of exhibitions.

The MCA is committed to addressing environmental sustainability at all its sites and has developed a vision statement and associated goals to move in that direction. A number of initiatives are being planned and implemented as part of the MCA's ongoing operations and major building redevelopment. These initiatives apply equally to exhibitions, functions and office activities and include: the completion of an energy audit; commitment to a seawater exchange system to reduce air-conditioning energy usage by up to 30% compared to traditional air-conditioning systems; design of cross ventilation to reduce loads on air conditioning; rain water harvesting for irrigation; installation of water saving devices; intelligent lighting control and conversion of office lighting to a sustainable light source with 40% reduction in usage.

The MCA has engaged an environmental sustainability consultant to review all aspects of the building development and formed an internal MCA Sustainability Committee to review all work methodologies, from exhibition install through to kitchen facilities in light of the MCA's sustainable objectives.

For more information on the MCA's building development, please see: http://www.mca.com.au/video.asp?playListId=6cb4aa21-0011-4fbb-87e4-d77ad46350da

National Gallery of Australia (Canberra, ACT)

The National Gallery of Australia in Canberra holds over 120,000 works of art in their collection. Touring and hosting national and international exhibitions is a part of their programming. Their environmental policy has a philosophy of 'rethink, reduce, reuse, repair and recycle'. They comply with Australian Government environmental legislation to foster best practice in greening initiatives from waste management to infrastructural changes. In accordance with the Environmental Protection and Biodiversity Conservation Act 1999, they report on how their activities comply with the principles of ecologically sustainable development, integrating both long-term and short-term economic, environmental and social considerations in their decision making.

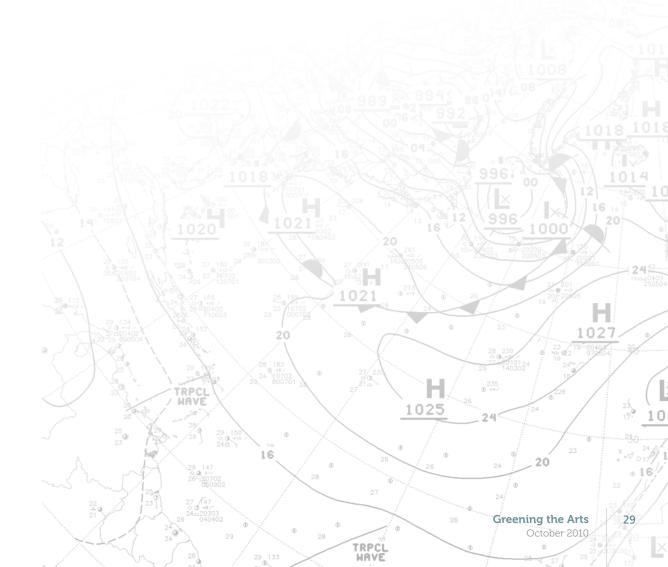
http://nga.gov.au/AboutUs/policies/environment.cfm

La Boite Theatre Company (Brisbane, QLD)

La Boite Theatre Company is Queensland second largest theatre company and La Boite's Roundhouse Theatre is Australia's only purpose built theatre-in-the-round. Established in 1925, La Boite's programming is diverse, showcasing music, movement, performance and the visual arts alongside its main season of 5-7 theatre productions.

Greening La Boite has numerous environmental initiatives from recycling and reusing stage sets to encouraging stage design culture to build smaller sets with less materials. They work with the supply chain to use sustainable materials, products and services and have achieved waste, water and energy reduction through staff behavioural change and infrastructure modifications.

www.laboite.com.au/01_cms/details.asp?ID=68





FUNDING -COLLABORATIONS

There are no models in Australia where arts funders are actively and consistently supporting sustainable arts practice across all their grants programs. The examples below are one-off initiatives.

There is an opportunity for artists and arts funders to collaborate with government sustainability initiatives at a local, state and federal level and for arts funders in Australia to be world leaders in developing support of sustainable arts practice in how and who they fund.

IETM and Australia Council for the Arts Collaboration Project

As part of the agreement between the Australia Council for the Arts and The International Network for Contemporary Performing Arts (IETM), a program of activities has been developed by Project Director, David Pledger to begin building a sustainable matrix of relationships between Australia and Europe, by seeding international collaborations via artist-residency programs, producer placements, inbound projects and a one-off commission – The Climate Commission.

