

Sustaining Great Art

Environmental report

YEAR ONE

results

AND HIGHLIGHTS

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ARTS COUNCIL
ENGLAND

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Foreword

Artists straddle the worlds of imagination and industry. Art challenges our ways of thinking and shows us alternative ways of living. This is what the Arts Council’s environmental reporting programme is about.

Last year we introduced environmental policy and action plan requirements for more than 700 of our revenue funded organisations.

It’s one of our criteria that the work we invest in must be resilient and sustainable in the social and business senses – and that it demonstrates an awareness of the general environmental context. To help our organisations implement this, we formed a partnership with Julie’s Bicycle, and this report summarises the first year’s work. It shows some truly encouraging results – 90% of organisations engaged with the programme and nearly 400 provided enough data to identify savings in energy and water use.

Among the latter figure were 62 cultural buildings that provided sufficient information to point to £810,000 combined savings from energy use. There are some 16,000 cultural buildings in the United Kingdom – which gives an idea of what our sector could contribute to the environmental agenda, and how many of our resources are currently wasted, a serious consideration given the alarming rises in utility bills.

The report highlights the issue of scale – nearly half the carbon footprint identified was generated by

just 28 organisations. While large organisations may be the biggest users of resources, it’s easier for them to make savings. The majority of organisations we work with are small or medium scale, and many work on the road or operate across multiple venues. It’s hard to reduce a transient footprint. So through Julie’s Bicycle, we will be continuing to help these smaller companies, offering advice and workshops and further developing the Industry Green Tools.

At Arts Council England, we know that we ourselves have a lot to do. We have been going through a period of reorganisation that has seen us cut our administration costs by half and close several regional offices. In the New Year, we will be moving our head offices from Great Peter Street to more efficient premises in Bloomsbury. When the dust has settled and the boxes are unpacked, we will be looking at the size of our footprint and considering how we can implement an environmental policy across the new structure.

Public bodies must show the way: the actions of Arts Council England have raised interest world-wide. Oxford City Council has introduced environmental reporting requirements for its cultural organisations; from next year Creative Scotland will be implementing environmental reporting and the International Federation of Arts Councils and Cultural Agencies is mapping out environmental engagement among its members to see how it can take a lead.

It would be wonderful if across the world, arts organisations came together to show what is possible, in what we say – and in what we do. We are communicators, and we can influence the public mood. Effective change will take the combined efforts of many organisations – change needs the momentum of organisational machinery. But that momentum is driven by individual voices and choices; we can all think how we can loosen our reliance on fossil fuels, ameliorate the effect and cost of our consumption and protect precious natural resources for our children and grandchildren. It looks like a daunting challenge, but we should be optimistic that we can make a difference: history shows us that when humans work together they can move mountains.

Alan Davey

Chief Executive,
Arts Council England

Executive summary

In 2012, Arts Council England became the first arts funding body in the world to embed environmental sustainability into the funding agreements of its major programmes. This move was based on its conviction – shared by arts leaders – that environmental sustainability is no longer a ‘nice to have’ but a business critical issue and an essential building block for a resilient arts and cultural sector. For the three years from 2012/13, **704 National portfolio organisations, Major partner museums and Bridge organisations¹ are required to report on energy and water and to have an environmental policy and action plan.** Arts Council England partnered with Julie’s Bicycle to provide tools, resources and support to the reporting organisations. Julie’s Bicycle was able to build on work already underway with 99 National portfolio organisations.

In the first year there was an impressive response: **90 per cent of all 704 organisations engaged** in some capacity with the environmental reporting programme, using the Industry Green Tools (carbon calculators) and online resources, creating environmental policies and action plans, and/or attending Julie’s Bicycle workshops or webinars². This was the first year of capturing energy and water data in this way for the majority of

organisations and it was challenging for some. Despite the high response, of the 615 organisations that registered on the Industry Green Tools, **397 provided energy and water data of sufficient quality for reliable analysis³** – that is 63 per cent of all engaged organisations (635) and 56 per cent of the total 704 organisations (301 cultural buildings and 231 offices including multi-site companies). It is entirely usual to have a wide range of data quality and these numbers, particularly in the first year, are outstanding.

Environmental impacts from energy and water use, waste and travel are commonly expressed in terms of carbon⁴. Julie’s Bicycle has estimated a **carbon footprint of 94,000 tonnes from the 397, or 56 per cent of the total, organisations that submitted energy and water data of sufficient quality for reliable analysis, representing an energy spend of £21 million** (£17 million electricity, £4 million gas). Based on this and other data, it was also possible to estimate a **total carbon footprint of 121,000 tonnes for all 704 organisations⁵ representing an estimated total spend of £26 million⁶.**

These results constitute the **biggest single dataset from arts organisations globally** and provide a robust starting point for years to come. This dataset has enabled Julie’s Bicycle to establish Arts Council England’s specific energy and water use benchmarks for cultural buildings and offices.

782 million litres of water were used in 2012 – 13⁷, the equivalent of 40 million regular baths⁸. As a slice of the overall carbon impact it is negligent, representing a mere 1% of the footprint, but this belies the true significance of water. Moving rapidly up the political agenda, water – scarcity, quality, depletion rates and availability – is an issue of growing public concern.

Larger organisations, prompted by higher utility costs and regulation (primarily the UK’s Carbon Reduction Commitment Energy Efficiency Scheme⁹) tend to be more advanced, helped by greater staff capacity and a more visible level of public accountability. Year one data analysis shows that four large organisations generated 21 per cent of the 2012/13 carbon footprint, and 28 (including the four largest) generated 50 per cent. While a small number of leading organisations are included in the top 28, there is still significant potential for overall improvement.

¹ 681 National portfolio organisations, 16 Major partner museums and seven Bridge organisations.

² Seven workshops in four regions with 241 participants and 18 webinars with 154 participants.

³ The following data was excluded from the data analysis: venues and office data covering less than a 12 month period; estimated home office data; and data which was more than double or less than half compared with Julie’s Bicycle and Chartered Institution of Building Services Engineers benchmarks.

⁴ See appendix 1 for further detail.

⁵ Julie’s Bicycle combined carbon and expenditure data for 397 organisations to work out an average carbon emissions per £1,000 unit of expenditure – 81 kilogrammes. Applying this average to all 704 organisations, assuming similar behaviours, would result in a total carbon footprint of 121,000 tonnes of carbon.

⁶ Assuming 121,000 tonnes of carbon breakdowns the same as for the 94,000 tonnes - ie 56% electricity, 44% gas, under 1% water - a total energy spend of £26 million is estimated: £17 million electricity and £9 million gas.

⁷ This excludes bottled water.

⁸ Nice & Serious and Waterwise <http://everylastdrop.co.uk>

⁹ <https://www.gov.uk/crc-energy-efficiency-scheme>

Key observations are:

- larger organisations and cultural buildings have the greater impact with just 28 generating 50 per cent of the 2012/13 carbon footprint. While in general these organisations find it easier to meet reporting requirements, some are in the early stages of taking action and offer good potential for improvement, others are making rapid progress, while some are outstanding
- the greatest potential for improvement still lies with those organisations that are in the early days of acting on environmental sustainability
- levels of engagement and reporting have generally been higher for theatre, Major partner museums and visual arts as compared with literature, dance and music. Museums and theatres in particular have already been targeted by specific environmental initiatives, something which has not been the case for the other art forms
- data quality varied across artforms. For example, all data provided by Major partner museums¹⁰ was of sufficient quality for inclusion in the analysis compared with just over a third for literature. **143 organisations were unable to provide data** for reasons beyond their control. **150 organisations went beyond Arts Council England requirements** and reported on energy, water, travel, waste, tours and productions

- **62 cultural buildings provided more than one years' worth of data and of these, two thirds reduced carbon emissions overall (from energy use only). Their combined 20 per cent energy use reduction over two years generated savings of 4,000 tonnes of carbon¹¹, a cash saving of £810,000¹²**
- if, with another year's good data, we assume that **301 cultural buildings manage to achieve the same level of performance it would represent a total 13,000 tonnes carbon saving and a £3 million energy bill reduction** on current tariffs. Both energy and water tariffs are set to rise providing more incentive to take action. There are an estimated 16,000 cultural buildings in the UK¹³. This is a major opportunity to leverage latent capacity into creativity and culture.

Aside from the figures the programme has stimulated ideas, debate and learning and prompted a huge increase in the number of cultural organisations taking environmental action. The results of the first year evaluation survey show that **79 per cent of respondents (354 in total) agreed or strongly agreed that 'Arts Council environmental reporting has made or can make a positive difference to our organisation'** and **86 per cent agreed or strongly agreed that '(it) has made or can make a positive difference to the arts sector as a whole'**.

Reporting levels correspond to the accessibility of data. Hence cultural buildings provided the most comprehensive datasets, followed by offices, while events struggled, reliant as they are on complex supply chains, short term contractors and a nascent energy measurement industry.

Environmental action can be challenging for smaller organisations with less spare capacity or housed in shared buildings, especially when dependent on landlords or other tenants for data. But there are numerous examples of smaller organisations, naturally nimble, driving environmental change by using their creativity and focusing on the activities where they can make a difference, whether that be production design, artist or audience engagement or tour planning.

Artistic responses have proliferated around sustainability. The relationship between creative content and the organisational – or cultural – context in which it is made is intimate, the context often framing the content. It can be surmised that the flourishing of creative invention around sustainability is intimately connected to flourishing confidence, expertise and literacy evidenced across the creative community.

¹⁰ While all 16 Major partner museums reported, the partnerships cover 96 individual organisations and reporting did not cover all 96.

¹¹ The majority of the 62 buildings reduced energy use, but for some, energy use remained constant or increased. The calculated savings are gross savings (ie based only on those which achieved reductions), and not net (ie all reductions less all increases).

¹² Based on actual energy use data and the Department of Energy and Climate Change's average energy tariffs.

