

# Sustainable Ability

Mapping the response to resource scarcity and climate change, best practice & barriers to greater response

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FOREWORD.....	4
INTRODUCTION.....	6
1. METHODOLOGY.....	7
2. THE INITIATIVE LIST – CATEGORISATION AND OBSERVATIONS.....	9
3. BARRIERS AND MOTIVATIONS TO BEHAVIOURAL CHANGE.....	18
4. WHAT BEST PRACTICE LOOKS LIKE.....	24
5. CONCLUSIONS.....	25
APPENDIX I: CONTACTS.....	28
APPENDIX II: SELECTIVE BIBLIOGRAPHY .....	32
APPENDIX III: RESEARCH TEAM.....	34



# FOREWORD

We're living through the unfolding of an extraordinary story, as we understand better the scale of our impact on the world we live in and the natural limits that we're breaching, moving out of the Holocene era and into that of the Anthropocene, a new era defined by our ability to alter key planetary systems.

While it might seem almost unimaginable that we can be the cause of such immense changes, we now have to ask ourselves two important and deeply urgent questions. What is an appropriate and proportionate reaction, and how can we ensure that our answers to that question go beyond science alone? The role of artists and arts organisations in helping us frame our response to these questions is potentially an enormously powerful one. Paradoxically, while our greater understanding of climate change is to a large extent based upon our ability to measure impacts, emphasis on measurement can be a mechanism to put off acting – and again artists and arts organisations can help us understand ways of knowing that reach beyond quantification.

As our understanding of the mechanisms underpinning climate change has become clearer, so the response from the arts has grown and deepened. However there has not been, yet, any commensurate artistic response to our recently growing understanding of the issue and impact of resource scarcity, and in particular peak oil. While peak oil is just one facet of more general resource scarcity, it has a particular and central role. As we approach or pass the peaking of production, we move from a period in our history when the supply of oil could be easily expanded to match demand to one in which demand is likely to outstrip supply. This is bound to have enormous impacts on how we live, given how drenched in oil our lives in the developed world are – from the food we eat to the way we travel and transport nearly everything around us. In fact the complexity of modern societies is founded in great part on the high net surplus energy we've extracted from oil and the other fossil fuels, coal and gas.

Given the importance of the arts in enabling us to look in different ways at what and who we are, it is a great relief to find in this research a coherent attempt to map not just activity addressing climate change, but also that relating to peak oil. My hope is that this will spur more artistic enquiry into what our lives will look like as oil production declines, enabling us to broaden the cultural stories underpinning our current ways of being and deal better with the changes coming towards us. As some of those interviewed for the research explored, our actions depend on our values and beliefs – and what better way is there to start to help

to strengthen key positive intrinsic values than through artistic enquiry? Our actions correlate to how we feel about ourselves, each other and the world we're part of, and we desperately need all the artistic creativity we have if we're to grapple with those feelings in ways which enable the changes we so urgently need. We've created the situation we face through our conflating having, and doing, with meaning; artistic insights into ourselves and our dilemma will be key in enabling us to move towards answers based on finding meaning through being instead.

Why is this work so urgent? Because we are running out of time and we are running out of planet. Climate change alone necessitates immediate action – ensuring that we do not trigger runaway feedback loops probably means peaking emissions within the 5 to 10 years, with dramatic declines year on year thereafter. Given recent trends in the opposite directions, that's quite an ask. That's before taking peak oil into account, which could drive us to using more damaging hydro-carbons like the tar sands of Canada. Yet in fact climate change is only one manifestation of a range of indications of our extraordinary ability to alter our environment. There are now nine<sup>2</sup> key threats to our planetary support systems, the systems we and other living things need to survive. So how far have we pushed these planetary systems already? Current, early scientific consensus is that for those for which we can evaluate safe limits (seven of the nine), we're well into the danger area for three – climate change, the nitrogen cycle and biodiversity. Even more alarming, some of those involved believe that dealing with climate change might turn out to be one of the easiest of the challenges – so we'd better get on with it.

To reflect, to act means that we all have significant enquiries to make not just about what we do but also how we do it, including of course our own practices. We cannot hope to do that without enormous leadership from those involved in creative, artistic work, and I'm delighted that this research exists and will enable more of that vital enquiry. My hope is that you'll use this report to look at what you or your organisation do and then take bold and proportionate decisions - from commissioning artists to negotiating with their supply chains. Our actions are based on our perceptions, and as the arts help us not only to see the world but also change how we see it, so they impact on what we do.

Peter Lipman

Chair, Transition Network and the Centre for Sustainable Energy

Policy director, Sustrans

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<sup>2</sup> Climate change, nitrogen cycle, biodiversity, acid oceans, ozone depletion, fresh water, land use, aerosol loading and chemical pollution

<http://www.newscientist.com/special/ocean-to-ozone-earths-nine-life-support-systems>

# INTRODUCTION

## *Historical context to research*

This primary research deals directly with the assumption that climate change and resource scarcity must be responded and adapted to by 2020 with speed.

Much research and widespread analysis places a time frame of between 5 and 10 years on bringing carbon emissions down to 350 parts per million of carbon dioxide to prevent warming of the planet above a critical 2 degree rise (a point at which systemic feedback in the biosphere becomes 'runaway' and beyond our means of control. The term biosphere was coined by Edward Suess in 1875 as 'the place on Earth's surface where life dwells').

The atmosphere currently has 391 parts per million of carbon dioxide<sup>3</sup> and this continues to rise at 2 parts per million per year, despite current efforts to halt the rise. The Industry Task Force on Peak Oil, together with 'peak oil' experts, predict a global energy crisis within the next 10 years, when our current supply of cheap oil declines. As much of the world's industrialised economies are hugely 'oil embedded', a predicted global economic collapse adds to the 'carousel of challenges' currently faced by societies. A significant report<sup>4</sup> from leading insurers Lloyd's/Chatham House published in June 2010 connects our energy vulnerability to economic performance. Systemic change in how we live is required and is being experimented with and committed to on a daily basis by individuals, organisations and communities.

Within 24 hours of becoming Prime Minister for example, David Cameron visited the Department of Energy and Climate Change, signed the government up to the 10:10 campaign and declared tackling climate change a priority for the new Coalition Government. The previous Labour administration oversaw legislation to bring carbon emissions down by 80% by 2050 and 30% by 2020. Though such commitments need action to follow, the UK is the first country in the world to bring in such a law and typifies to some degree the extent to which the UK, as an industrialised nation and high carbon emitter, can play a leadership role in its responses to climate change and resource scarcity.

Primary research outlined in this report provides the Paul Hamlyn Foundation with an overview to help inform policy in line with systemic changes happening at all levels of UK

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<sup>3</sup> <http://www.noaa.gov/>

<sup>4</sup> The Lloyd's/Chatham House 'Sustainable Energy Security' White Paper published in June 2010 explores issues of energy vulnerabilities and the need to find a 'new energy paradigm'.

society as part of a wider global picture - and in particular in relation to the arts and cultural sector. Several UK projects were outlined at the Culture Futures conference held in Copenhagen in December 2009 as part of the UN Climate Change Talks.

The arts have a tradition of 'speaking differently' and nurturing cultural change. Drawing on metaphor and abstraction the arts tap deeply into intrinsic values of connection, story, place and meaning. There is a sense that science cannot play the role of interpreting the challenges we face or questioning what values underpin the need for change. The arts however have just such an ability to challenge the status quo, create emergent spaces for new ideas and engage people collectively at an imaginative level. The UK arts and cultural sector thus have the potential skills and expertise to be part of a historic period of systemic social change. This report reveals the patterns of how this is happening already - and likely to become more marked from now on. In the 'Big Here and Long Now', Brian Eno expresses well how the arts reinvent and renew our ways of seeing and being:

"Humans are capable of a unique trick, creating realities by first imagining them, by experiencing them in their minds....As soon as we sense the possibility of a more desirable world, we begin behaving differently, as though that world is starting to come into existence, as though, in our mind's eye, we are already there. The dream becomes an invisible force which pulls us forward. By this process it begins to come true. The act of imagining somehow makes it real..... And what is possible in art becomes thinkable in life." <sup>5</sup>

Given the scale of change required, it is easy to feel that 'not enough' is being done. The report highlights the considerable amount of work that is being done. Due to the speed at which work is being generated in response, information gathered here remains indicative and cannot be regarded as complete. New initiatives can be added every day. Whilst the report serves as a barometer of what is happening within the arts and cultural sector, it is also more complete, as far as we know, than anything else that exists to date.