 $www.ietm.org/index.lasso?p=information\&q=newsdetail\&id=491\&-session=swww.ietm.org/upload/files/2_20101006193450.doc$

Signature Brisbane

Signature Brisbane is an initiative of City of Brisbane Arts and Environment Ltd. Their mission is "to initiate and foster cultural and environmental signature concepts and projects unique to the greater Brisbane area".

The grants are an annual program to encourage organisations and individuals to propose creative projects with an environmentally based concept and design, and also reflect the Brisbane subtropical environment.

www.signaturebrisbane.com.au/grants.html

Queensland Government Natural Resources Awareness Grants 2010

The 2010 grant theme for the Natural Resources Awareness Grants is "Reducing our Carbon Footprint". More than \$100,000 in funding was allocated to 17 community projects across Queensland including creative initiatives to support film and photographic competitions, exhibitions and festivals, a mural project and an artist-in-residence project to engage groups on various environmental issues.

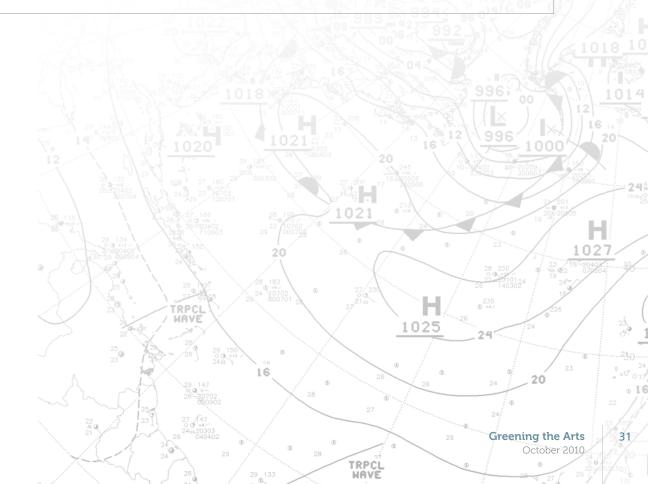
www.regionalnrm.qld.gov.au/get_involved/community_grants.html

Green Art: A Special RADF Opportunity

Closed September 2010

The Regional Arts Development Fund (RADF) is a partnership between Queensland State Government and the Sunshine Coast Council. This year Arts Queensland in partnership with Sunshine Coast Council announced \$37,000 set aside to fund the Green Art program to support one of three 2011 major ecoArt initiatives.

www.sunshinecoast.qld.gov.au/sitePage.cfm?code=radf-green-art



FESTIVALS - INVOLVING THE AUDIENCE

The Falls Music & Art Festival

(Marion Bay, Tasmania and Lorne, Victoria)

The Falls Festival is an annual New Year's Eve music and arts festival held simultaneously in two locations. Organisers have a strong commitment to sustainability for their activities, infrastructure, products and services.

A dedicated 'Green Team' is employed at each festival site to manage waste programs to assist with recycling and minimising general waste. They use flush free composting toilets which save water and also produces a high-grade fertiliser. All festival caterers and market stalls must adhere to strict basic environmental procedures including the use of biodegradable cutlery and packaging. Patrons can also offset their travel to the festival site by contributing \$3.50 per ticket, with the amount going to renewable energy projects through Climate Friendly.

www.fallsfestival.com.au/sustainability/environment

Ottawa Bluesfest (Canada)

The Ottawa Bluesfest is one of Canada's premier music festivals held annually over a two week period. In 2010 over 350,000 people attended the event. Festival organisers have implemented greening initiatives to reduce their carbon footprint including providing supervised bicycle parking, using compostable beer cups and environmentally friendly cleaning products along with their partnership with Rothsay Biodiesel to use biodiesel to power on-site generators.

www.ottawabluesfest.ca/green

Electrosmog Festival (NZ and International) International Festival for Sustainable Immobility March 18 – 20, 2010

ElectroSmog is an international festival exploring the concept of sustainable immobility. Bringing together a broad coalition of designers, environmentalists, urban and spatial planners, technologists, artists, theorists, and engaged and concerned citizens, to explore and 'design' sustainable immobility.

Through an online presence, the festival hosted performances, debates, discussions, art projects, exhibits and screenings. However, no presenter travelled beyond their local boundaries to participate. Working together with an international network of cultural and new media centres, labs and theatres, audiences from around the globe with access to the internet, could follow events and participate in the program.