¹³ Association of British Orchestras (2011), <http://www.abo.org.uk>; British Phonographic Institute (2001), <http://www.bpi.co.uk/default.aspx>; First Step, UK Music Industry Greenhouse Gas Emissions for 2007, Julie's Bicycle (2007) and Environmental Change Institute, Oxford University, Oxford; Moving Arts, Managing the carbon impacts of our touring, Volumes I, II and III. Julie's Bicycle, London (2010); Green Visual Arts, Mayor of London (2010) and Greater London Authority, London; National Arenas Association (2011), <http://www.nationalarenasassociation.com>; Theatres Trust database, <http://www.theatrestrust.org.uk>

ENGAGEMENT



90% of 704 organisations engaged



79%

Environmental reporting has made or can make **A POSITIVE DIFFERENCE TO OUR ORGANISATION**



86%

Environmental reporting has made or can make **A POSITIVE DIFFERENCE TO THE ARTS SECTOR**

CARBON & CASH SAVINGS



Energy reductions of **62** cultural buildings saved



Similar reductions by **301** cultural buildings would save



savings of **£810,000**



savings of **£3 Million**

RESULTS

year 1

2012-2013

• ENVIRONMENTAL REPORTING •

CARBON IMPACT



£21 Million
energy spend

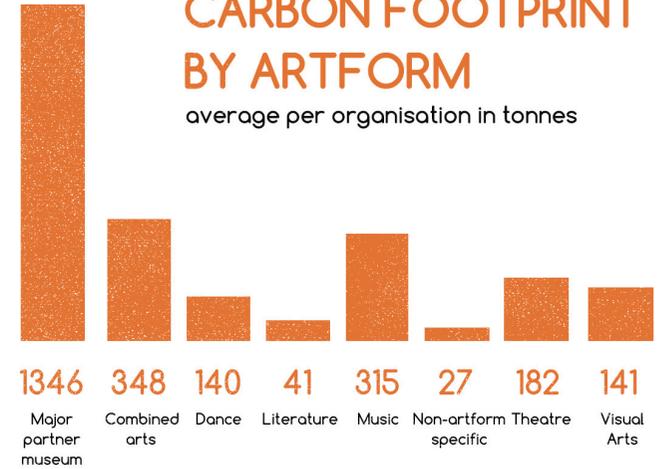
based on the energy and water use of 397 organisations = 56% of total



estimated for 704 organisations based on average carbon per £1,000 unit of expenditure for 397 of 81kg

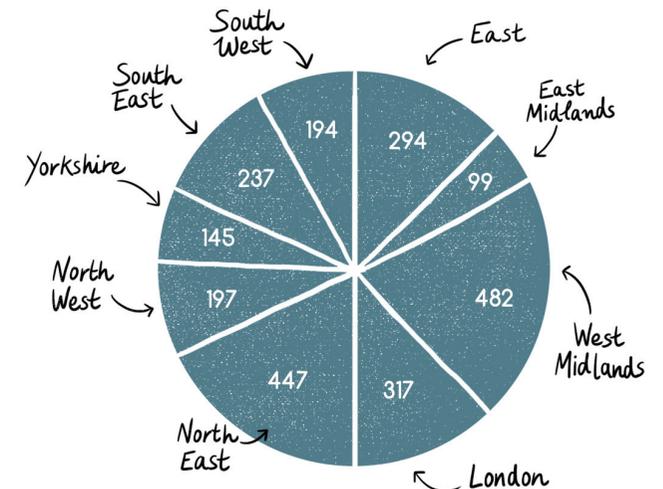
CARBON FOOTPRINT BY ARTFORM

average per organisation in tonnes



CARBON FOOTPRINT BY REGION

average per organisation in tonnes



Key recommendations

A differentiated strategy for year two and beyond

A distinct approach is needed for smaller organisations, offices and events unable to provide meaningful energy and water data, and for organisations whose primary activity is touring and events, for whom reporting on other sources of environmental impact, such as transport and waste, may be more meaningful. Julie's Bicycle will explore options with the Arts Council for tailoring support and resources to different levels of readiness and need. Julie's Bicycle is developing support for different artforms in the form of tailored resources and events to complement the environmental reporting programme.

Collaboration and information exchange to accelerate good practice

There is plenty of evidence from collaborations such as the London Theatre Consortium, Newcastle Gateshead Cultural Venues and Manchester Arts Sustainability Team to prove that exchange and collaboration across the arts and culture can catalyse scaled change and accelerate learning. Further opportunities to collaborate have been requested throughout year one. Identifying the key characteristics for effective knowledge transfer using the hundreds of stories and resources already gathered would yield exponential benefits for the creative community across the UK.

Sign posting and supporting investment

While initial scepticism has largely evaporated, some organisations are still concerned about how environmental performance will be linked to future Arts Council England funding. Communicating if and how environmental performance will influence funding assessment criteria would preempt and allay these concerns.

Arts Council England's integration of sustainability requirements into large and small capital grants is already proving an important driver and stimulating longer-term investment in sustainable infrastructure. Specific sustainability expertise for those applying for these grants and signposting to other environmental financing opportunities would leverage greater skills and investment into the sector and reinforce the overall commitment from Arts Council England to environmental resilience.

Stretch ambition, extend practice and communicate with confidence

Year one has created a baseline for the majority of the organisations funded by Arts Council England. It has also witnessed a huge range of imaginative responses that far exceed reporting requirements from many organisations all over the country. Encouraging and reinforcing the widespread commitment to sustainability by reinforcing and celebrating good stories will deepen ambition and build confident communications.

Consider now the types and scales of investment and competencies that the creative sector will need beyond 2016

The arts and cultural community are as subject to external forces as any other. Some of these forces, such as climate change, are compromising the capacity of our total infrastructure to cope and, in the interests of long term resilience, have made it necessary to widen the parameters upon which decisions are made.

These parameters stem from our custody of the environment: the sourcing and control of energy, cost and availability of commodities and raw materials, land and the built environment, and the organising of human and technological solutions. A holistic approach to arts and culture, intent on shoring up strength and wellbeing over the coming decades, will consider the likely systemic changes already influencing mainstream thinking and put environmental sustainability and innovation at the forefront. This thinking should start now.

'This move by Arts Council England brings environmental sustainability into the mainstream, making it an important business issue within the sector.'

David Joseph, Chairman and CEO,
Universal Music UK

Part A The strategic context

1. External context

We live in an age of consequence and it is prompting transformation everywhere. We know that what we exploit of the earth's natural resources – water, oil, gas, food – and how we manage these resources is shaping the future.

The latest, and richest evidence yet, about climate change and the environment is summarised in the Intergovernmental Panel on Climate Change's 5th Assessment Report¹⁴. Collated by thousands of scientists from 130 countries, the report concludes that it is extremely likely that humans are adversely affecting the climate and that we should act rapidly to expedite a low carbon global infrastructure. While the political spotlight has been on carbon, other areas of concern are rapidly gaining hold, particularly water, biodiversity loss and soil.

The domestic backdrop to all of this is tough: divided and diminishing public concern and continuing uncertainty in the UK's policy framework is hampering growth in sustainable infrastructure. The consequences of the financial crisis have directly impacted on the low carbon economy, and continue to do so indirectly. Firstly, state investment and

policy tools which encourage growth were cut throughout 2011 and 2012. Although subject to the 2008 Climate Change Act¹⁵ current policy that incentivises low carbon initiatives is under threat, specifically green levies on energy. This is in spite of record renewable power generation output¹⁶.

Unsurprisingly China took the global prize for investment in renewable energy last year at \$66.7 billion, 20 per cent up on the previous year. Here in the UK private sector investment in the energy sector as a whole rose to £11.6 billion in 2012, outstripping other major sectors such as transport, construction and financial services. The total represents around 10 per cent of UK capital investment in 2012 and directly employs some 125,000 people, while an estimated 539,000 jobs were supported through the industry's supply chain – one in every 45 jobs in the UK¹⁷. The green economy is here to stay.

Reasons to be ambitious are compelling and have convinced large swathes of the UK's business base. The price of gas and electricity has stubbornly increased over the past eight years after a decade of

falling prices. Last winter all of the big six energy suppliers increased gas and electricity prices by 6 to 11 per cent. So far this autumn five of the big six have announced price increases of 8.5 to 11.1 per cent to be implemented before the end of the year. While in the medium to long term the pressures on price all appear to be upwards, the fastest and cheapest way for most organisations to safeguard against price increases is through energy efficiency. But predicted energy price rises don't tell the whole story. In November 2013 two important reports, both backed by the investment community¹⁸, were published highlighting the prospect of stranded assets – investments in fossil fuel based companies which are likely, given time, to plummet in value. The International Energy Agency has calculated a global carbon budget that accommodates the burning of one third of existing fossil fuel reserves by 2050 which makes this threat very real; at least two thirds of fossil fuel reserves will not be monetized if we are to stay below 2°C of warming.

¹⁴ <http://www.ipcc.ch>

¹⁵ The Climate Change Act commits the UK to reducing carbon emissions by 60 per cent by 2050. The business and public sectors generate over a third of UK carbon emissions.

¹⁶ International Energy Agency, World Energy Outlook 2013.

¹⁷ Ernst and Young: Powering the UK, October 2013.

¹⁸ Meteos: *Systems not Siloes*, November 2013; Ceres: *Unburnable Carbon*, November 2013

In the US more than 40 institutions and 16 cities are divesting fossil fuel assets, and student divestment campaigns have sprung up at 20 UK universities, including the three with the largest investments: Cambridge, Oxford and Edinburgh. Norway's Sovereign Wealth Fund could soon become the largest institutional investor to date to abandon coal investments after the Labour Party called on the new government to reform the \$800 billion fund's lending policies. This is a nascent issue for the arts in the context of pension funds, shareholdings, endowments; and old debates are reviving around sponsorship.

Human wellbeing is dependent upon 'ecosystem services' provided by nature for free. Such services – water, air purification, fisheries, timber production and nutrient cycling – are predominantly public goods with no markets so their loss is not detected by our current economic incentive system and thus continues unabated. The sure-fast way of halting this decline is to build these externalities into pricing and to extend the time scales for investor returns so that impacts over time – such as the costs of pollution-related disease, or artificial pollination – are recognised. Updated two months ago, the Department for the Environment and Rural Affairs (DEFRA) published its *UK National Ecosystem Assessment 2011*¹⁹, the first analysis of the UK's natural environment in terms of the economic benefits it provides, with a framework and design principles for payments to ecosystems services. This was in response to the United Nations' *The*

*Economics of Ecosystems and Biodiversity to Business*²⁰, now widely recognised as a critical policy shaper for the years to come. The most likely outcome will be higher prices which reflect truer costs.

Water and its availability and quality has rapidly shot up the barometer of environmental concerns in the last five years. Globally it is the current most critical component for human and natural welfare, it is a measure of equity across the globe and a symbol of a society's relationship to natural capital. The consequences of poor or inequitable water custody are deeply worrying. In England high quality water is easily available and extremely cheap to everyone (despite rising prices). Never-the-less water in the form of precipitation and flood risk – including risk to buildings and collections within the cultural and heritage estate – directly concerns us. Unlike atmospheric concentrations of CO₂, water is a tangible natural asset and therefore a potent symbol of sustainability.

Whilst it is tempting to move on from the uncomfortable realities of environmental sustainability in favour of other trends such as digital, we do so at a huge risk and should instead be looking at exploring synergies. A thriving digitised economy is no guarantee of a lower carbon, less wasteful economy, but could offer huge opportunities to be so – which is why Google, Apple, Spotify and many others are investing staggering amounts into renewable and zero waste technologies.

They have recognised that their business is contingent on minimising risk and impact, and maximising reliability in the energy system. The intervention by Arts Council England to make environmental measurement and reporting a requirement is, like them, a move that recognises inherently the longer term risks and opportunities of the green economy.