The report aims to give the PHF a perspective on what is currently happening to inform and prioritise what could be done next in achievable steps.

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<sup>5</sup> Brian Eno, The Big Here and Long Now, 2003, [www.longnow.org](http://www.longnow.org)

# 1. METHODOLOGY

We set about this research in five stages:

1. Establishing scope of research and contacts to be made (see Appendix 1)
2. Collection of raw material and data including suggestions for interim survey (see Appendix I).
3. Data aggregated into Initiative List and categorised including a review of best practice and telephone interviews about behavioural change
4. Report writing.
5. Review with MMM/PHF and final drafting of report.

Standard desk research was undertaken via email and follow up phone calls. A bibliography was compiled (see Appendix II) – this is not comprehensive but includes the key reading influencing the report.

Models of good practice highlight the important role exemplars play in providing inspiration and demonstrating a practical commitment to change. Emphasis was placed on solutions rather than problems.

During a meeting to review the draft report in July 2010, PHF agreed reference should be made to ‘resource scarcity and climate change’ rather than ‘climate change and resource scarcity’ as originally cited. The change of emphasis recognised the lack of data returned in response to resource scarcity and the need to look at resource scarcity and climate change as interconnected. The impact of this on the report has been limited to a change of title and pointers to the significance of the current imbalance.

‘Resource Scarcity’ usually refers to food, oil, and water. For the purposes of the report ‘resource scarcity’ refers to oil (rather than non-renewable fuels such as natural gas and coal.) ‘Peak oil’ refers to the point in time when the maximum rate of global petroleum extraction is reached, after which the rate of production enters terminal decline. Due to our extraordinary dependence on oil in all aspects of our lives for power, heat, mobility, food production and health and including a huge range of ‘products’ from plastics to paints, fertilizers to medicines; its scarcity as a finite natural resource and the lack of any comparable substitute, the economic consequences of such scarcity present astonishing challenges for society and all its sectors - including the arts and cultural sector.

“The UK Industry Taskforce on Peak Oil and Energy Security, led by Lord Oxburgh, former Chairman of Shell warns that "a peak in cheap, easily available oil production is likely to hit by 2013, posing a grave risk to the UK and world economy". The warning comes from a broad spectrum of industry (Arup, FirstGroup, Foster + Partners, Scottish and Southern Energy, Solarcentury, Stagecoach Group, Virgin Group, Yahoo). The Task Force report suggests that risks to UK society from peak oil are far greater than those that tend to occupy government risk-assessment, including terrorism. As easily and cheaply available oil supplies fall off, high oil prices will become a long-term trend having profound direct and indirect economic impacts including:

- Increased oil-based input costs for manufacturing and agriculture
- Increased transport costs throughout the supply chain
- Wider macro-economic shocks via higher inflation, balance of payments deficit and reduction of consumer demand

Although the recession has depressed the oil price, this group forecasts that by 2013 (if not before) the price will again be escalating rapidly and assuming an increasing supply-demand gap, that little would restrict the upward movement of the price other than economic collapse.” (Quoted from <http://www.ttandc.org.uk/orgs/issues.html>)

Whilst climate change is widely recognised as a challenge for organisations and institutions to take on board, it is only one half of the story. As Richard Heinberg, Senior Fellow of the Post-Carbon Institute has said, using the analogy of a car: ‘Climate change is an end-of-tailpipe problem, while peak oil is an into-fuel-tank problem’. A ‘both/and’ approach is needed rather than an ‘either/or’.

Anecdotally, insights into the connectivity of the two, (along with the knock-on impact on economic performance), can trigger a leap in people’s understanding of how total the re-invention of our way of life needs to be. A veritable duty to act and think creatively appears to follow: whereas climate change urges us to believe we should change, peak oil brings closer to home the knowledge that we have no choice but to get down to the practicalities of reinvention.

Sustainable Ability - an MMM survey - was designed to find out more about the barriers to change and what interventions work in increasing the response to resource scarcity and climate change. We were asked to propose questions for the survey. These explored what support people needed for their work and decision-making processes in responding to

resource scarcity and climate change. Acknowledgement was made of the potential tension between a practitioner's personal and organisational practices. The final survey has been analysed by MMM.

## 2. THE INITIATIVE LIST – CATEGORISATION AND OBSERVATIONS

Data gathered over a three-week period between April/May 2010 formed the basis for the Initiative List with 190 initiatives itemised from the UK arts and cultural sector (given a more extensive research period it without doubt would have been longer.) The Initiative List is available in the form of an interactive web map on the MMM website at <http://www.sustainableability.com/map>. This was thought to be the most useful format on an ongoing basis as it enables the easy identification of initiatives, by activity, artform and by region. It also allows the list to become a 'live' source as further initiatives are created and identified.

Initiatives range in scope and scale from the personal manifesto and environmental policy of a solo artist Ellie Harrison (No. 54) to data collected by the Scottish Arts Council (No. 156) on consumption of gas, electricity and water amongst Scottish RFO's over the last three years.

The list also refers to a number of key publications and documents created in 2009/10 giving an overview of relevant umbrella bodies and their current research, policies, campaigns and strategies. These serve as an adjunct to the Initiative List. Long Horizons (No.114) <http://www.britishcouncil.org/climatechange-longhorizons.pdf> commissioned by the British Council and curated by Julie's Bicycle is a good example. Many publications and websites contain toolkits to make cutting carbon and engaging with change easier for practitioners.

A broad field of initiatives therefore exists, which - quoting John Hartley, then Arts and Ecology officer at Arts Council England - "stretch from the epistemological role of creative enquiry at a time of profound existential crisis through to emissions reduction and resilient business models within arts practice all the way to reframing the cultural offer in what currently falls under a government owned definition of 'sustainable development.'"

The sample of initiatives is not big enough to make informed judgments about artform or regional coverage. However the broad geographical and artform break down is as follows:

### *Geographical Regions*

The largest group comprised individuals and organisations whose activity is not *focused* in one particular geographic area and are listed as UK (75). Of other initiatives, 34 are from London; 18 from Scotland; 16 from South West; 12 from South East; 9 from East; 8 from North West; 6 from West Midlands; 6 from East Midlands and 1 from Yorkshire.

### *Arts and cultural sector*

The largest group, 52, is identified as Cross-sector; Music has 40 initiatives, Visual Arts 29, Heritage 21, Craft 19, Performing Arts 13 and Literature 5. Design, comedy and film are included with one initiative each. The spread across artforms will have been influenced significantly by the level of response received from umbrella bodies.

The Initiative List has been further categorised as follows. A few selected examples within each category are described along with a corresponding Initiative List number in brackets for ease of reference. Many initiatives cited were quoted by those consulted as examples of good practice.

### *Leadership*

A number of committed organisations and key individuals recognise that playing a leadership role as a change maker can influence others looking for moral guidance and direction. For example, The National Theatre's low carbon building management (No. 131); Live Nation, particularly in connection to large scale concerts in locations such as Hyde Park (No. 85); and Northern Stage (No. 132) looking at the local, regional and global environment. At an individual level, the singer Thom Yorke from Radiohead (No 144), is recognised as having played an influential role for some years.

### *Manifesto*

Ellie Harrison (No. 54) gives an account of her way of living and working to 'be the change' including details of diet, energy consumption, ethical banking, transportation and so on. She concludes by saying she is 'continually looking to improve on her environmental commitments and to influence those who she works with to modify their own behaviour.'