TRPCL

www.electrosmogfestival.net

OTHER EXAMPLES

Unruly ecologies: Biodiversity and art A SymbioticA Symposium (Perth and Mandurah, WA) 26 – 28 November, 2010

Adaptation is one of SymbioticA's long-term projects that scopes issues surrounding life and ecology. This symposium explores the possibilities and difficulties related to the diversity of life through critical investigations in art, ecology and activism. Artists, scientists, humanities scholars and conservationists will discuss concerning issues around the futures of biodiversity.

http://symbiotica-adaptation.com/?page_id=197

Guy Abrahams (Australia)

Guy Abrahams was trained by former US Vice President Al Gore to deliver Mr. Gore's Climate Change presentation (www.theclimateproject.org). He practiced as a solicitor before becoming the Director of Christine Abrahams Gallery from 1987-2008. His website has numerous links and posts connecting issues in the arts and environmental sectors.

http://guyabrahams.com

Bindarri (Australia)

Bindarri is a design blog and directory featuring Australian green design, sustainable design, architecture, art, craft, fashion, film, furniture and photography. Their mission is to encourage eco-design practice, knowledge sharing and to raise the profile of Australian eco-design locally and internationally.

www.bindarri.com.au

The Climate Commissions and TippingPoint Australia

The Climate Commissions is a 10 year program of arts projects launched at Tipping Point Australia – three gatherings of artists and scientists responding to climate change.

Tipping Point aims to 'energise the creative responses to climate change'. Through intensive two-day gatherings taking place around the world, Tipping Point seeks to precipitate intense dialogue between artists, scientists and others close to the heart of the issues. They believe that, through their creative work and through collaborations with scientists, artists can play an important role in exploring the cultural, societal and behavioural shifts in a world impacted by climate change.

www.tippingpointaustralia.com

Carbon Arts (Australia)

Carbon Arts (Melbourne), is a not-for-profit organisation facilitating roles for artists to intersect in generating awareness and action on climate change.

http://carbonarts.org/blog/

Illuminarts (SA)

Multimedia artist Cindi Drennan and Illuminarts Productions Pty. Ltd specialise in illuminated audiovisual environments and projection art. Based in South Australia, the main office is powered by 100% renewable energy and they have a minimal travel policy. Along with using carbon offsets to reduce travel pollution, commuting travel is also offset by offering courier services, maximising the function of the travel. Environmental consideration informs decision making for product purchasing and investment.

www.illuminart.com.au

RMIT University, The School of Art, Art & Environmental Sustainability Research Cluster

This trans-disciplinary research group focuses on how cultural interpretations of the non-human world contribute to our knowledge of the environment and the crisis in global ecological sustainability. Research is undertaken in both a wide range of art practices and the rapidly developing international theoretical fields of the Ecological Humanities and Human –Animal Studies.

ARC (Australian Research Council) Linkage Project: Spatial Dialogues: Public Art and Climate Change

Funded by Grocon, Fairfax and an ARC Linkage Grant, Spatial Dialogues looks at the social and environmental benefits of combining highly innovative public art projects with electronic social network systems to initiate trans-national civic dialogues on the problem of adaptation to climate change. http://www.rmit.edu.au/browse;ID=4kupbfycyzg8

In September 2008, RMIT University's Art and Environmental Sustainability Research Cluster in partnership with ASLE-ANZ (Association for the Study of Literature and Environment – Australia New Zealand) hosted Cultures of Sustainability, a transdisciplinary symposium in association with the major international art exhibition at RMIT Gallery, Heat: Art and Climate Change. http://www.rmit.edu.au/art/culturesofsustainability

Other projects are listed on the website: http://www.rmit.edu.au/art/artandenvironmentalsustainability

Slow Art Trail (UK)

SLOW ART TRAIL was a pilot, public art project developed by Chrysalis Arts to raise awareness of environmental issues and to explore how artists can develop a more sustainable approach to their creative practice. The project connects with the slow food concept of taking more time to appreciate quality, sourcing materials locally where possible, the use of natural and non-toxic materials and aimed to highlight issues such as re-using and recycling, sustainable transport and responsible travel.