Capital infrastructure has also been the focus of significant regulation, to improve current building stock and to build for the future. Regulation is only one reason why our buildings are crucibles for innovation. The arts and cultural estate, as evidenced throughout this report, offers exciting opportunities for fresh thinking – infrastructures, purpose, relationships to local and global communities, use, legacy and resilience.

¹⁹ <http://sd.defra.gov.uk/2011/06/national-ecosystem-assessment-synthesis-report>

²⁰ <http://www.teebweb.org>

Part A The strategic context

2. Arts and culture context

Where does art and culture fit into this landscape? In obvious ways the sector is as subject to the external influences described here as any other. But there are also reasons to act that are peculiarly our own and which acknowledge that the creative sector predicts, influences, and reflects culture in the widest sense. Understanding current constraints is forcing new thinking – diverse economic, material, and community infrastructures are emerging everywhere. And much of this is happening within the arts.

England is well ahead of our European peers in terms of a coherent and strategic response to climate change and environmental impacts manifest in the many initiatives and art works on the theme of sustainability and by the Arts Council's reporting requirement. England also has something quite unique: the quality and the quantity of our environmental measurement data collected via the Industry Green Tools. The arts and culture sector in England has led the world by amassing enough data to begin to reconceptualise our understanding of business performance in relation to environmental sustainability. Developing the data through improving digital platforms and functionality will be vital over the next few years so that we nurture this

new asset base, exploit it for positive change, and improve it. It will serve us well.

Year one data analysis shows that four large organisations generated 21 per cent of the 2012/13 carbon footprint; and just 28 (including the four largest) generated 50 per cent. While the report shows that the large institutions were responsible for the greatest savings, it remains the case that 99% of creative and cultural businesses in England have less than 50 employees.²¹ We must respond to the needs of the smaller companies with as much imagination as the large. Further, organisations already leading in this area are more likely to see energy use and carbon stabilising, as improvements generally become more difficult over time. This group however represents the most exciting potential for finding new and better ways of doing things and developing business models receptive to emerging constraints and innovations.

As evidenced in this report, we can expect to see real savings of carbon, and cash. Over time we can also expect increased demand for investment into sustainable capital infrastructure, training, and knowledge transfer. This should be fostered.

Building mechanisms over the long term that

support resilience means that commodity pricing, forecasting and availability, capital infrastructure, market trends, energy security, investment and sponsorship are key issues of governance. Environmental literacy and skills, low impact business opportunities, and the 'social contract' – the 'do-no-harm' principle underlying public funding – are also essential. How our governing bodies and leadership teams understand, prepare and take steps to ensure that their charges are in the best shape for the future will be a focus for 2014.

The effect that Arts Council England reporting requirements has had on the wider arts and creative sector is a model of how effective interventions can be forces of wider change. Oxford City Council has introduced reporting requirements and a support programme for its cultural commissioned organisations that aligns directly with Arts Council England requirements, Creative Scotland recently announced that from 2014 it will ask funding recipients to provide environmental information (with the Industry Green Tools licensed to Creative Carbon Scotland)²².

²¹ <http://creative-blueprint.co.uk/statistics/reports/national-statistics>

²² <http://www.creativescotland.co.uk/about/our-policies#Environment>

Industry Green Tools have also been licensed to Live Performance Australia and translated into seven European languages. And finally, the International Federation of Arts Councils and Cultural Agencies is mapping environmental sustainability in the arts and cultural sectors internationally to identify what role their membership can play in fostering a global community of environmentally engaged and active arts organisations.²³

Clearly the intervention by Arts Council England has served as an inspiration to others and helped to propel the value of sound environmental data and the importance of practical responses onto an international stage.

Examples throughout this report illustrate the scale of practical engagement – but don't quite describe the creative energy in the artistic community. The relationship between the imaginative and innovative creative content inspired by environmental themes, and the organisational or cultural context in which it is created, is a close one. The context itself often inspires and reinforces the content. Therefore developing the skills and environmental literacy to support action can catalyse a deeper and more encompassing relationship with the emerging world. In this hypothesis the intervention by Arts Council England has already had a direct impact on the landscapes in which art and culture can flourish.

At moments of upheaval – and we are indeed at one of those – creativity of the highest order comes into being. Our challenge now is to recognise this as leadership and build on it.

²³ <http://www.ifacca.org/announcements/2013/11/21/arts-and-environmental-sustainability-survey-arts>

Part B Programme results, learning and next steps

1. Programme introduction

In 2012, Arts Council England became the first arts funding body in the world to embed environmental sustainability into the funding agreements of its major programmes. This move was based on its conviction – shared by arts leaders – that environmental sustainability is no longer a ‘nice to have’ but a business critical issue and an essential building block for a resilient arts and cultural sector.

‘Our commitment is motivated by both ethical concern and economic imperative.’

Alan Davey, Chief Executive,
Arts Council England²⁴

For the three years from 2012/13, 704 National portfolio organisations, Major partner museums and Bridge organisations²⁵ are required to report on energy and water and to have an environmental policy and action plan. While these measures do not of themselves guarantee environmental improvements, they help build environmental literacy, set priorities and create a foundation for confident action. Arts Council England partnered with Julie’s Bicycle to provide tools, resources and

support to the reporting organisations. Julie’s Bicycle was able to build on previous work already underway with 99 National portfolio organisations.

In this first year an outstanding 90 per cent of all 704 organisations engaged with the environmental reporting programme, notably using the Industry Green Tools (carbon calculators) and online resources, creating environmental policies and action plans, and attending Julie’s Bicycle workshops or webinars²⁶. Analysing the data from year one, Julie’s Bicycle has estimated a carbon footprint of 94,000 tonnes from the 397 organisations that submitted energy and water data of sufficient quality for reliable analysis²⁷, representing an energy spend of £21 million. These results do not paint a complete picture of every single organisation; however they do constitute the biggest single dataset from arts organisations globally and a very robust starting point for years to come. It has allowed Julie’s Bicycle to estimate the carbon and cash savings already realised and project potential savings, which are also compelling.

Initial scepticism has largely dissipated. The programme has stimulated ideas, debate and learning and prompted a huge increase in the number of cultural organisations taking environmental action. The results of the first year evaluation survey show that 79 per cent agreed or strongly agreed that ‘Arts Council environmental reporting has made or can make a positive difference to our organisation’ and 86 per cent agreed or strongly agreed that ‘(it) has made or can make a positive difference to the arts sector as a whole’. This conviction is underlined by the hundreds of inspiring accounts of environmental progress shared with the Arts Council over the last year, highlights of which are included in this report.

‘There has been widespread endorsement of the Arts Council’s move to build sustainability into the fabric of the cultural sector, as the business benefits, carbon literacy, positive branding and ethical case for action have all gained hold.’

Alison Tickell, CEO, Julie’s Bicycle

²⁴ <http://press.artscouncil.org.uk/Press-Releases/Arts-Council-to-embed-environmental-sustainability-into-funding-5e3.aspx>

²⁵ 681 National portfolio organisations, 16 Major partner museums and seven Bridge organisations.

²⁶ Seven workshops in four regions with 241 participants and 18 webinars with 154 participants.

²⁷ The following data was excluded from the data analysis: venues and office data covering less than a 12 month period; estimated home office data; and data which was more than double or less than half compared with Julie’s Bicycle and Chartered Institution of Building Services Engineers benchmarks.

Part B Programme results, learning and next steps

2. Road to resilience

'By resilience we mean the vision and capacity of organisations to anticipate and adapt to economic, environmental and social change by seizing opportunities, identifying and mitigating risks, and deploying resources effectively in order to continue delivering quality work in line with their mission.'

Great art and culture for everyone – 10 year strategic framework,
Arts Council England, October 2013

Environmental sustainability is an integral component of resilience. Those organisations which recognise that building environmental considerations into current and future thinking will optimise efficiencies and, crucially, help to future proof against risks including energy and water price increases, the cost of materials and other commodities and the possible consequences of climate change such as more extreme weather. The most recent public opinion polls suggest that climate change is returning as an issue of broad public concern. If this trend continues arts and cultural organisations would be well advised to position themselves in relation to their public sustainability profile.

'Better resource management and efficiency will ensure that not only are our organisations more sustainable, but that their subsidy goes further and generates greater value.'

Nick Starr, Executive Director of the National Theatre²⁸

First year reporting has revealed a wide range of responses on the road to resilience. Drawing on insights gathered from organisations in year one, Julie's Bicycle estimates that:

- 10 per cent haven't yet taken any action on environmental sustainability
- 45 per cent are starting out
- 35 per cent are making good progress
- 10 per cent are leaders

'There is no more essential task for us all – as citizens and as companies – than to start to live within the sustainable means of our planet.'

Anthony Sargent, General Director, Sage Gateshead

Sage Gateshead aspires to be one of the UK's most environmentally sustainable arts venues. With environmental leadership from the top and an active green team its actions range from LED lighting upgrades and installing electric car charging to sustainable food sourcing and food waste recycling. It reduced carbon by 10 per cent during the period 2008/09 to 2012/13 and actively engages staff, audience and suppliers (eg via its sustainable travel campaign). It contributes to Newcastle Gateshead Cultural Venues' joint work to improve their combined environmental, social and cultural impact.

Manchester Art Gallery's carbon reduction target is aligned with the city's target of 41 per cent carbon reduction by 2020. Energy-saving measures include installing low energy lighting suitable for museum objects and adopting more energy efficient climate conditions suitable for artworks, making it an international leader amongst museums and galleries. Other initiatives range from sustainable procurement and travel to bee-keeping and rooftop gardening.

²⁸ <http://press.artscouncil.org.uk/Press-Releases/Arts-Council-to-embed-environmental-sustainability-into-funding-5e3.aspx>

Larger organisations, prompted by higher utility costs and regulation (specifically the UK's Carbon Reduction Commitment Energy Efficiency Scheme) tend to be more advanced in their environmental approaches. Greater staff capacity to respond and a higher level of public accountability are also factors which have been cited. Year one data analysis shows that four large organisations generated 21 per cent of the 2012/13 carbon footprint, and 28 (including the four largest) generated 50 per cent. While a small number of leading organisations are included in these top 28, there is still significant potential for greater overall improvement.

Environmental action can be challenging for smaller organisations with less spare capacity or housed in shared buildings, especially when dependent on others such as landlords or other tenants for data, or for joined up action. Small and medium sized enterprises (SMEs) are a critical part of the UK economy (99 per cent of all UK businesses have less than 250 employees). While the report shows that the large institutions were responsible for the greatest impacts it remains the case that the arts are mainly made up of SMEs and that their combined impact can also be significant (SMEs produced 110 million tonnes of CO₂ per year, accounting for 20 per cent of total UK greenhouse gas emissions).²⁹ There are numerous examples of smaller organisations, naturally nimble, driving environmental change by using their creativity and focusing on the activities where they can make a difference, whether that be production design, artist or audience engagement or tour planning. We need to respond to the needs of the smaller companies with as much imagination as the large.