### *Policy*

The DCMS Climate Change Plan (No. 43) published in May 2009 includes a mechanism for looking at research, evidence, financial policy and practical measures relating to the climate change agenda. This includes flood management, building design and prioritises business processes, capital investments and policy developments, including the raising of awareness. One interviewee pointed out that although government is drawing up sustainable development policies, these are 'owned and conceptualised' by DEFRA and DECC leaving DCMS with a compliance duty but essentially remaining a 'bystander.' There is an important policy gap here for the arts and the cultural sector to frame and articulate. Examples of innovative best practice can supply evidence of the potential role the cultural sector can play in initiating and nurturing social and cultural change.

### *Strategy*

We failed to find an initiative with a strategy that addresses resource scarcity *and* climate change. A number of organizations and institutions however are taking a holistic approach to the challenges with consideration and implantation across the breadth of their activity – a level of activity which might be seen as 'strategic' whether explicitly stated or not. Examples include Killhope Lead Mining Museum (104), Ruichi Sakamoto (152) and University of the Arts (179)

The British Council's Long Horizons: An Exploration of Art+Climate Change (No. 114), with contribution to cultural discourse from scientists, writers, musicians and academics is not a strategy document as such, but makes explicit the British Council's commitment to the role of cultural relations in 'the fight against climate change' and work 'to develop shared trust and values to remove the barriers that currently prevent finding a global solution to this crisis'. It's high profile launch in Feb'10 at British Council Head Office with the then Minister of Energy and Climate Change and British Council CEO, Martin Davidson afforded the British Council the opportunity to give public focus to these issues for the first time.

### *Funding*

Artists Planet Earth (No. 13) direct profits made from the music industry to projects with artists that help reduce greenhouse gas emissions.

TippingPoint Commissions (No. 176): The first round of these commissions for art and climate change in 2009 attracted 178 applications and funds from DECC.

There are currently few funding sources specifically for the arts and climate change. Artists committed to engaging with these issues prove creative in raising funds from a range of sources to include New Economics Foundation, local government, and research councils. Cape Farewell's webpage summarising nine years' fundraising shows a successful example of this approach. <http://www.capefarewell.com/about/partners-and-sponsors.html>

### *Cultural Discourse*

An important contribution is made by initiatives creating space for reflection, knowledge exchange and collaboration. These range from one-off conferences, exhibitions (and accompanying programme notes) to publications, informal gatherings and regular away days. Guardian writer Madeleine Bunting's article for the RSA (No. 116) is a good example of where such debate currently sits - for example, whether or not artists have an obligation to engage with climate change and large scale issues of the day, and if so, how? Such discourse creates a focus for individuals and organisations to exchange ideas, share learning and offer support and inspiration to each other. Thorny issues such as international travel for artists and the moral responsibilities of artists can be aired. Over time such events help individuals track their own contributions and those of others, especially innovators and opinion formers.

The following initiatives provide examples of such cultural discourse. TippingPoint (No. 175); MMM Thriving on Less (No. 126); RSA Arts and Ecology (No. 151).

### *Artists and Arts Practice*

This is where mapping the responses to climate change and resource scarcity is most inspiring and shows that the present times are creating a historic opportunity for artists to rise to what Gustav Metzger calls the 'task and privilege of art through the ages to meeting challenge'. The inside covers of the British Council Long Horizons document show a continuous line running to several hundreds of artists and organisations currently addressing environmental impacts in their work.

Some projects such as Cape Farewell (No.30) and Platform (No. 138) maintain a profile and momentum over many years, proving to be groundbreaking and influential, giving rise to many other projects over time. In both these cases artists are involved in working with professionals in other sectors: scientists, geographers, economists and activists. The Laboratory of Insurrectionary Imagination (No. 105) came out of Platform and was responsible for the '20 year birthday celebrations' of BP's sponsorship of the UK arts in response to the Deepwater Horizon oil spill in the Gulf of Mexico. Novelist Ian McEwan (no.

92) wrote 'Solar' after travelling with Cape Farewell on the Noordelicht to the Arctic in 2005 with other artists and scientists. Alex Hartley's earlier expedition laid the seeds for his 2012 Cultural Olympiad Project, Nowhere Island (no. 133).

Works such as ExtInked (no. 60) in which animals in danger of extinction were tattooed onto arms of members of the public who adopted one of the threatened animals, show how art and activism combine deep personal commitment with audience engagement.

Others show how the materials themselves provide inspiration such as craftwork produced from waste paper (Leah Miles No. 109) and the use of recycled plastic to make lace collars (Laura Marsden No. 107) now bought by the Victoria and Albert Museum.

### *Audience Engagement*

Dalston Mill (No. 39) by EXYST in summer 2009 was part of the Barbican's Radical Nature, creating an open space for people locally to look at the future by bringing the best of the past. A connection made with the land included art, wheat growing and bread making within a conceptual and physical framework.

With the help of Julie's Bicycle many music festivals have found that successful carbon-cutting measures involve working closely with audiences. The Museum of East Anglian Life, MEAL (No. 127), has a holistic approach to audience engagement and takes account of the big picture of people's lives, in the historic past and in the present. Well-being and alternatives to an economy predicated on continuing growth are connected. The Museum has established a number of social enterprises around skills development for prisoners on probation and people with learning disabilities.

### *Research*

Three significant areas of research in the cultural sector came to light - there are bound to be many more.

Julie's Bicycle and The Oxford Environmental Change Institute conducted a seminal piece of research in the UK Music Industry in 2008, First Step (No. 66), identifying that the annual audience travel to music events accounts for 43% (231,000 t CO<sub>2</sub>e) of Green House Gas emissions from the UK Music Industry. The research maps the real challenge of reducing the industry's annual emissions of 540,000 by 80% by 2050. It also looks at a range of green factors in the music business such as CD packaging, seeing a trend away from

plastic to cardboard, amongst other systemic changes in the industry resulting from the work of Julie's Bicycle. Considered a 'foundational study' by the Oxford Environmental Change Institute into an industrial sector, First Step offered the opportunity for a 'wider understanding of patterns of emissions and paths to lower carbon futures in the UK'. Eight research papers have followed, all downloadable on [www.juliesbicycle.com](http://www.juliesbicycle.com). The latest, Moving Arts: Managing the Carbon Impacts of our Touring, for example, is in 3 parts to cover Bands, Orchestras and Theatre.

Dr Joe Smith (No. 102) at the Open University is conducting a longitudinal study, Creative Climate, of how societies learn about, respond to and learn to live with global environmental change. A related PhD research on culture and climate change is funded by the Ashden Trust. [http://www.open.ac.uk/socialsciences/staff/people-profile.php?name=Joe\\_Smith](http://www.open.ac.uk/socialsciences/staff/people-profile.php?name=Joe_Smith)  
Ciaran Mundy at Cardiff University (No. 32) is collaborating with social science and psychology academics, COIN (Climate Outreach and Information Network) and practitioners working with DECC and the Welsh Assembly to understand better the deeper shifts involved in behavioural change and the importance of placing emphasis on intrinsic rather than extrinsic values i.e. what matters 'on the inside' rather than the acquisition of material wealth. The research seeks to explore the role of the arts to re-focus attention on aspects of ourselves that value community, family, connection to others and nature.

### *Sector Knowledge and Exchange*

The significant work under way demonstrates how the arts and cultural sector can 'get up to speed' on changes to be made if organisations and individuals are willing.

The IFACCA D'Art Report No.34 Arts and Ecological Sustainability from 2008 (No. 93) summarises good practice whilst FLOW Associate Director, Bridget McKenzie, writes a blog that gives updates on the Culture and Heritage Sector  
[-http://ecoch.wordpress.com/tag/heritage/](http://ecoch.wordpress.com/tag/heritage/).

Most significant is the work of Julie's Bicycle (No. 103), an exemplar driver of change in the arts and cultural sector initially in the music industry, but now also in the performing arts, theatre and beyond. Julie's Bicycle energises a collective industry response and acts as educator giving organisations a positive, practical approach backed up by campaigns, research and toolkits. This gives organisations the opportunity to get onto a trajectory to measure and manage carbon emissions effectively. The work of Julie's Bicycle was the most frequently cited example of best practice and also appears under several different categories such as CO2 Reductions, Research, Toolkits, Audience Engagement, and

Leadership. Their current work with the Department of Energy and Climate Change together with strategic partnerships in both the music and theatre industries suggests their practical approach and expertise places them in a position to influence policy and strategy.