www.chrysalisarts.org.uk/projects_slow_art_trail.cfm

Eco sapiens Hui/Symposium (New Zealand) 14-16th of January, 2011

Intercrreate is a project-based research centre hosting SCANZ 2011: Eco sapiens Symposium in New Plymouth, NZ in January. The symposium aims to bring together a broad range of knowledge groups together to investigate the cultural roots of climate change and to explore alternative approaches to encourage cultural and behavioural change.

http://intercreate.org/view/eco-sapiens-hui

Staging Sustainability Conference (Canada) Arts – Community – Culture – Environment

20-22 April 2011

The Staging Sustainability Conference is an initiative by the Department of Fine Arts at York University and the Social Sciences and Humanities Research Council of Canada. The goal of the conference is to bring together artists, scholars, critics, producers, designers, policy-makers, industry and government leaders to dialogue about the issues and challenges associated with environmentally sustainable arts practice and performance.

www.stagingsustainability.ca

Peter Von Tiesenhausen (Canada)

Peter von Tiesenhausen is a Canadian sculptor who set legal precedent in Canada by successfully claiming copyright of his land as a work of art, thereby forcing encroaching oil and gas companies to reroute their pipelines.

http://this.org/magazine/2010/04/22/peter-von-tiesen hausen-fights-oil-companies www.tiesen hausen.net/press1.htm

Social Sculpture Research Unit (UK)

"Every human being is an artist, a freedom being, called to participate in transforming and reshaping the conditions, thinking and structures that shape and inform our lives" Joseph Beuys

The Social Sculpture Research Unit is a transdisciplinary research unit based in the Arts Department at Oxford Brookes University. They explore transdisciplinary creativity, engaging with the work and thinking of Joseph Bueys, in shaping a more humane and ecologically viable society. They do this though various connective practices to link artists, activists, projects, researchers and the public internationally. Postgraduate study in course work and research is also offered.

www.social-sculpture.org

Rethink - Contemporary Art & Climate Change (Denmark/International)

RETHINK — Contemporary Art & Climate Change is an exhibition of 26 works created by trend-setting Nordic and international contemporary artists working in the intersection between art, culture and climate change. The exhibition was also part of the official cultural program for the United Nations climate summit COP15 held in Copenhagen in December 2009. The website has links to the artworks but also a blog with numerous contributions on themes such as Rethink Nature, Rethink Art, Rethink Technology, etc.

www.rethinkclimate.org

Culture | Futures (Denmark)

Culture I Futures is an international collaboration of organisations and individuals who are concerned with shaping and delivering a proactive cultural agenda to support the necessary transition towards an Ecological Age.

www.sustainablepractice.org/2010/08/09/culture-futures/

RSA Arts & Ecology Centre (UK)

After five years, the RSA Arts & Ecology Centre has come to a close. The organisation's role was to catalyse, publicise and support artists who were responding to environmental challenges. The website remains offering resources, links and writing on the issues of art and climate change.

www.artsandecology.org.uk/

Mierle Laderman Ukeles

American artist Mierle Laderman Ukeles has been the artist-in-residence at the City of New York Department of Sanitation since 1977. She is professionally involved in the planning team for the Fresh Kills Landfill reclamation project. The initiative is to transform one of the world's largest landfill sites, an area of 2,200 acres, into a NYC 'urban asset' with parkland and public spaces.

www.nyc.gov/html/dcp/html/fkl/fkl3.shtml www.feldmangallery.com/pages/artistsrffa/artuke01.html www.greenmuseum.org/c/aen/lssues/ukeles.php

Mel Chin (USA)

American artist Mel Chin rose to national attention when he had to defend the artistic merits of his work Revival Fields to the National Endowment for the Arts in 1990. Collaborating with scientist Dr. Rufus Chaney, Revival Fields is a public sculpture using hyperaccumulators, plants that absorb heavy metals in soil. Their work led to major advancements in the phytoremediation industry and also the role of artistic-scientific collaboration in addressing environmental issues.

www. green museum. or g/c/ecovention/sect 1.html

2020 Thin Ice network (EU)

Thin Ice is a 2020 Network pilot program that ended in May 2010, involving six European arts organisations. The 2020 Network involves more than 20 artists and companies actively engaging in environmental issues to 'harness the power of the artist's imagination to raise debate and find solutions' to the greatest challenge of the 21st century.