There are also a growing number of arts organisations finding different means of investing in sustainable infrastructure with a view to becoming more independent and securing a reliable and financially predictable energy supply.

The greatest potential for improvement still lies with those organisations that are in the early days of acting on environmental sustainability. These organisations can benefit greatly by learning about the experiences of sector environmental leaders and improved access to information on the latest good and best environmental practice.

Organisations already leading environmentally are more likely to see energy use and carbon stabilising, as improvements become more difficult over time. However, this group has the experience and creative commitment to interpret sustainability in innovative and inventive ways and are likely to generate the prototypes the future. There is a growing number of forward-thinking arts organisations approaching this on all fronts – financial, capital, operational, technological, artistic and with their audiences.

We are also seeing increasing numbers addressing environmental sustainability through their content and art such as: The Writer's Centre Norwich event, 'Writing & Climate Change: the story so far...', in partnership with the University of East Anglia; Just Jones & 'An Enemy of the People', looking at sustainability arguments against the backdrop of a Cornish small town community; and Spin Cycle, Emergency Exit Arts' outdoor arts piece on the sustainability of a consumerist lifestyle.

Organisations are recognising that profound opportunities exist in connecting artistic, ethical

and business considerations to environmental ones. We hope that what is currently good or best environmental practice will soon become the norm and that we will continue to innovate and extend our leadership and business models to find new and better ways of doing things.

Softtouch Arts is a Leicester-based charity which uses arts, media and music activities to inspire, engage and develop young people's skills. With European Regional Development Fund money, Softtouch commissioned a study by University of Nottingham into sustainable energy generation and water recycling. Using the results it secured EDF Green Energy Funds for solar panels and a heat source system. Both projects will have a major impact on its financial as well as environmental performance.

In 2011 Bristol's Tobacco Factory Theatres installed solar photo-voltaic panels on its roof which meet about a third of its energy needs and provide a regular and reliable income stream. Funding was secured through the Biffa Award, a multi-million pound fund that helps to build communities and transform lives through awarding grants to community and environmental projects across the UK, and the Department of Energy and Climate Change's Low Carbon Buildings Programme.

²⁹ SME statistics from various sources: Carbon Trust; Department of Environmental and Rural Affairs; and Department for Business, Innovation and Skills.

Part B Programme results, learning and next steps

3. Year one results

Engagement

The first year saw 90 per cent of all organisations (635 out of 704) engage with the programme:

- 87 per cent (615) registered on Industry Green Tools (whether or not they completed their entries)
- 66 per cent (463) submitted an environmental policy
- 61 per cent (431) submitted an environmental plan
- 34 per cent (241) participated in a workshop
- 22 per cent (154) participated in a webinar
- 55 per cent (354) responded to the first year evaluation survey

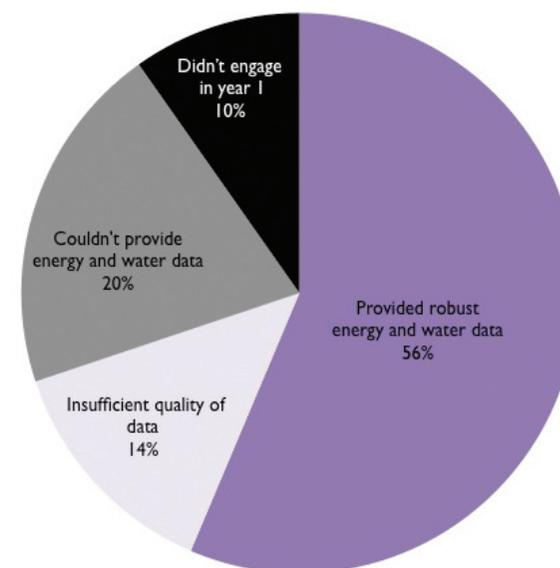
Further detailed information on all quantitative and qualitative analyses can be found in Appendix 1 and 2.

Reporting and data

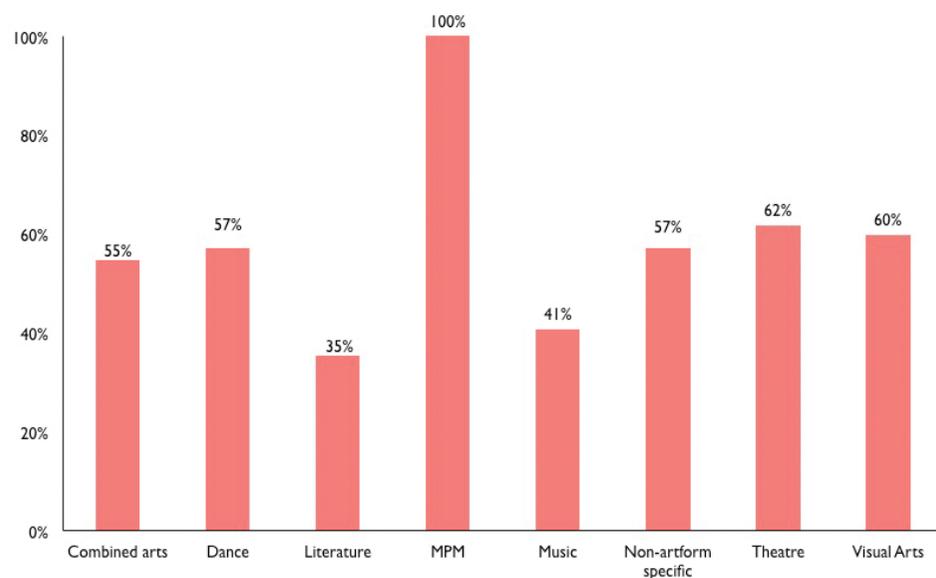
Of the 615 organisations that registered on Industry Green Tools, 397 provided energy and water data of sufficient quality for reliable analysis³⁰ – that is 63 per cent of all engaged organisations (635) and 56 per cent of all 704 organisations – covering 301 cultural buildings and 231 offices (including multi-site companies).

Not surprisingly reporting levels and quality correspond to the accessibility of data, hence cultural buildings provided the most comprehensive datasets, followed by offices, while events struggled, reliant as they are on complex supply chains, short term contractors and a nascent energy measurement industry.

Graph 1. 2012-13 reporting and data levels



³⁰ The following data was excluded from the data analysis: venues and office data covering less than a 12 month period; estimated home office data; data which was more than double or less than half compared with Julie's Bicycle and Chartered Institution of Building Services Engineers benchmarks.

Graph 2. levels of inclusion in data analysis by artform³¹

Data quality varied across artforms. For example, all data provided by Major partner museums was of sufficient quality for inclusion in the analysis compared with just over a third for literature. It is important to note that while 16 Major partner museums reported and provided quality data, they cover 96 individual organisations and reporting did not cover all 96. 143 organisations were unable to provide data for reasons beyond their control, notably those in shared office spaces. 150 organisations went beyond Arts Council England requirements and reported on energy, water, travel, waste, tours and productions.

Carbon impacts

Environmental impacts from energy and water use, waste and travel are commonly expressed in terms of carbon. The energy and water use of the 397 organisations during April 2012 to March 2013 combined created a **carbon footprint of 94,000 tonnes of CO₂e**³², equal to the carbon generated by 20,000 UK households' annual energy use. Just four organisations generated about a fifth of the total footprint and 28 generated about half.

94,000 tonnes of CO₂e represents a **£21 million energy spend**, based on actual electricity and gas use and the Department of Energy and Climate Change's 2013 average energy tariffs (electricity: 11p per kWh, gas: 3p per kWh). If we assume a 10 per cent energy tariff increase but no reduction in energy use next year, total energy spend would be just over £23 million.

92 per cent of the total carbon footprint was from venues or cultural buildings and 8 per cent from offices. Electricity use was the main source of emissions, making up over half of the total (56 per cent) and gas was second (44 per cent), whereas water use made up less than 1 per cent. While water use may not be a significant source of carbon impact, it does impact on water scarcity, quality and availability, and can be a significant source of impact. 782 million litres of water were used in 2012 – 13³³, the equivalent of 40 million regular baths.³⁴

Table 1. 2012/13 energy and water use

Activity	Electricity/kWh	Gas/kWh ³⁵	Water/m ³
301 cultural buildings	145,200,000	117,900,00	727,800
231 offices	12,400,000	8,200,00	54,700
Total:	158,000,000	126,000,00	782,000

The average carbon footprint of 397 organisations across artforms was 255

³¹ There are seven Bridge organisations which are not also National portfolio organisations. Four of seven Bridge organisations provided sufficient quality data for analysis. One is covered under combined arts and three under non-artform specific.

³² There are six main greenhouse gases and different activities, such as energy generation and waste disposal, create different types of greenhouse gases, but each one has a different global warming potential. For example, methane's global warming potential is 20 times greater than carbon dioxide (CO₂), per unit of gas. To deal with this, scientists use carbon dioxide equivalent (CO₂e) as a common denominator for the main greenhouse gases so they can express the climate impacts in a single measure.

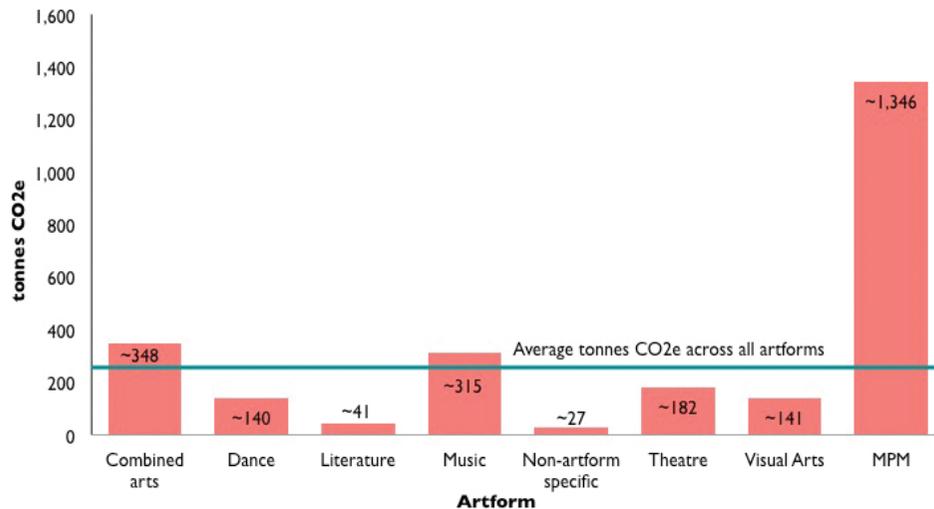
³³ This excludes bottled water.