### *Data*

Much research in this area is underpinned by significant amounts of data collected both by individual organizations and strategically by bodies such as Julie's Bicycle (103) - whose work is underpinned by a principle of understanding (and measuring) environmental impact in order to take action to reduce it.

The Scottish Arts Council (No. 156) was the only statutory body to send actual data collected from the arts sector. This includes a breakdown of energy, gas and water consumption figures collected from RFOs.

### *CO2 reductions*

Julie's Bicycle (No.103) leads the field as the most significant groundbreaker in creating momentum in one sector (UK music industry) - now being transferred to the theatre sector (Greening Theatres with the Arts Council and the Greater London Authority) and internationally. Work is proceeding for an Industry Green Framework with tools to measure greenhouse gases with Julie's Bicycle advising DECC on its potential delivery more widely.

As an example of what one organisation has done, The Manchester Museum (No. 120) has worked with the Carbon Trust since 2007 to calculate the Museum's annual CO2 emissions (800 tonnes) and how to reduce this by 2011 to 500 tonnes by cutting energy consumption and reducing waste sent to landfill by 40%.

### *Transport and Travel*

There are many examples particularly within the music industry (many led by Julie's Bicycle though not exclusively) where audience access work has been combined with attempts to reduce carbon emissions. Car sharing and reduced tickets prices for travelling on specially arranged coaches are increasingly common, such as for the Download (49) and Latitude Festivals (No. 106). Such schemes save the public money but also educate them about carbon: three people in a car being the third most sustainable way to travel.

Issues of international travel for the arts and cultural sector are complex and can be emotionally fraught for those attempting to reconcile artistic excellence with environmental

responsibility. How do artistic imperatives to collaborate on an international stage tally with environmental considerations? At SLOWBOAT (No. 158), organised by Artsadmin and the British Council in June 2009, the international arts sector looked in depth at the complex issues of carbon intensity of international travel.

Britten Sinfonia (No. 27) experiments with its orchestra travelling to Poznan, Poland, by train and bus. The experiment was considered worthwhile though costly in terms of time and money.

### *Supplier*

The BS8901 British Standard trialled by the Manchester International Festival (No. 119) creates a template for organisations to work down the supply chain with venues, transport, technical, manufacturing and other suppliers and contractors. Suppliers who were identified as taking a sustainable approach included Abbey Road (5) and WhiteLight (181).

### *Materials*

Laura Cahill (No. 108) is one of an increasing number of craftspeople using recycled objects, including books.

### *Buildings*

There are many good examples of building-based environmental practice.

The Arcola Theatre (No.11) in Stoke Newington has taken a holistic view looking at everything from designing sets to sourcing local produce for the bar; concentrating on building local audiences and renewable energy sources.

Robert Butler's excellent article written on the National Theatre's (No. 131) website informs the public about the steps the theatre has taken in recent years to reduce its carbon footprint.

The museum, Gibson Mill, at Hebden Bridge (No. 72) generates all its power and water and disposes of its waste. Run by the National Trust it is model of sustainable development for visitors.

Heather and Ivan Morrison (No. 86) are artists who have devised a community Barn-raising project creating a low impact public structure to host workshops and festivals looking at challenges to come such as How To Prosper During the Coming Bad Years. Metal's

Chalkwell (No. 123) combines art and architecture refurbishing a Grade II listed building in Southend-on-Sea with renewable technologies.

### *Toolkit*

Julie's Bicycle (No 103) develops toolkits for CO2 emissions reduction for practitioners in music and the performing arts to cover transport, building, set design, catering, use of materials and marketing.

Edinburgh Book Festival (No. 52) is a good example of a leader over several years, developing thoughtful ways of reducing impact on the environment and sharing good practice. Independent Theatre Council (No. 95) runs training courses to prepare organisations in the arts sector for challenges to be faced in coming years and to 'grasp opportunities and minimise threats' of a low carbon economy.

### *Standards and Awards*

Green Awards for Tourism gave Artsadmin (No. 17) a Silver Award. A look at the ten-page audit for the award is informative of the huge amount of work involved in 'green' auditing. It includes monitoring water and energy to instigating a green action plan and file for staff, overhauling air conditioners, refrigerators, heating and cooling; the preparation and supply chains of food and drink; cleaning products used; recycling; waste; laundering; staff transport to work and much much more besides. Such work within an organisation can fall onto one person's shoulders or is done by a 'green team'.

The BS8901 British Standard for Sustainable Events was trialed successfully by Manchester International Festival (No 119) and is currently being developed as an International Standard.

### *Directories*

The Ashden Trust (No. 18) plays several roles including that of a directory of arts projects that engage with ecology and environmental issues and as a funder. Its director, Robert Butler, writes a blog on Ashdenizen and elsewhere.

### *Landmark Events*

Some events stood out as a result of the level of emphasis and number of references received from contributors. These could be regarded as 'landmark events' in relation to the profile they received amongst press, public and practitioners.

2009 saw a range of large public art exhibitions: Radical Nature, Art and Architecture for a Changing Planet at the Barbican (No. 143); Earth, Art of a Changing World at The Royal Academy (No. 50); Two Degrees curated by Artsadmin along with RETHINK programmed to coincide with the Climate Change talks in Copenhagen in Dec 2009.

### *Resource Scarcity and Climate Change*

All initiatives referenced climate change as a core driver for their activity.

Only two directly referenced resource scarcity or 'peak oil' in the research gathered, signalling the most significant 'gap' in responses to climate change and resource scarcity.

The Independent Theatre Council (No.95) refers to 'peak oil' in their training.

The Tooting Trashcatchers' Carnival in July 2010 commissioned by TippingPoint (No. 176) addressed twin challenges of Peak Oil and Climate Change within a community. The event was profiled at the Copenhagen Talks in Dec 2009 (Culture Futures) and used recycling as a metaphor for change, creating a large-scale community celebration from 'trash'. The celebration afforded an entire community to imagine a world beyond oil dependency.

### *Observations*

The small number of references to Resource Scarcity is considered significant. The arts and cultural sector are not alone in this. Climate Change is considered universally a priority. In July 2009 for example, DECC published a Low Carbon Transition Plan (LCTP) mapping how the UK would work towards a low carbon society. A public response was given by Rob Hopkins, founder of the Transition Movement (which explicitly works to address peak oil and climate change together as a necessity to achieve the systemic changes needed). Hopkins welcomed the plan in essence whilst outlining its weaknesses in not addressing both sides of the 'carbon' story: i.e. consideration of the inputs of our fossil fuel dependent economy as important as the carbon outputs being tipped into the atmosphere. Responses to peak oil complicate our response to climate change and vice versa. For example, the search for oil in high risk locations creates exceptional environmental damage and contributes nothing towards the practical preparations needed for a low carbon world.

It is arguable that in the short term the loss of cheap oil will have greater consequences for our lives in the UK than climate change. The groundbreaking report published in June 2010

by Lloyd's/ Chatham House 'Sustainable Energy Security' White Paper highlights issues surrounding energy vulnerabilities and risks for business, stressing that 'Business as usual' is not an option and that 'Peak oil presents the world with a risk management problem of tremendous complexity' – US Department of Energy 2007. The report highlights the importance of a collaborative response from active citizens, communities and businesses and that "energy security is now inseparable from the transition to a low-carbon economy". <http://transitionculture.org/2010/06/10/lloyds-on-peak-oil-climate-change-resource-depletion-a-historic-publication/>

A recurrent sense of things being 'piloted' emerged during research. At one level this proves exciting, at another there is evidence of practitioners, particularly those in management positions, of being overwhelmed with new demands, standards and information. Many are invigorated by the sense of challenge, adventure and doing things differently, but they are also overstretched. The SustainableAbility Survey analysis (see methodology above) makes further reference to this.

Few Trade Unions responded. It is possible they do not yet see climate change as their responsibility or what their members want. This may reflect a sense of powerlessness of individuals rather than a potential power of the collective in the face of the challenges faced.