Imagine 2020 – Arts and Climate Change builds upon the successes of the pilot program, expanding their geographical scope to include more organisations and artists. The network will initiate new artistic projects and research along with developing a communications strategy to engage the European cultural sector as a whole to include climate change concerns into their working practices.

www.2020network.eu/thin-ice

4. Food For Thought: Some Publications

IFACCA D'ART REPORT NO 34

Arts and Ecological Sustainability JANUARY 2009 Prepared by John Hartley, Arts Council England

This report provides examples of good practice in supporting the arts sector with creative and practical responses to ecological concerns such as environmental sustainability and climate change, and seeks to identify potential partners to develop future work.

www.ifacca.org/announcements/2009/01/29/arts-and-ecological-sustainability-report/

Does the art stop when the persuasion starts?

RSA Arts & Ecology Magazine Features 29 March 2010 Madeleine Bunting

Madeleine Bunting explores the role of art and artists, expectations and purposes in responding to the issue of climate change.

www.artsandecology.org.uk/magazine/features/madeleine-bunting

The Rise of Climate Change Art

The Guardian 2 December 2009 Madeleine Bunting

An article on the Rethink exhibition held at the National Gallery of Denmark in Copenhagen.

www.guardian.co.uk/artanddesign/2009/dec/02/climate-change-art-earth-rethink

Climate Change and the Problem of Representation

Australian Humanities Review, May 2009, Issue 46 Emily Potter

This paper offers a rethinking of the role of representation in environmental discourse.

www.australianhumanitiesreview.org/archive/Issue-May-2009/potter.htm

CLIMATE CHANGE: ENGAGEMENT AND BEHAVIOUR POSTNOTE

POSTNOTE

Parliamentary Office of Science and Technology January 2010, Number 347

This report provides an overview of UK attitudes and behaviours relating to climate change. It outlines current approaches and lessons for future policy.

www.parliament.uk/documents/post/postpn347.pdf

Long Horizons – An Exploration of Art + Climate Change Julie's Bicycle February 2009

Curated by Julie's Bicycle, Long Horizons is a series of essays debating the impact of climate change on the work of policy makers, scientists and artists. It looks at the inspirational qualities of the arts to demystify and energise the debate. It was commissioned by the British Council and contributors include Antony Gormley, KT Tunstall, Jay Griffiths and Professors Diana Liverman and Tim Jackson.

www.juliesbicycle.com/about-jb/research/long-horizons

MAPPING THE TERRAIN OF CONTEMPORARY ECOART PRACTICE AND COLLABORATION

ART in ECOLOGY – A THINK TANK ON ARTS AND SUSTAINABILITY
Vancouver, British Columbia 27 April 2006
Beth Carruthers

This paper explores trends issues and advances in EcoART collaborations between artists, environmental groups, communities and scientists. It considers the future of such collaborations and how this work can be better supported. There is a focus on western Canadian works, but it provides an overview of collaborative practice in arts and ecology, rather than projects. Numerous links, resources and the research bibliography are available at the end of the report.

 $www.unes co. ca/en/activity/sciences/documents/Beth Carruthers Artin Ecology Research Report English.\\ pdf$

State of the Arts Conference (UK) January 2010

The State of the Arts conference was organised in partnership with the RSA and Arts Council England, bringing together over 500 leading artists, entrepreneurs, cultural leaders and policy makers. It examined current and future challenges and opportunities around arts policy, strategy and funding within a time of significant global change. Some transcripts and videos are available on the site.

www.artscouncil.org.uk/our-work/state-of-the-arts/

Theatre in an Age of Eco-Crisis

Canadian Theatre Review, University of Toronto Press 06 October 2010 Volume 144, Volume 144 / 2010

This latest issue of the Canadian Theatre Review takes a look at the role of theatre with respect to some of the most pressing ecological issues of our time. Co-editors Sheila Rabillard and Nelson Gray have brought together a community of artists, directors and scholars to issues related sustainability and the theatre industry. Eleven essays are available as downloadable PDFs.

http://utpjournals.metapress.com/content/m26h44316vv8

Culture and the Green Agenda

Arts Professional, Arts and the Environment 03 December 2007, Issue 159

This issue of Arts Professional offers perspectives on arts and the environment including 'Culture and the Green Agenda' along with contributions from writers Jane Cooke, Ben Todd and Nick Jones

www.artsprofessional.co.uk/Magazine/view.cfm?id=3662&issue=159

The Ecological Footprint of Contemporary Art

Translocal.org Maja and Reuben Fowkes

Maja and Reuben Fowkes are curators and art historians who write extensively on the issue of contemporary art and sustainability. This website provides a synopsis of their current research presented at the Symposium on Sustainability and Contemporary Art held at the Central European University, Budapest in 2009. It highlights current issues facing the arts sector in addressing sustainability.