³⁴ Nice & Serious and Waterwise <http://everylastdrop.co.uk>

³⁵ Gas data has been weather normalised, ie actual consumption figures have been adjusted using degree-day data to account for outside weather conditions. For example, this means if a venue uses less gas because it was a mild winter, this mitigating circumstance (the weather) is taken into account.

tonnes. Major partner museums had the highest average of the different artforms and non-artform specific the lowest. While Major partner museums are over five times the artform average, this is an average for 16 organisations comprising 96 individual ones, many of which have large buildings. The average footprint per organisation across regions was 313 tonnes.

Graph 3. 2012/13 average carbon footprint per organisation by artform



121,000 tonnes carbon

FOR ALL 704 ORGANISATIONS



94,000 tonnes carbon

FOR 397 ORGANISATIONS (56%
OF ALL 704 ORGANISATIONS)

The National Theatre's energy efficiency investment programme, launched in 2007, has generated significant energy and financial savings. Energy efficiency measures in targeted areas for example, such as external lighting and signage, car park lighting and ventilation systems, have reduced carbon emissions in these areas by 20 per cent.

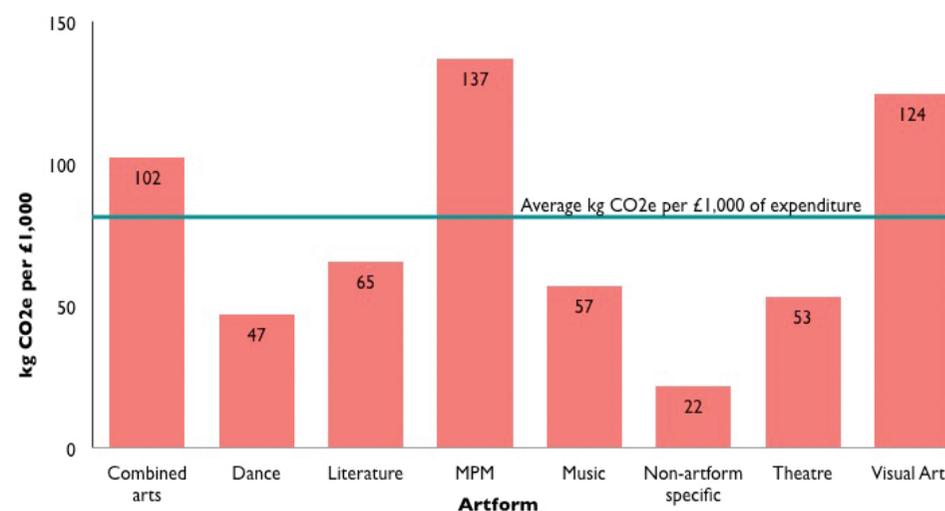
The theatre has installed a new Combined Heat and Power plant, and is expecting to see positive first results in 2014 in terms of energy, cost and carbon reductions. It is also introducing a new cooling strategy using 'ice storage, which should come into full operation in 2014 which is more energy efficient than tradition cooling systems. Other innovative measures include the theatre's temporary venue, The Shed, which is connected to the Combined Heat and Power plant, is naturally ventilated, and constructed out of reused or recyclable materials.

Carbon emissions can be reported in both ‘absolute’ and ‘relative’ terms. Absolute means the total footprint – in this case 94,000 tonnes of CO₂e. Relative emissions refer to the absolute figure indexed to a unit, such as per m², per performance or per exhibit – these can also be referred to as ‘intensity indicators’³⁶. Such indicators can enable comparisons between different organisations and the creation and comparisons with industry averages, eg benchmarks, and are also a good way to understand whether emission increases are due to inefficiency or growth.

To investigate this question, Julie’s Bicycle established a year one carbon intensity indicator by calculating carbon emissions per £1,000 unit of expenditure for 397 organisations. The average across artforms was 81 kilograms of CO₂e. If the average for 397 organisations, or 56 per cent, is applied to all 704 organisations, and similar behaviours assumed, this would result in a total carbon footprint of 121,000 tonnes of CO₂e. This is 29 per cent higher than the existing total of 94,000 tonnes of CO₂e, but not surprising, as a higher ratio of the largest organisations have already submitted quality data for analysis.

Assuming 121,000 tonnes of CO₂e breakdowns the same as for the 94,000 tonnes for which real data was provided – ie 56% electricity, 44% gas, under 1% water – a total energy spend of £26 million can be estimated: £17 million electricity and £9 million gas.

Graph 4. 2012/13 carbon intensity³⁷



Carbon and cash savings

62 cultural buildings provided more than one year’s worth of data (out of a total 301 buildings). Of these 62 buildings, 69 per cent reduced carbon emissions overall (from energy and water). A combined 20 per cent energy use reduction over two years generated savings of 4,000 tonnes of CO₂e, a cash saving of £810,000³⁸. If this level of savings were achieved across all 301 cultural buildings it would represent a total saving of 13,000 tonnes of carbon and a £3 million energy bill reduction. There are an estimated 16,000 cultural buildings in the UK, so these results give an idea of the scale of opportunity.

³⁶ Carbon intensity is the average emission rate of carbon dioxide or other greenhouse gases from a given source relative to the intensity of a specific activity; for example kilograms of carbon dioxide released per megajoule of energy produced, or the ratio of greenhouse gas emissions to GDP.

³⁷ The indicator is based on carbon data for all 397 organisations, expenditure data for all National portfolio organisations and Bridge organisations and income data for Major partner museums.

³⁸ The majority of organisations reduced energy use, but for some energy use remained constant or increased. The calculated savings are gross savings, ie based only on those which achieved reduction, and not net, ie all reductions less all increases.

Benchmarks

Using year one data Julie's Bicycle has established specific benchmarks for cultural buildings and offices as a point of reference for individual organisations to compare performance.

Table 2. venues and cultural building benchmarks

Venues or cultural buildings	Arts Council England portfolio 2012/13	CIBSE TM:46 2008 for cultural activity ³⁹	Comparison, Arts Council - CIBSE cultural activity	CIBSE TM:46 2008 for entertainment halls
Electricity kWh per m ²	101	70	+31 per cent	150
Gas (weather normalised) ⁴⁰ kWh per m ²	109	152	-39 per cent	319
Water litres per m ²	497	n/a	n/a	n/a

Table 3. office benchmarks

Offices	Arts Council England portfolio 2012/13	CIBSE TM:46 2008 for general office	Comparison Arts Council England - CIBSE
Electricity kWh per m ²	78	95	-22 per cent
Gas (weather normalised) kWh per m ²	90	91	-1 per cent
Water litres per m ²	338	n/a	n/a

Seven Stories, the National Centre for Children's Books, and a member of Newcastle Gateshead Cultural Venues reduced carbon from energy use, both in absolute terms and per exhibition day, by 24 per cent in the period 2010/11 to 2012/13, saving £10,000 on electricity in the process.

The London Theatre Consortium comprises 13 theatres working to develop strategic, creative initiatives and share expertise and resources. Between 2011/12 and 2012/13, 9 theatres reduced energy use and achieved a combined reduction of 201 tonnes of carbon (from 3147 to 2946 tonnes). Typical improvement measures implemented across the group include switching to low energy lighting in front of house areas, staff engagement initiatives, and improving recycling rates and knowledge sharing across the consortium to support green champions and staff.

³⁹ CIBSE is the Chartered Institution of Building Services Engineers. Its cultural activity benchmark covers: art galleries; arts centres; libraries; and museums. Its entertainment halls benchmark covers: auditoria; casinos; cinemas; concert halls; dancing schools; entertainment halls; and theatres. CIBSE TM: 46 is their technical memorandum on energy performance of different types of activities and buildings.

⁴⁰ Gas data has been weather normalised, ie actual consumption figures have been adjusted using degree day data to account for outside weather conditions. Degree day data was applied using a date range of 1 April 2012 to 31 March 2013. CIBSE benchmarks were also weather normalised in order to compare against the Arts Council portfolio.

Part B Programme results, learning and next steps

4. Insights

Size, shape, readiness and artform really do matter

The success and impact of the environmental reporting programme has been affected by a number of factors facing individual organisations, including type and size of activity, artform and levels of environmental engagement at the programme outset.

- cultural buildings and offices have had higher levels of reporting and provided more reliable data, compared with outdoor events and touring activities, whereby the latter were not required to report. It is generally more difficult for an event or tour to obtain good data, given the temporary nature and location of activities and dependence on others for data (eg host venues)
- larger organisations and cultural buildings have the greater impact, with just 28 generating 50 per cent of the 2012/13 carbon footprint. While in general these organisations find it easier to meet reporting requirements, some are in the earlier stages of taking action and offer good potential for improvement, others such as the Royal Opera House are making good progress, while some, such as the National Theatre, are outstanding
- many smaller organisations in shared spaces have been limited in their ability to take action due to lack of support and co-operation from landlords. For some organisations, large and small, local authority co-operation and support is also necessary for environmental reporting and action
- levels of engagement and reporting have generally been higher for theatre, Major partner museums and visual arts, compared with literature, dance and music. Museums and theatres in particular have already been targeted by specific environmental initiatives, something which has not been the case for the other art forms
- in year one the programme was oriented to those starting out rather than those making good progress or leading to establish a level playing field. So while the latter could easily meet the reporting requirements, the programme may not have provided as much learning or 'stretch' material for them

There is a clear need for a more differentiated strategy for year two and beyond

- a distinct approach is needed for smaller organisations, offices and events unable to provide meaningful energy and water data, and for organisations whose primary activity is touring and events, for whom reporting on other sources of environmental impact, eg transport and waste, may be more meaningful. Julie's Bicycle is already developing a 'Green Office' guide and further guides for outdoor events and touring with Grants for the arts funding, but a widening of reporting scope from 2015 to include these areas should also be considered by Arts Council England
- Julie's Bicycle will explore options with the Arts Council for tailoring support and resources to different levels of readiness and needs, eg master classes for leaders, more in-depth energy efficiency workshops for those starting out and also for facilitating experience exchange between leaders and those less advanced to fully exploit their improvement potential
- Julie's Bicycle is developing support for all six artforms in the form of tailored resources and events to complement the environmental reporting programme.

Recent years have seen an exciting proliferation of sustainability initiatives in the museum sector such as: Renaissance funded Green Museums regional initiatives; Bizot and National Museum Directors' Council work on environmental conditions; and the inclusion of environmental sustainability in Arts Council England museum accreditation, Major partner museum and Museum Development Partnership grants, Arts Council England capital grants and Heritage Lottery Fund grants. Arts Council England is aware of the need for complementarity between the different programmes and their sustainability elements and co-ordination with sectoral stakeholders such as the Heritage Lottery Fund.

There is an appetite for learning through exchange and collaboration

Further opportunities to meet, exchange and explore collaboration have been frequently requested throughout the first year. Apart from the reassurance factor, sharing knowledge mitigates the inefficiency of working on new projects in siloes, helping to reduce the time burden of learning new skills or researching new solutions within individual organisations.

A key area to explore is how to facilitate exchange and collaboration as a driver for positive change, for example sharing National portfolio organisations', Major partner museums' and Bridge organisations' environmental policies and action plans, and also the hundreds of positive examples and stories gathered in year one.