Learning and Participation: Further analysis of the initiatives is needed to draw out elements that engage with the participatory arts, with young people and with non-professionals. Such analysis could be valuable given how crucial shared learning is to how societies change together and how vital it is to span boundaries of culture, generation and working expertise in this process.

Little work was seen on how societal change is being modelled - at individual and organisational levels - and the role the arts play in this. A lack of positive views of what a low carbon world will look and feel like: models of the future in our wider culture tend to be presented as disastrous, high tech or ultra-traditional and introspective.

Many responses drawn up and delivered strategically by finance or building managers - evidence that sustainability can sometimes be looked at in terms of financial sustainability. Such an approach precludes a deeper, broader response in the organisation say at an artistic level. Artsadmin are a good example of where the two go hand in hand: building management and artistic commissioning in collaboration through the international IMAGINE

2020 programme. The National Theatre is an example of where building management has been at the forefront of the organisation's response.

There was a limited number of networks making connections on environment in some sectors e.g. heritage and museum sector.

The Performing Arts appeared under-represented, whilst including excellent exemplars. Since the research period a number of productions have been staged including Earthquakes in London by Mike Bartlett, at the National Theatre.

There was little connection to or partnership with the burgeoning voluntary sector activity in this area often led by community energy and social change projects at grassroots levels (Isle of Eigg an example where 100 islanders developed renewable sources of energy in response to having no electricity). These initiatives (some funded by NESTA's Big Green Challenge) tap into social capital and the creative 'energy' of communities. In financial terms, they are modelling new kinds of social enterprise and creative skill. Transition Towns are doing the same as is Cambridge's Carbon Conversations where in-depth conversations are had around home, travel, and food. Technical fixes such as light bulb changing leads onto shifts in understanding needed for major social change involving both loss and possibility.

There are few studies of how change is sustained over the longer term. MMM has started to research into the qualities of resilience required of individuals and organisations and the Open University's Creative Climate led by Dr Joe Smith is a longitudinal study of cultural and social change.

A significant number of references emerged to feelings of disempowerment – especially in larger institutions and local government – where levels of bureaucracy or supply chain issues act as barriers to action. The Sustainable Ability Survey makes reference to this.

### *The Natural World*

It was not possible to categorise work drawing directly on our connection to the natural world as so much does in different ways. It is worth noting however that many artists recognise aspects of our global challenge stem directly from the loss of affinity to nature that our society once had. What the author Richard Louv has coined 'nature deficit disorder' sets off a cascade of disconnections - many cultural. The link between biophilia (the bond

between humans and other living systems) spirituality and the arts and cultural sector is likely to strengthen along with practices that draw few distinctions between art, our connection to the earth and everyday life. The Dalston Mill project (No. 39) is an example of how such connections can be made along with the recent work of Marcus Vergette's Time and Tide Bell.<http://www.marcusvergette.co.uk/bell.htm>

### **3. BARRIERS AND MOTIVATIONS TO BEHAVIOURAL CHANGE**

Behavioural change is a complex area of study looking at how people decide to change their routine behaviours, usually in response to social groupings. In relation to climate change and the global challenges of resource scarcity, there is intensive research being conducted across many disciplines from social marketing, addictive psychology, positive psychology, neuroscience and anthropology to work out why it is when the problems we face are so evident, that so many people choose to turn away from them.

We spoke to a range of people, knowledgeable about behavioural change - conducted interviews and read a range of relevant publications. We did not draw a distinction between human beings in general and arts and cultural sector practitioners although we did ask what role interviewees saw for the arts in relation to behavioural change. The repeated conclusion was that the pace of change is slow. Our dependence on fossil fuels has taken around 250 years to embed. Deep personal change is the most efficacious and demands engagement with the values that underlie the decisions we make – and our sense of who we are. This terrain is precisely one in which the arts and cultural sector are in their element.

One of the most interesting studies of behavioural change we found was instigated by the World Wildlife Fund. Natural Change - Psychology and Sustainability, invited a number of 'light green' leaders and opinion formers from diverse sectors over a period of a year to take time 'in nature' to reflect on the world and their roles in it. The study was designed to engage participants at the level of "experience, values and identity, rather than the knowledge and evidence-based approaches commonly used to communicate about sustainability issues." The approach was effective among participants in stimulating deep thinking about sustainability and about their own lives. The importance of a community of interest, providing support for personal journeys and critical reflection on sustainability was

evident. “This project” said one participant “is making me think big, prompting questions far beyond ‘is my washing up liquid environmentally friendly?’”

Such moments of insight shed light on the turning points in individual’s stories of personal change - moments at which people perceive they are a significant part of a change movement. The Sustainable Ability Survey also revealed that this was something wanted by many. It is the depth of such responses that help tap into a shift of consciousness, along with a sense of adventure, privilege and opportunity.

A contact at Carbon Conversations said that ‘Barriers to behaviour change’ – as an expression can be dangerous as it identifies individuals as the problem rather than seeing this as society’s problem which we need to tackle collectively.

“Significant human factors in enabling change include awareness of the issues, membership of a community of practice, and a sense of agency. People often feel powerless in the face of the enormity of climate change so it is important to build capacity to act at individual and collective levels.”

The concentration to date also on ‘small steps’ and people ‘doing their bit’ can also come across as patronising and disempowering as people sense small steps are inadequate. People need to feel they are part of something quite large in which they have a role. There is now a shift away from looking at problems at an individual level and more as a holistic societal one.

Behavioural change can be looked at as a journey of self discovery and as manipulation. A barrier is often the opposite of a motivation. We represent some of these key tensions by describing barriers and motivations as two sides of the same coin along with questions around how any individual may see things their own way. For example: for each person who experiences an ‘inner shift’ of awareness and connectedness to the natural world as a route to behavioural change, there will be someone else who prefers practical ‘outer action’ and someone else who views both with equal suspicion.

It is often a question of timing about when someone is ‘ready’ and willing to change. We can all be susceptible to not seeing something from another’s point of view. Simply sharing information is not sufficient. One person was quoted at a conference as saying: ‘We often think that ‘Somehow if you knew what I know, you would believe what I believe, and act accordingly’”. This approach can cause conflict and does not always hold true!

The following general points cover barriers and motivations to behavioural change: the former creating a vicious circle of disengagement, the latter a more virtuous circle of empowerment and responsibility. Any of the features of behavioural change listed below could be preventing greater breadth and depth of response to climate change and resource scarcity amongst arts and cultural sector practitioners. These are likely to be predominantly psychological features as the Initiative List provides evidence that many organisations find practical steps to adapt and change are possible, even within financial constraints. Personal ‘buy in’ from the leaders of organisations appears to be singularly important.

Points particularly relevant to the arts are highlighted and at the end of this section we quote Ciaran Mundy on work being done to look into the role the arts can play in tapping into intrinsically motivating aspects of behavioural change.

### *Barriers and Motivations to Behavioural Change*

Barriers can be characterised by suspicion and a moving away from a situation.

Motivations can be characterised by yearning and a moving towards a situation.

Key tensions between the two centre on:

#### *Isolation/Connection*

The realities of climate change and resource scarcity make people feel fearful. This fear in turn can make people feel isolated, separating them from others. The single most influential feature of behavioural change is that people are influenced by others’ examples and learn from them. When people feel isolated and are disconnected from others, they can’t learn from them. Such disconnection contributes to fear and loneliness increasing a sense of suspicion of change.

What are our fundamental needs for connection and how are they met? Do individuals feel isolated or supported in their work?

The arts create opportunities for bringing people together, creating a shared understanding and agency for change, along with incremental rehearsals of that change. Imagining and sharing change proves enjoyable.

## *Complexity/simplicity*

Climate change is only one part of the picture. There are many connections to be made between what is happening in the environment, species loss, resource depletion and how we live our lives. This can feel overwhelming. Is the interconnectedness of everything seen as a problem for people ('it's all so complicated') or, on the contrary, does it prove a simplification? ('I can see how it all connects'.)