www.translocal.org/footprint/index.htm

Ecovention: current art to transform ecologies

Sue Spaid Green Museum, 2002 ISBN0917562747, 9780917562747

The term ecovention combines ecology with invention and is used to describe artist-initiated projects that physically transform an ecology. This book gives examples of artist's work and offers a unique perspective on what results when art and science merge to create a healthier world.

www.greenmuseum.org/c/ecovention/sect1.html

Beyond Green: Toward a sustainable art Stephanie Smith

Independent Curators International, 2005 ISBN0935573429, 9780935573428

This book introduces a new generation of international artists who work in the intersection of sustainable design and contemporary art.

Reducing art's carbon footprint: How can we balance the need to preserve artworks, with the need for more ecologically sound museums and galleries?

The Guardian, Art and Design Blog, 12 January 2007 Jonathan Glancey

www.guardian.co.uk/artanddesign/artblog/2007/jan/12/post13

Exclusive: Carbon footprint of touring theatre revealed The Stage News (UK) 17 June 2010 Natalie Woolman

www.thestage.co.uk/news/newsstory.php/28617/exclusive-carbon-footprint-of-touring

Sustainable Creative Cities: Role of arts in globalised urban context 28th September 2010
Judith Staines

In October 2010, the Asia Europe Foundation (ASEF)'s Connecting Civil Societies of Asia and Europe Conference in Brussels will host a series of expert workshops including Sustainable Creative Cities: the role of arts in a globalised urban context. This feature article for Culture360. org by Judith Staines presents a range of good practices from Asia and Europe, highlighting creative initiatives that address the topic of sustainable creative cities.

http://culture 360.org/perspectives/sustainable-creative-cities-role-of-arts-in-globalised-urbancontext/

Orion Magazine

Orion is a bimonthly magazine focused on nature, the environment, and culture, addressing environmental and societal issues.

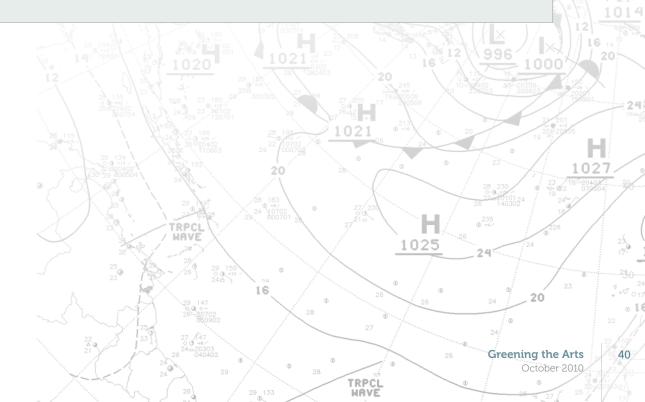
www.orionmagazine.org

CSPA Quarterly

Centre for Sustainable Practice in the Arts

The CSPA Quarterly explores sustainable arts practices in all genres (performance, visual art and installation, music, and film/video) and policy. The CSPA views sustainability in the arts through environmentalism, economic stability, and cultural infrastructure.

www.magcloud.com/browse/Magazine/38626





This survey was produced as part of TippingPoint Australia 2010 with the assistance of:

NATIONAL PARTNERS









LOCAL PARTNERS

Melbourne









Sydney





Brisbane





Credits

Research: Jen Rae

Editing: Angharad Wynne-Jones and Domenica Settle

Design: Justine Henry

October 2010

We would like to acknowledge the contributions to this survey from Sue Beal (Arts House), Ilka Nelson (The Last Tree), Claude Schryer (Canada Council for the Arts), Meegan Jones (author of Sustainable Event Management: A Practical Guide), Mary Jo Capps and Tim Matthies (Musica Viva), Ben Kneppers (Edge Environment), Miyuki Jokiranta (Seven Thousand Oaks) Trudy Lane (Intercreate) Karilyn Brown (IFACCA) and Alan Dayeh (Net Balance).

contact: angharadwj@yahoo.com

© copyright TippingPoint Australia 2010