Links to Arts Council and other funding and investment opportunities are critical

While some initial scepticism over the reporting programme has largely evaporated, some organisations are still concerned about how environmental performance will be linked to future Arts Council funding. Under the new round of funding applications in early 2014 applicants will be assessed on how they contribute to strategic goals 1 and 2 and asked to show that they have a clear environmental sustainability plan. In this process it will be essential to define and communicate what this means and how it will be assessed, monitored and evaluated.

Many arts organisations find it difficult to make the case for significant infrastructural investments with longer payback periods, given the comparatively short term nature of their funding arrangements. Arts Council England's integration of sustainability requirements into large and small capital grants is already proving an important driver and providing access to longer-term investment in sustainable infrastructure. This is a major achievement. A logical next step would be to develop more specific sustainability support for those applying for large and small capital grants. Signposting to other environmental financing opportunities available is another area where Julie's Bicycle is already active and which could be further promoted by the Arts Council.

A number of groups are already demonstrating the benefits of collaboration, including:

- London Theatre Consortium, 13 theatres working to develop strategic, creative initiatives and share expertise and resources, including a sustainability strand
- Manchester Arts Sustainability Team, 13 arts organisations, venues and events, collaborating to support their own sustainability goals and Manchester's climate change strategy
- Newcastle Gateshead Cultural Venues, 10 venues working to share learning and maximise their positive environmental, social, cultural and economic impact, with different workstreams, including a Green Campaign and Capital Investment Strategy which explores longer-term sustainable capital projects for the group
- Royal Opera House, Royal National Theatre and Royal Albert Hall, who entered into a three-year contract for collective energy procurement known as 'The Arts Basket' provided by the energy broker Power Efficiency in 2012. Other organisations have since joined and benefits include reduced costs, better risk management and longer-term price certainty on a green tariff supply.

“A key requirement for the Arts Council England capital grant application is to demonstrate that the project will deliver improvements to both the financial and environmental sustainability of the organisation. This aspiration is at the heart of the £12M Anniversary Works project which is currently underway at The Bristol Old Vic and has ensured that the sustainability elements of the design have not been cut back when the budget was under pressure. The proposals currently include a substantial “green” roof, air source heat pumps, underfloor heating, a naturally ventilated foyer and labyrinth cooling for the new studio theatre.”

Jack Tilbury, Project Director,
Bristol Old Vic Anniversary Works

Evaluation reveals a positive response to the programme

Julie’s Bicycle gathered feedback on the year one roadshow workshops and webinars and conducted an evaluation survey of the whole year one programme in September 2013. Feedback and responses were largely positive. Quantitative and qualitative evaluation of all feedback and the survey results is provided in Appendix 2.

Selected comments from participants:

On the workshops: ‘Good balance of information and practical examples. It was good to be grouped with similar organisations for the break-out session and our facilitator was good at taking on board sector specific issues as well as identifying helpful examples for us to explore’.

On the webinars: ‘I attended a few of the webinars and think they are a fantastic way to provide help and support in a time efficient manner. A lot of the time my questions are answered through other people’s questions and it is extremely useful to hear other people are in similar positions’.

On the Industry Green Tools: ‘Making our environmental impact more tangible to us’ and ‘We have been able to include the facts and figures generated for funding applications’.

Based on this feedback, Julie’s Bicycle has identified a range of improvements, notably support, guidance and user experience for Industry Green Tool users, such as adding new visualisation of results and establishing an Industry Green Tools focus group to give feedback on developments. This will play a key part in improving the quality of data submitted. The other key area for improvement is communications, and working more closely with the Arts Council team.

Battersea Arts Centre has reconfigured its artistic commissioning process and capital development plans, with a resilience and sustainability focus. It is working towards using an ‘Art per kWh’ formula as part of its commissioning process. Its 21st Century Organisation project seeks to define how an arts organisation is run with environmental sustainability at its core. This sits alongside its Strategic Road Map on improving building and organisational environmental performance and objectives for “inventing the future of theatre”.

Free Word, a literary organisation promoting free expression, is participating in Weather Stations, a new European Cultural Programme funded project. With partners in Dublin, Berlin, Warsaw and Melbourne, Weather Stations will use the power and vision of literature to explore how people from all over the world might adapt to a changing climate.

Cornerhouse is Manchester’s international centre for contemporary visual arts and independent film. In recent years it has been making impressive environmental progress such as: achieving zero waste to landfill; establishing a sustainable materials sourcing, recycling and reuse policy; and running a creative environmental communications project which resulted in the *Life of a paper cup* recycling awareness film. In 2013 Cornerhouse achieved a Manchester Environmental Business Pledge Gold Award.

Part B Programme results, learning and next steps

5. Next steps

Year two reporting requirements for National portfolio organisations, Major partner museums and Bridge organisations remain unchanged, with organisations continuing to report on energy and water use for cultural buildings and offices over a 12 month period (April 2013 to March 2014) or for outdoor events occurring within this time period. Organisations must also ensure they have an up-to-date environmental policy and an action plan by 31 May 2014. National youth music organisations will start reporting for the first time in 2013/14.

Immediate plans for year two are to:

- deliver a second series of national workshops and relationship manager briefings November-December 2013, focusing on year one results and next steps for year two
- provide a second webinar series in the first quarter of 2014
- target the 10 per cent which haven't engaged so far, in close co-operation with the Arts Council and relationship managers
- further develop and improve the Industry Green Tools based on user feedback (some of this work is already underway)
- engage with National youth music organisations and Music education hubs
- explore the insights and recommendations drawn from year one with the Arts Council and support the Arts Council in developing a plan of action.

Farnham Maltings in Surrey is home to crafts makers and six resident theatre and dance companies. Facilities include rehearsal, dance and craft studios, a cinema, pottery room, meeting rooms, a bar and a café. Arts Council England's reporting programme spurred Farnham Maltings into reviewing and updating its 2010 environmental policy and reinvigorating its environmental programme. It has now established a 'Green Team' and produced a new Environmental Sustainability Action Plan, setting a carbon reduction target of 20 per cent by 2015 and energy and water reduction of 10 per cent per annum. Building improvement plans are being developed based on the results of a 2012 independent building energy audit.

By the end of 2013 Acme Studios will own or lease 16 buildings accommodating 579 studios and 24 work/live units. Following environmental actions over the last five years, such as secondary glazing, replacing boilers and improving control systems, Arts Council England reporting provided Acme with further impetus and it is currently developing two areas: engaging staff in monitoring and reducing office and travel impacts; and engaging artists/tenants in sustainability initiatives as building users and in their own practice.

Appendix 1: year one environmental data analysis

Results and analysis

A) Engagement

Engagement is defined as contact made by National portfolio organisations, Major partner museums and Bridge organisations with Julie's Bicycle in relation to the environmental reporting requirements. Contacts were made via phone or email, through workshop or webinar attendance or by registering on the Industry Green Tools (sector-specific carbon calculators), even if no data was provided. The reporting requirements apply to a total of 704 organisations:¹

- 681 National portfolio organisations
- 16 Major partner museums, representing 96 individual organisations

- seven Bridge organisations (a further five Bridge organisations are counted as National portfolio organisations)

90 per cent of these 704 organisations, or 635, engaged with Julie's Bicycle during 2012/13.

Breaking down the type of engagement across 635 organisations:

- 87 per cent (615) registered on the Industry Green Tools (whether or not entries were complete)
- 66 per cent (463) submitted an environmental policy
- 61 per cent (431) submitted an environmental plan
- 34 per cent (241) participated in a workshop
- 22 per cent (154) participated in a webinar
- 55 per cent (354) responded to the first year evaluation survey.

Table 1. Engagement levels by artform

Artform	Percentage of total per artform	Numbers per artform
Major partner museums	100%	1
Theatre	96%	171/179
Dance	95%	53/56
Visual arts	90%	43/48
Combined arts	90%	137/153
Non-artform specific	89%	17/19
Literature	82%	14/17
Music	81%	35/43

¹ This is the split of organisations in September 2013 at the time of the data analysis.

Table 2. Engagement levels by region

Region	Percentage of total per region	Numbers per region
North East	100%	1
East Midlands	98%	41/42
South East	95%	20/21
London	93%	234/251
North West	93%	27/29
East	88%	7/8
West Midlands	88%	15/17
Yorkshire	81%	13/16
South West	76%	19/25

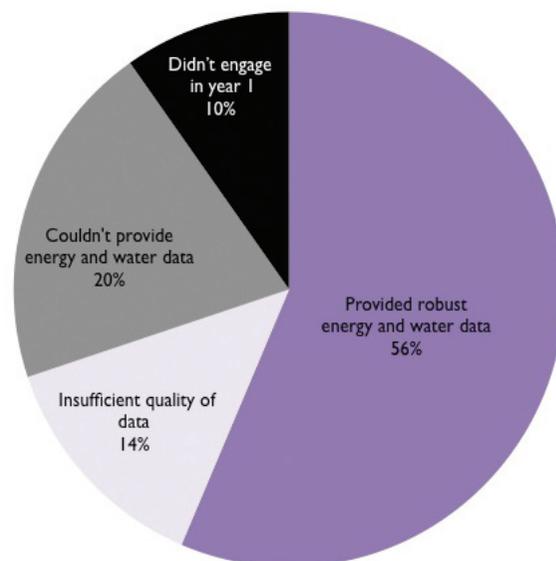
Based on year one insights the 704 organisations can be grouped as follows:

- 10 per cent are not yet active
- 45 per cent are starters
- 35 per cent are making progress
- 10 per cent are leaders

B) Reporting and data

Of the 635 total organisations which engaged:

- 397 provided energy and water data of sufficient quality for reliable analysis², ie 56 per cent of all 704
- 143 couldn't provide energy and water data but explained why
- 95 provided data which couldn't be included in the analysis as it was of insufficient quality
- 150 not only reported on energy and water but also on travel and waste, tours and productions

Graph 1. 2012/13 reporting and data levels

Reasons that a 143 organisations couldn't provide data were:

- 31 per cent are based in a building run by another National portfolio organisation/Major partner museum/Bridge organisation reporting on their behalf
- 23 per cent have no office, or receive office space and/or utilities in kind
- 45 per cent had uncooperative landlords, were based in a shared office space and unable to get data pertaining to their own impacts, or moved from one office space to another during the 12 month period covered by this analysis
- 1 per cent were signed off by their relationship managers for not having any data

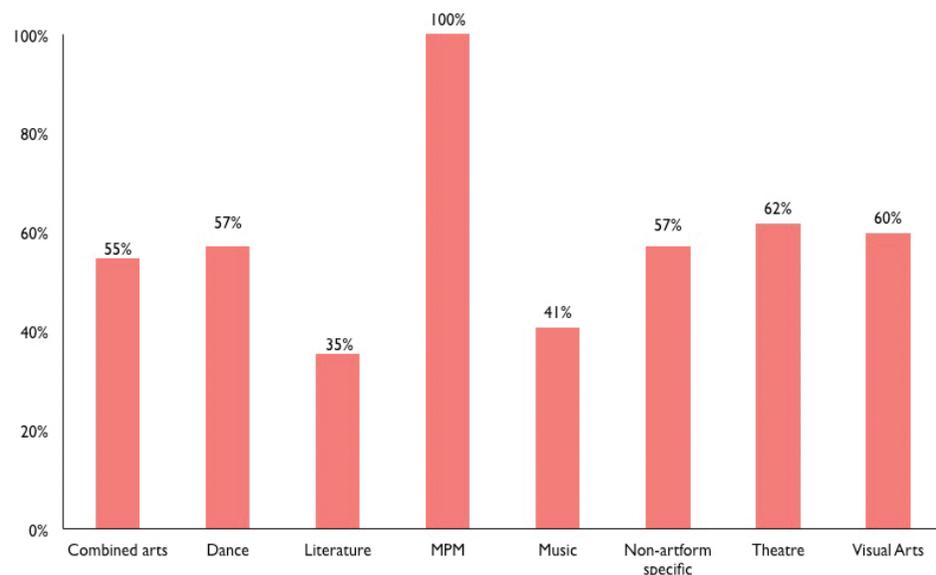
The 397 organisations which provided data of sufficient quality covered 301 cultural buildings and 231 offices.