Do practitioners working in the arts and cultural sector feel they now have more and more 'things to do' or are they spurred on by the awareness that systemic change gives them an historic sense of coherent purpose and connection?

## *Price and Inconvenience/v Reassessment of Priorities*

Both price and inconvenience are real barriers and calculating your climate footprint can be very complicated.

If an organisation or institution takes responsibility for this detail, it frees up its artists and audiences to engage directly with the work on offer.

The arts can promote intrinsic rather than extrinsic values thereby increasing the chance of overriding barriers of price and inconvenience.

## *High Consumption and Growth/Thriving on Less*

Overcoming the idea that consumption equates to purposeful living is the biggest challenge to behavioural change. The greater the GDP, the greater the carbon consumption. Our current political parties are more or less unanimous in their commitment to increasing GDP as sole basis for national economics. Alternatives are possible for example, Bhutan, which measures itself by Gross National Happiness and organisations such as NEF who are doing much concrete work in this area as referenced in their publication *The Great Transition*. <http://www.neweconomics.org/publications/great-transition>

Business models requiring financial turnover of consumption and production need to be reconciled to 'thriving on less' and reinvented for low carbon living. Sections of the arts and cultural sector have a high 'turnover' of product. What are the consequences of slowing down this prolific turnover?

## *Old/New Worldview*

We reject change if it threatens the way we see the world. As referenced above, many modern lifestyles assume continuous economic growth and acquisition of material wealth. Change will be rejected if this way of seeing things is threatened.

The arts create alternative worldviews with aesthetics and imagery enabling the imagination to see the world with new eyes. As Brian Eno has demonstrated the arts can help us exercise our imaginations. What are the basic concepts artists can address i.e. What is good? What is valuable? What matters 'on the inside'?

## *Inner/Outer*

Approaches vary. For some outward actions are all. For others an 'inner journey' of self-discovery and awareness of the natural world is AS important if not more so in terms of building a sense of hope and possibility in facing global challenges. The idea that meeting these challenges is a joyous adventure can be a 'turn off' for others.

The arts and cultural sector seek to resonate with the deep frames of our values and cultural stories. They can also affect shifts in this deep framing that ignore logic and reality.

## *Problem/Opportunity*

Do people feel the way they see the world is being threatened (e.g. success = growth), or have they travelled towards seeing there is opportunity for shared creativity in reimagining the world? A glass half empty that can be reframed as a glass half full? Given the scale of the challenges, optimism can be seen as blind and pessimism as irresponsible to future generations. Artists with a dynamic hopeful practice are proving to be pioneers of change - what the philosopher and activist Joanna Macy describes as 'committing oneself wholeheartedly without necessarily seeing the outcome of our work in our lifetime'.

The extent to which people can reframe the problem as an opportunity is fundamental to a new awareness of and excitement for the potential role of the arts. Transformation is a characteristic process of the arts and culture.

## *Suspicion of/Yearning for Biophilia (the bond or love between humans and other living systems)*

There is a sense that people no longer have the affinity with nature they once had. Although for some the connection to the natural world produces a yearning in people and is connected to spirituality; others are not comfortable when such terrain is identified and named.

Environmental art addressing its connection to the natural world head on can seem to fall flat on its face. Many artists testify to the difficulties of making such work. Mostly work has to come at the issues obliquely rather than tackling them head on.

The arts have the ability to create a new cultural narrative empathetic to the biosphere. Charting these contradictory approaches to biophilia is a barrier to overcome, but as the Initiative List shows there is a body of work creating a connection to the natural world.

## *Incoherence/Coherence of actions*

Sometimes people experience tension in creating a coherent response to resource scarcity and climate change, finding they compromise their commitment in practice. (e.g. addressing climate change in the content of work, but involving high carbon impact and international travel in its delivery).

It is useful to experience models where there is no disconnect between rhetoric and practice as in Gandhi's instruction to 'Be the change'. Some artists take an holistic approach to their life and practice along these lines. Clare Patey's Ministry of Trying to Do Something About It commissioned by the New Economics Foundation is an example of this. <http://theministryoftryingtodosomethingaboutit.wordpress.com/>

## *Slow/Fast*

We are too busy to change. We need to slow down to create real change, despite a sense of urgency. A natural response to a sense of emergency is to speed up, yet the evidence suggests the best thing we can do is to slow down.

Although the arts can meet a fundamental need for wondering, participation and reflection, they themselves are also subject to a machinery of over production and competition,

wasteful of people's creativity and energy. In gathering information we detected this tension for people working in the arts and cultural sector: the need to go fast, whilst needing emotional space to nurture a slower depth of response.

### *The arts and cultural sector*

In relation to the practical and behavioural barriers to greater breadth and depth of response, a polemic is emerging in the arts and cultural sector raising as many questions as answers. Do practitioners see the present times as creating a historic opportunity to rise to the 'task and privilege of art through the ages to meeting challenge'? (Gustav Metzger). Or is there suspicion of pressure to instrumentalise the arts to address these epic issues?

Virtually everything comes down to personal choice and the need to signal to others how one prioritises the need for change. At the Low Carbon Future for the Arts meeting in Feb 2010 at the National Theatre the current Chair of the Arts Council Dame Elizabeth Forgan, announced a shift in her own view that the arts sector now had an appetite to embrace these challenges and that her leadership would do what it could to move in this direction.

Is this a moral choice? Does art need to engage 'directly' with issues or be free not to engage at all? What responsibilities are involved here? How can larger organisations and institutions support artists who do choose to engage? Is it easier for individuals to meet these responsibilities in their personal lives than at work? At what point do personal lives breach professional boundaries?

What is certain is that the arts bring people together and nurture behavioural change, by questioning assumptions of modern life and experimenting with the norm. Do the arts and cultural sector fully recognise the role they can play in the wider whole to peel back the sense of disconnect experienced by so many? Some believe the arts have yet to hit their stride in terms of their radical nature and power to imagine, lead and rehearse systemic change.

Ciaran Mundy, director of Transition Bristol and co-founder of One World Wildlife is collaborating with activists, practitioners, social scientists and psychology academics at Cardiff University and elsewhere to help national governments (primarily DECC and the Welsh Assembly) understand the deeper cognitive impact of policies and communications.

“It is my hope that they can take a more nuanced understanding of 'communicating' on climate change and understand the role of the arts which has been to date largely missed. We need to work with deeper frames to elicit different values. The idea of science being value free isn't working; science is not in the job of communicating, whereas the arts communicate the things that matter to us: concepts, values, responses on a deeply subconscious level. We need to work in positive frames of sharing - these can be intrinsically motivating, doing things that matter on the inside that reaffirm who we are. These values of community, family and connection are the ones we operate by. We may think people are motivated by selfish goals, but the history of mankind shows we have evolved by being thoughtful. We wouldn't have a deeply complex civilization if we weren't. There's an assumption we cannot communicate about intrinsic values to people, but we can.

The arts have a central role in helping us all re-focus on aspects of ourselves that value community, connection to others and nature and move away from the predominantly consumerist and extrinsic world view that lies at the root of our astonishing predicament.”

Research by the World Wildlife Fund backs this up:

“The data clearly shows that self-enhancing, materialistic values are not only associated with worse environmental attitudes and behaviours, but also with less concern for social justice, equality and a world at peace, and less pro-social behaviour.

Individuals who engage in behaviour in pursuit of 'intrinsic goals' (of personal growth, emotional intimacy or community involvement) tend to be more highly motivated and more persistent in engaging in this behaviour than individuals motivated by 'extrinsic goals' (for example, of acquisition of material goods, financial success, image and social recognition). Moreover, more materialistic individuals tend to have higher ecological footprints. This report presents evidence that motivations which are intrinsic are more likely to lead to pro-environmental behaviour. Moreover, this effect is found to be particularly strong for more difficult environmental behaviours – those requiring greater effort.”

And finally, Mindspace doc sets out nine of the most robust (non-coercive) influences on our behaviour, captured in a simple mnemonic – MINDSPACE. These provide a useful checklist when considering behavioural change.