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Data quality varied across artforms. For example, all data provided by Major partner museums was of sufficient quality for inclusion in the analysis compared with just over a third for literature. It is important to note that while 16 Major partner museums reported and provided quality data, they cover 96 individual organisations and reporting did not cover all 96.

Graph 2. levels of inclusion in data analysis by artform³



C) Carbon impacts

The energy and water use of 397 organisations in the period April 2012 to March 2013 created a carbon footprint of 94,000 tonnes of CO₂e⁴, equal to the carbon generated by 20,000 UK households' annual energy use. Just four organisations generated about a fifth of the total footprint and 28 generated about half.

Table 3. 2012/13 energy and water use

Activity	Electricity/kWh	Gas/kWh	Water/m ³
231 offices	12,400,000	820,000	54,700
301 cultural buildings	145,200,000	11,790,000	72,7800
Total:	158,000,000	12,600,000	782,000

92 per cent of the total carbon footprint was from venues or cultural buildings and 8 per cent from offices. Electricity use was the main source of emissions, making up over half of the total (56 per cent) and gas was second (44 per cent), whereas water use made up less than 1 per cent. While water use may not be a significant source of carbon impact, it does impact on water scarcity, quality and availability, and can be a significant source of impact. The water use in 2012/13 of 782 million litres is the equivalent of around 20 million five-minute showers or 40 million regular baths.

94,000 tonnes of CO₂e represents a £21 million energy spend (£17 million on electricity and £4 million on gas) based on the Department of Energy and Climate Change's 2013 average energy tariffs (11p per kWh for electricity and 3p per kWh for gas).

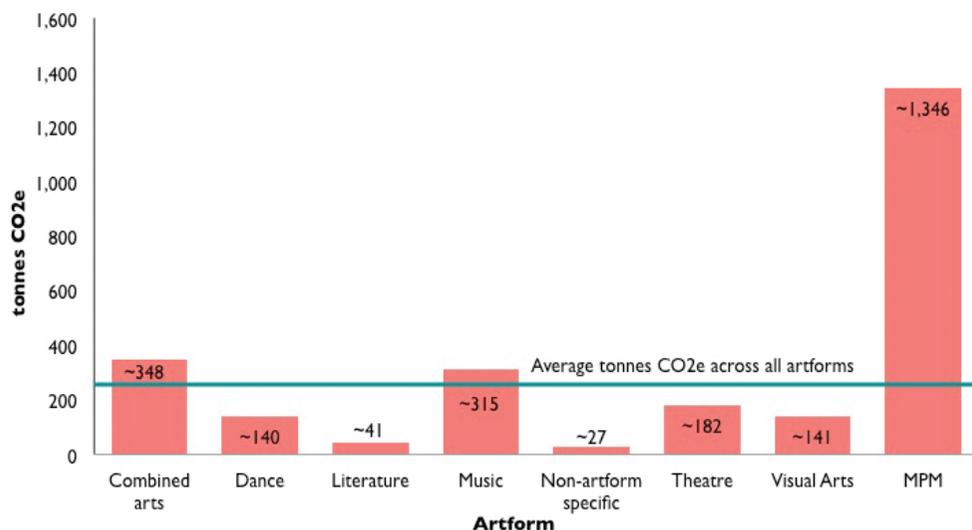
The average carbon footprint of 397 organisations across artforms was 255 tonnes. Major partner museums had the highest average of the different artforms and non-artform specific the lowest.

³ There are seven Bridge organisations which are not also National portfolio organisations. Four out of these seven provided sufficient quality data for analysis. One is covered under combined arts and three under non-artform specific.

⁴ There are six main greenhouse gases and different activities, eg energy generation and waste disposal, create different types of greenhouse gases, but each one has a different global warming potential. For example, methane's global warming potential is 20 times greater than carbon dioxide (CO₂), per unit of gas. To deal with this, scientists use carbon dioxide equivalent (CO₂e) as a common denominator for the main greenhouse gases – so they can express the climate impacts in a single measure.

While Major partner museums are over five times the artform average, this is an average for 16 organisations comprising 96 individual ones, many of which have large buildings. The average footprint per organisation across regions was 313 tonnes.

Graph 3. 2012/13 average carbon footprint per organisation by artform



Carbon data in terms of region and artform aligns with the way Arts Council England report on their portfolio of major funded organisations. Carbon results have averaged according to the number of organisations within each artform and region which were able to provide data of sufficient quality for reliable analysis as opposed to presenting results in total tonnes for each artform and region. One of the learnings from this first year of environmental reporting is to better understand what factors may have contributed to these average footprints across artforms and regions such as the type of buildings in each artform and/or region.

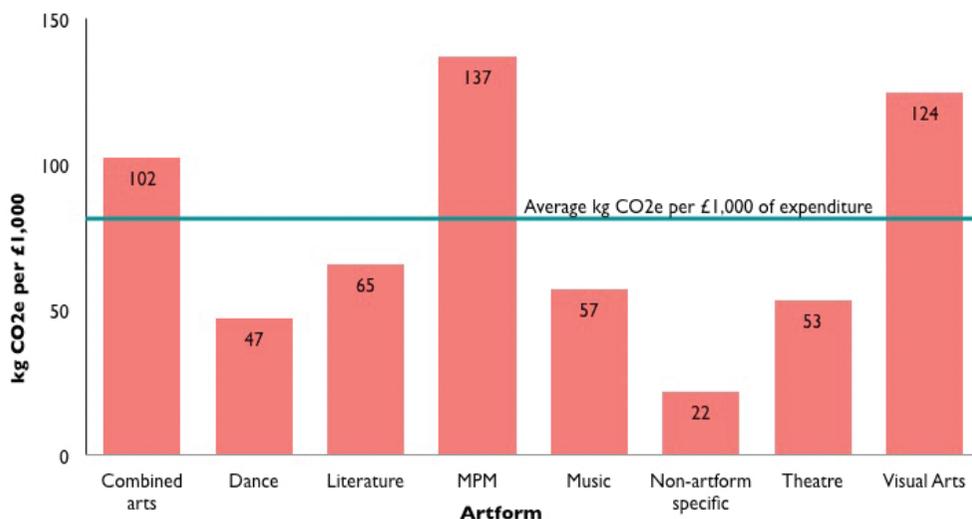
The 16 Major partner museums have been treated as 16 discrete organisations, though as a whole they comprise 96 museums, galleries and other buildings in total. This aligns with the way the Arts Council report on the Major partner museums. They are predominantly made up of estates with large and often older buildings, which can be hard to insulate and are significant consumers of energy. As these are, in effect, groups of organisations the resulting carbon footprint is large in comparison to other artforms such as literature where organisations are predominantly based in shared office spaces and activities often take place outside the office.

Carbon emissions can be reported in both ‘absolute’ and ‘relative’ terms. Absolute means the total footprint – in this case 94,000 tonnes of CO₂e. Relative emissions refer to the absolute figure indexed to a unit, such as per m², per performance or per exhibit – these can also be referred to as ‘intensity indicators’⁵. Such indicators can enable comparisons between different organisations and the creation and comparisons with industry averages, eg benchmarks, and are also a good way to understand whether emission increases are due to inefficiency or growth.

To investigate this question, Julie’s Bicycle established a year 1 carbon intensity indicator by calculating carbon emissions per £1,000 unit of expenditure for 397 organisations. The average across artforms was 81 kilograms of CO₂e. If the average for 397 organisations or 56 per cent is applied to all 704 organisations, and similar behaviours assumed, this would result in a total carbon footprint of 121,000 tonnes of CO₂e. This is 29 per cent higher than the existing total of 94,000 tonnes of CO₂e, but not surprising as a higher ratio of the largest organisations have already submitted quality data for analysis.

Assuming 121,000 tonnes of CO₂e breakdowns the same as for the 94,000 tonnes for which real data was provided – ie 56% electricity, 44% gas, under 1% water – a total energy spend of £26 million can be estimated: £17 million electricity and £9 million gas.

⁵ Carbon intensity is the average emission rate of carbon dioxide or other greenhouse gases from a given source relative to the intensity of a specific activity, for example kilograms of carbon dioxide released per megajoule of energy produced, or the ratio of greenhouse gas emissions to GDP.

Graph 4. 2012/13 carbon intensity⁶

D) Carbon and cash savings

62 cultural buildings provided more than one year's worth of data (out of a total 301 buildings). Carbon and cash savings were calculated based on actual energy use data (electricity and gas kWh) from these 62 cultural buildings, which provided more than one year's worth of reliable data, using Department of Energy & Climate Change (DECC) 2013 average energy tariffs. Water was not included. Gas use was weather normalised, ie actual consumption figures were adjusted using degree day data to account for outside weather conditions. Offices were not included in the calculations as none of them showed significant savings.

For the 62 organisations that provided more than one year's worth of reliable data:

- 69 per cent of 62 (43) reduced carbon emissions overall (from energy and water)
- 58 per cent of 62 (36) reduced electricity use, saving 2,000 tonnes of CO₂e and £480,000
- 69 per cent of 62 (43) reduced gas use, saving 2,000 tonnes of CO₂e or £333,000
- combined carbon savings from energy use reductions were 20 per cent overall, representing 4,000 tonnes of CO₂e, an average of 61 tonnes per building, and total cash savings of £810,000⁷

2011/12 energy use for the 36 and 43 buildings which made electricity and gas savings represented a combined energy spend of £5.1 million (36 spent £4 million on electricity and 43 spent £1.1 million on gas), based on DECC 2013 average energy tariffs. 2012/13 energy use represented a combined spend of £4.4 million (36 spent £3.6 million on electricity and 43 spent £0.8 million on gas). Overall this shows 12 per cent savings on electricity spend and 26 per cent on gas spend over the two years.