- Messenger: we are heavily influenced by who communicates information

- Incentives: our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
- Norms: we are strongly influenced by what others do
- Defaults: we “go with the flow” of pre-set options
- Salience: our attention is drawn to what is novel and seems relevant to us
- Priming: our acts are often influenced by sub-conscious cues
- Affect: our emotional associations can powerfully shape our actions
- Commitments: we seek to be consistent with our public promises, and reciprocate acts
- Ego: we act in ways that make us feel better about ourselves.

## 4. WHAT BEST PRACTICE LOOKS LIKE

(NB Specific examples of a wide range of best practice are noted in the Initiative List section above as identified by us and those consulted.)

The scale of challenge presented by climate change and peak oil creates a language of demand, urgency, nightmare and emergency. Celebrating opportunities for creativity and transformation appears counter-intuitive and yet this is where best practice can manifest itself, with the following characteristics.

### *A holistic view*

A holistic view is characterised by simplicity and an understanding of the interconnectedness of things. A systemic approach allows for meaningful ways of being and doing that really make a difference. Careful and creative choices are made which influence decisions on everything from water, waste, energy, transport, food and what work to make. One key decision - such as acting consciously for the Earth - helps make all other choices: complexity is thereby simplified. For many this is where art and activism meet, where a creative practice becomes the art of living.

A holistic approach is also often characterised by humility, compassion, sharing, collaboration, commitment, an unceasing application to work and a cautious calm sense of

hope. It is focused on solutions engaging instinctively with a 'depth and breadth' of response and involving personal commitment.

### *Deeper 'values-led' approaches*

Projects, like the WWF Natural Change Project show the importance of providing support for personal journeys and critical reflection on sustainability. "This project" said one participant "is making me think big, prompting questions far beyond 'is my washing up liquid environmentally friendly?'. Undergoing this within a community of interest where values are shared is key.

### *The creation of a positive vision*

We need a positive vision of what a low carbon world will look and feel like. The arts create myriad ways in which a positive vision can be experimented with and rehearsed. Working with imagination the arts diversify stories in our wider culture of the future that are commonly presented as apocalyptic or unrealistically high tech. In addition, UK arts practitioners have long been rehearsing how cultures can work together. Such arts practice provides a foundation for drawing on different cultures for a shared vision.

### *Space for Understanding of Loss*

Many narratives about solutions remove reference to what is being lost (bio-diversity, animal and marine species, certainty of the future) and protect people from the need to face and mourn the loss associated with climate change. Much of Joanna Macy's Work That Reconnects looks at this crucial area of our emotions and how shared space can be created for understanding and coming to terms with loss, where grieving is a point of transformation. In such processes, celebration and thankfulness for life become crucial stages in countering loss.

### *Communities of Activity*

Working in collaboration and embracing a breadth of approach are hallmarks of good practice. The challenges are so great there is a need to embrace different approaches to the problem. A diverse community of activities is needed in which learning and innovation go hand in hand and everyone feels supported.

Artsadmin and the LIFT Festival are working with 9 other European partners on IMAGINE 2020 to rise to the challenge of climate change and systemic changes needed in society. Their approach combines artistic commissioning with energy audits, marketing and low carbon travel. Many new communities of practice of this kind are springing up.

## 5. CONCLUSIONS

Practitioners in the arts and cultural sector are embracing the global challenges we face with inventiveness, a grand sense of adventure and some bravery to boot. They recognise that previous generations did not know what is known now to our own generation about resource scarcity and climate change and that future generations will know that we knew about the changes and responses that were needed.

Change is demanding though and will need to be sustained. We're living through what James Howard Kunstler refers to as a 'Long Emergency'. Developing resilience and pacing ourselves for reinvention over the long-term are imperative. How artists and those working in the arts and cultural sector can be kept going and renewed is as crucial a question to ask as how they can be encouraged to engage in the first place.

Four areas for particular attention stand out:

### *Inner change*

Evidence points to the value of supporting inner change and the shifts of consciousness that accompany such change. It is at a deep level that people engage most effectively with change and a belief that they are part of something larger and can make a difference. Fearing any contribution they make will not be sufficient can hold people back from committing to even small changes.

Cutting edge research points towards a societal shift in values needed from an extrinsic focus on material wealth to intrinsic values of community and connection. It is not straightforward for the arts and cultural sector to engage with such a complex and unknown terrain, but they are professionally equipped to work with meaning, risk and uncertainty.

The particular kinds of support they need at all levels, especially emotionally, require further research.

## *Collaboration*

Collaboration is essential: much can be achieved with others that cannot be done alone. Collaborations build dynamic energies especially with those outside the arts and cultural sector. They increase chances of work connecting to a wider picture and decrease a sense of isolation.

The role of collaboration extends to the social space created by the arts and cultural sector. They create safe space for rehearsal of new realities and go deep in transforming the way people see things. The shared social space of the performing arts can be particularly powerful.

## *New structures and models*

The voluntary and community energy sector is developing new business models very fast that tap into creative skills and new ideas, for renewable energy, food growing, car sharing, public health and social change projects. The cultural sector could explore these resilient social enterprise models, particularly when traditional sources of arts subsidy are in decline. It is worth valuing the experimentation being done by volunteers in local communities with local authorities beginning to delegate the running of assets such as land, buildings and participatory budgeting. The Coalition Government's 'Big Society' agenda provokes debate about the risks and opportunities inherent in building such partnerships and where the boundaries lie between professional and voluntary effort.

More awareness of energy scarcity and resilience is needed to drive this experimentation. An Energy Resilience Assessment<sup>6</sup> would allow businesses to analyse their dependency on fossil fuels in transport, heating, lighting, materials, income sources, catering and international travel.

The arts and cultural sector provide spaces for these kinds of emergent discourses and practices.

## *Participation and learning*

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<sup>6</sup> Energy Resilience Assessments run by Transition Training and Consultancy - a diagnostic service to investigate direct and indirect energy used by organisations. <http://www.ttandc.org.uk/orgs/work-with-us/energy-resilience>

Aesthetics, learning, experimentation and play are key aspects of innovation. All need to be encouraged interculturally and intergenerationally and across professional and non-professional lines. It will take time to adapt to an ecological age. Long-term scenario planner Barbara Heinzen<sup>7</sup> suggests societies learn through fostering qualities of neighbourliness; working together with intimacy and diversity, project by project over time. She concludes from a study of England from medieval times to the industrial era that learning and invention arise from neighbourly experimentation, bringing people together across conventional boundaries of class, gender, culture, generation and working expertise.

Our focus on the 'emergency' we are looking at narrows our cognitive faculties and closes us down to learning, stops us being able to play. This is a natural response to fear. We cease to be curious about new ways of thinking, doing. The arts have an essential role in opening us to learning and seeing things in different ways, building creative skills, lost crafts, learning through doing and engaging. (Neuroscience shows how collaboration in the arts, creativity and pleasure enhance our learning and negate the cortisol-inducing effects of fear). How we change is connected directly to how effectively we learn. How effectively we learn is directly connected to how we 'co-learn' with others and how this learning becomes 'embodied' enabling us to incorporate new knowledge into behaviour. The problems are so big we all need to be involved.

In conclusion there is a sense emerging from many of the conversations we have had - particularly with those in the sustainability and social change sectors, that the role the arts and cultural sector can play at this historic time can be ramped up significantly in terms of - literally re-imagining the world. In every part of the sector, inspired courageous leadership is required: the DCMS for example should be an inventive designer not a bystander in drawing up a vision of a low carbon world.

Joseph Beuys believed that 'everyone is an artist'. The arts have the ability to create a new cultural narrative empathetic to the biosphere. We should be able to look forward to an era in this country of the arts and cultural sector leading a radical reinvention of society, connecting to our lives and the natural world holistically on a deep and broad creative basis. Such work would be celebrated and understood alongside that of key workers such as teachers, midwives and farmers as contributing to the well-being of 'the place on Earth's surface where life dwells'<sup>8</sup> so that "what is possible in art can become thinkable in life."<sup>9</sup>

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<sup>7</sup> [www.barbaraheinzen.com](http://www.barbaraheinzen.com)

<http://www.barbaraheinzen.com/site/publications.php?catId=35&strCurrPath=A-+Articles+%26+presentations&dirToBrowse=E+-+Inventing+ecological+societies>

<sup>8</sup>The term biosphere was coined by Edward Suess in 1875 as 'the place on Earth's surface where life dwells'.

<sup>9</sup> Brian Eno, *The Big Here and Long Now*, 2003, [www.longnow.org](http://www.longnow.org)

This overview provides a snapshot of the significant number of initiatives under way. It offers a basis for Paul Hamlyn Foundation to re-examine its policies in response to the rich and varied landscape emerging in the arts.

Lucy Neal

Hilary Jennings

Sept 28 2010

## APPENDIX I: CONTACTS

An initial email (see below) was sent out to the following individuals and organisations:

From the ERA 21 Group:

- National Campaign for the Arts - Louise de Winter
- Independent Theatre Council - Charlotte Jones
- Association of British Orchestras - Mark Pemberton
- Dance UK - Caroline Miller
- Equity - Christine Payne
- Visual Arts and Galleries Association (VAGA) - Hilary Gresty
- VAGA Scotland - Ben Spencer
- Society of London Theatres and Theatre Management Association (SOLT and TMA)  
- Kathleen Hamilton
- Broadcasting Entertainment Cinematograph and Theatre Union (BECTU)  
- Willy Donaghy
- Museums Association - Maurice Davies
- Federation of Scottish Theatre - Jon Morgan
- Opera and Music Theatre Forum - Caroline Anderson
- Crafts Council - Rosy Greenlees and Sarah Bartholomew
- Artsadmin - Judith Knight and Mark Godber
- Musicians Union - Horace Trubridge

Also:

- Arts Council England - John Hartley
- Arts Council Scotland - Belinda Love
- Arts Council Northern Ireland - Jacqueline Witherow
- Arts Council Wales - via Fern Smith (Volcano)
- Museums Libraries and Archives (MLA) - Sue Wilkinson and Jo Woolley
- Museums and Galleries Scotland - Heather Doherty
- TippingPoint - Angela McSherry
- Julie's Bicycle - Al Tickell and Sian Alexander
- RSA - Michaela McGibbon
- Cape Farewell - David Buckland and Nina Lyndon
- Ashden Directory - Robert Butler
- Envirodigital - Hannah Rudman
- FLOW Associates - Bridget McKenzie
- Edinburgh Festivals - Amy Saunders
- Newcastle Gateshead - Edmund Nickols
- Greenpeace - Charlie Kronick
- Keith Khan and Penny Andrews
- Artists Planet Earth - Lorna Howarth
- New Economics Foundation - Ruth Potts and Paul Squires
- NESTA - Helen Goulden

The following people were interviewed about Behavioural Change - Barriers and Motivations

- Dr Barbara Heinzen - Geographer and Consultant Scenario Planner
- Ed Mitchell - Transition Network
- Ciaran Mundy - Cardiff University and Transition Bristol
- Toni Spencer - Schumacher College, Education for Sustainability
- Hardin Tibbs - Futures Researcher and Strategy Consultant
- Rosemary Randall - Carbon Conversations, Cambridge

## EMAIL SENT TO CONTACTS FOR INFORMATION ON SUSTAINABLE ABILITY

Dear X,

We write with a request for your assistance by XXX in a number of hopefully simple ways.

We have been asked by The Mission, Models Money Programme (MMM) to conduct primary research to map the current response to climate change and resource scarcity amongst the arts and cultural sector in the UK. The research is being undertaken with the support of the Paul Hamlyn Foundation. One of the key outcomes expected by them is a vision for sector wide action on climate change and resource scarcity and an outline of the specific roles ERA21 MMM and the Paul Hamlyn Foundation themselves might play in achieving this vision together with an outline partnership action plan with proposals to realise this vision.

It will seek to understand the practical and behavioural barriers preventing greater breadth and depth of response to these two issues. It will also look at motivations to behavioural change and form an important benchmark of what is going on in the UK arts and cultural sector. The research looks at:

- Artist-led responses to climate change and resource scarcity and
- Initiatives focused on organisations reducing their overall environmental impact

For the purposes of the research 'environmental impact' is defined here as taking in both reduction of carbon emissions and the sustainable use of limited or finite natural resources such as oil, water etc. (The Brundtland report, United Nations World Commission on Environment and Development 1987, defines sustainability as the importance of meeting the needs of the present without compromising the ability of future generations to meet their own needs.)

Please could you let us know of:

1. DATA that you or your organisation has written up that covers artist or organisational responses to climate change and/or resource scarcity
2. DATA that has been written up by someone you know in your sector; that exists in the public domain and that covers artist or organisational responses to climate change and/or resource scarcity
3. THREE examples of best 'sustainable' practice that you know of within your sector and a one sentence description of why you consider it best practice

We are contacting over 30 organisations working in the UK Arts and Cultural Sector in the UK, along with other key players, funders and providers. Data received from you will be aggregated and key issues summarised. Once this stage is complete, a survey will be designed to elicit views on behavioural barriers to change and motivations.

Such an accumulation of data will prove beneficial for all of us in the arts and cultural sector - and our combined work moving the wheels of change and acting consciously for the earth.

Thank you very much indeed for your help in advance. We look forward to hearing from you!

With best wishes,



## APPENDIX II: SELECTIVE BIBLIOGRAPHY

– the following publications have informed this report

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## **APPENDIX III: RESEARCH TEAM**

Lucy Neal and Hilary Jennings work freelance in the arts and cultural sector and have worked together on a range of enterprises since 2005. They are currently Co-Chairs of Transition Town Tooting, - a community-led initiative modelling social and cultural change inspired in practice by their professional work in the arts and cultural sector. They have recently jointly produced The Trashcatchers' Carnival in Tooting, July 4th 2010 which was awarded a TippingPoint commission for climate change and the arts.

### **Lucy Neal OBE**

Lucy Neal has a reputation worldwide as an innovative arts practitioner and educator with 30 years' experience. An international portfolio includes theatre festival production, social entrepreneurship, community activism and cultural commentary. She is especially interested in participatory and celebratory events and how they act as a catalyst for change.

She is the initiator and co-chair of Transition Town Tooting, a positive collective response in South West London to peak oil and climate change, creating a 20-year vision for a low-carbon future. As co-founder of Taking Up Space she is currently forming a network - part of the Cultural Leadership Programme - to look at the transformative role of the arts in systemic change within communities.

As Research Associate at the University of Winchester, Lucy led the Mary Neal Project: bringing to light the 'undertold' story of suffragette, social reformer and radical arts practitioner, Mary Neal, whose Espérance Club work with sewing girls in Kings Cross, is a model of arts and social change. Lucy has written and broadcast widely on the story and is currently researching a book on the subject.

As Co-Founder and Director of the LIFT Festival (London International Festival of Theatre) from 1981 to 2005, Lucy was responsible for pioneering one of the world's most innovative and adventurous theatre festivals. She is author of a number of publications, including The Turning World, with Rose Fenton. She was awarded the OBE for services to drama in 2005.

### **Hilary Jennings**

Hilary Jennings is a freelance consultant working across the creative & cultural and education sectors with extensive experience in setting up and facilitating partnerships and creating and delivering strategic projects. The focus of much of her career has been supporting and promoting learning, skills and more recently leadership development (she is an associate of the Cultural Leadership Programme) through network building, project management, assessment and evaluation, research, facilitation and coaching and mentoring.

She is heavily involved in community and artistic approaches to the twin challenges of resource scarcity and climate change and is currently Co-Chair of Transition Town Tooting. Previous roles included Industry Skills Director at Creative & Cultural Skills where her focuses were Craft and Leadership and Director of Policy and Development at UK Skills where she managed the UK entry to the World Skills Competition and the UK-wide National Training Awards, Apprentice Awards and Beacon Status programmes. In her varied career she has worked with greengrocers, lawyers, pharmacists, teachers, engineers, artists, writers, and (quite literally) butchers, bakers and candlestick makers.

<http://uk.linkedin.com/pub/hilary-jennings/8/331/611>