If the savings of the 62 organisations were achieved across all 301 cultural buildings, assuming similar conditions, this would represent a total of £3 million cash savings (£2 million electricity and £1 million gas), an average of £9,800 per organisation, and 13,000 tonnes of CO₂e savings, an average of 44 tonnes of CO₂e per organisation.

E) Benchmarks

Using year one data, Julie's Bicycle has established specific benchmarks for cultural buildings and offices as a point of reference for individual organisations to compare performance.

⁶ The indicator is based on carbon data for all 397 organisations, expenditure data for all National portfolio organisations and Bridge organisations and income data for Major partner museums.

⁷ The majority of organisations reduced energy use, but for some energy use remained constant or increased. The calculated savings are gross savings (based only on those that achieved reduction), and not net (all reductions less all increases).

Methodology

A) Introduction

Using all the data gathered on the Industry Green Tools for National portfolio organisations, Major partner museums and Bridge organisations, the following analysis and reporting was undertaken:

- the proportion of National portfolio organisations, Major partner museums and Bridge organisations meeting minimum reporting requirements (ie having an environmental policy and/or action plan in place, and completing relevant Industry Green Tool entries with at least energy and water data for 2012/13)
- a breakdown of portfolio engagement statistics (by emails/phone, webinar and/or workshop attendance and registration on Industry Green Tools)
- the number of entries, carbon and other related environmental results
- the proportion of organisations across the portfolio performing better than benchmarks
- the proportion of organisations going beyond the minimum requirements (providing data on building waste, business travel or audience travel; temporary event waste or audience travel; touring/movement activity; and production materials and design)
- carbon and cash savings for organisations with two or more consecutive years of data (one of which is 2012/13), and aggregated, where applicable
- carbon data extrapolation to the entire portfolio

A list of the National portfolio organisations, Major partner museums and Bridge organisations that could not collect data and/or develop a policy and an action plan was provided. The full data (anonymised) and analysis is available and can be shared in Excel format.

B) Data analysis boundaries

Artform and regional boundary

All National portfolio organisations, Major partner museums and Bridge organisations funded by Arts Council England for the period of 2012 to 2015 which have submitted data to Julie's Bicycle via the Industry Green Tools have been included in the analysis. These organisations cover a range of artforms (music, dance, theatre, visual arts, combined arts, literature and non-artform specific) and regions (London, South East, East, North East, East Midlands, West Midlands, Yorkshire and North West).

Timeframe boundary

All data submitted for offices and venues or cultural buildings for a period of 12 months covering 2012/13 were used in the analysis.

In the case of outdoor events, the event must have taken place from April 2012 to March 2013 to be considered in the analysis.

Emissions boundary

The analysis focused on the following sources of carbon dioxide:

- energy and water use in venues and cultural buildings
- energy and water use in festivals and outdoor events
- energy and water use in offices

The rule of thumb for data to be collected on the Industry Green Tools and analysed was that they had to be activities for which an organisation paid bills and over which they had control. So if, for example, an organisation paid for rent and utilities in kind, that data was neither taken from the Industry Green Tool entries nor considered in the analysis. Or if an organisation rented a venue for a one-day indoor event for which it paid bills but could not control or influence the amount of energy and/or water consumed, that event data was neither taken from the Industry Green Tool entries nor considered in the analysis.

Greenhouse gas emissions considered

The most relevant greenhouse gas emissions are carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). These gases are emitted as the result of combusting fossil fuels for heating, electricity and travel. Carbon dioxide will be the most dominant gas with CH₄ and N₂O at much lower levels. Almost all the conversion factors used to translate energy use to greenhouse gas emissions were those provided by the Department for Environment, Food and Rural Affairs (Defra) in their 2013 guidelines to companies for greenhouse gas emissions reporting. The conversion factors used in this analysis are provided at the end of this appendix.

Table 4. venues and cultural building benchmarks

Venues or cultural buildings	Arts Council England portfolio 2012/13	CIBSE TM:46 2008 for cultural activity ³⁵	Comparison, Arts Council - CIBSE cultural activity	CIBSE TM:46 2008 for entertainment halls
Electricity kWh per m ²	101	70	+31 per cent	150
Gas (weather normalised) ³⁶ kWh per m ²	109	152	-39 per cent	319
Water litres per m ²	497	n/a	n/a	n/a

Table 5. office benchmarks

Offices	Arts Council England portfolio 2012/13	CIBSE TM:46 2008 for general office	Comparison Arts Council England - CIBSE
Electricity kWh per m ²	78	95	-22 per cent
Gas (weather normalised) kWh per m ²	90	91	-1 per cent
Water litres per m ²	338	n/a	n/a

Beyond the scope

The following were considered as going beyond the environmental reporting scope for 2012/13 and were not included in the analysis:

- activities covering a 12 month period in addition to 2012/13 (eg 2011/12)
- data relating to touring or production
- data relating to anything other than energy and water such as waste, business travel, audience travel, fleet, commuting, etc

Where relevant, separate pieces of analysis were undertaken that considered the above, eg carbon and cash savings.

Data quality

The following data was excluded from the 2012/13 carbon footprint analysis:

- activities covering less than a 12 month period in the case of venues and offices
- home office entries where the carbon footprint is estimated and minimal
- data which was more than double or less than half compared with Julie's Bicycle, Chartered Institution of Building Services Engineers (CIBSE) or other sector benchmarks

The activities excluded were not more than 20 per cent of the total (ie all reported Arts Council England funded venues or cultural buildings, offices and outdoor events) as per CIBSE guidance.

Greenhouse gas emission conversion factors used

Table 6 outlines the global warming potential (GWP) of the most relevant greenhouse gas emissions. The GWP, expressed in terms of CO₂ equivalent (CO₂e), is an index that compares to CO₂ the relative potential of these gases to contribute to global warming, ie the additional heat/energy which is retained in the earth's ecosystem through the release of these gas into the atmosphere. CO₂ has a designated GWP of 1. For methane it is 21, and for nitrous oxide, it is 310.

Table 6. Global warming potential of key greenhouse gases

	Carbon dioxide CO₂	Methane CH₄	Nitrous oxide N₂O
Global warming potential (CO ₂ e)	1	21	310

The emission conversions are done in line with the *Department for the Environment, Food and Rural Affairs (DEFRA) Environmental Reporting Guidelines: Including mandatory greenhouse gas emissions reporting guidance, June 2013*, with the following exceptions:

- Julie's Bicycle zero rates all renewable energy sources in recognition of exclusion of life cycle emissions from fossil fuel emission conversion factors
- Julie's Bicycle zero rates recycled or composted waste for the purposes of this analysis. This is because splitting recycling and composting waste data into fractions is generally unavailable and factors vary considerably
- Julie's Bicycle zero rates all waste vegetable oil and UK grown biofuels in recognition of the short timescale of the carbon cycle and that life cycle emissions are not included in fossil fuel conversion factors.

Appendix 2: year one support evaluation

National roadshow workshops 2012

A) Introduction

Seven environmental reporting workshops were held in 2012. 241 organisations attended the workshops, representing 33 per cent of National portfolio organisations/Major partner museums/Bridge organisations.

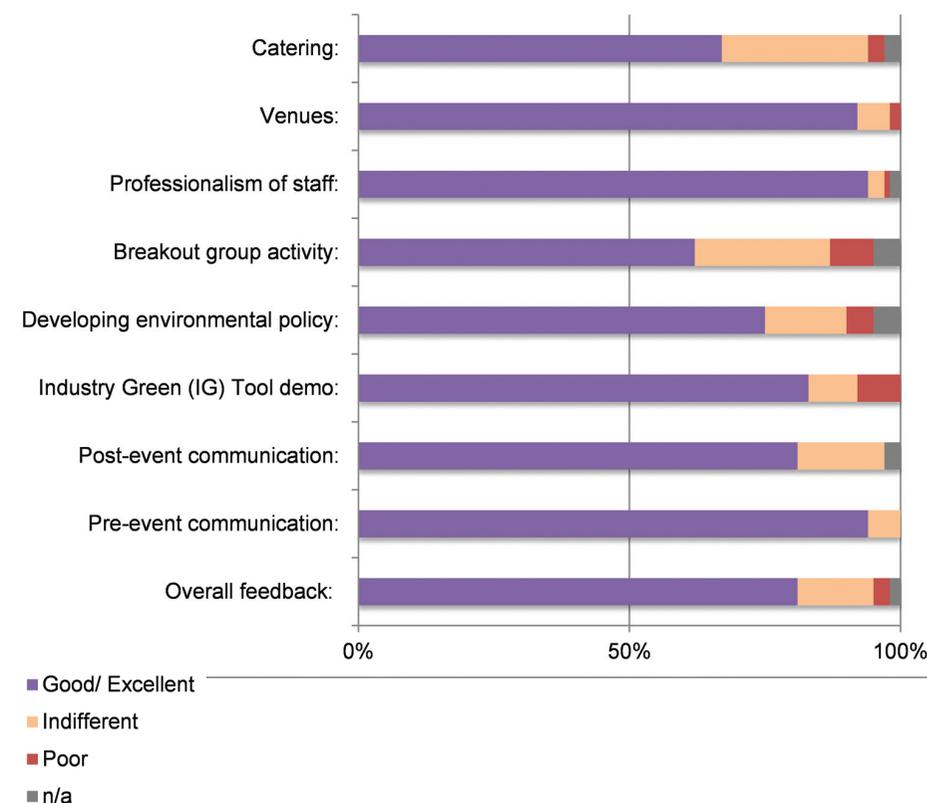
11 May 2012	Royal Exchange Theatre, Manchester
16 May 2012	Free Word Centre, London
06 June 2012	Sage, Gateshead
08 June 2012	Tate Modern, London
14 June 2012	Arnolfini, Bristol
03 July 2012	Bush Theatre, London
18 July 2012	Town Hall, Birmingham

Feedback from the workshops was collected via an online SurveyMonkey emailed to participants the day after (or as soon as possible after) each workshop. This included both quantitative and qualitative questions covering:

- pre and post-event communications
- participants' experiences on the day – logistics, venue, catering, professionalism of Julie's Bicycle staff and workshop content
- understanding of Arts Council environmental reporting requirements
- other areas they would have liked to cover during the workshop
- additional comments

B) Quantitative survey results

Graph 1. workshop evaluation survey responses



Overall 92 per cent of all participants surveyed felt they were clear and confident about what their organisation needed to do for their National portfolio organisation/Major partner museum funding agreement. 95 per cent of participants said that they would attend another event run by Julie's Bicycle.

Qualitative survey results

Selected participant comments on Julie's Bicycle staff:

'Great speakers – natural, personable, humorous, inspiring.'

'The staff were fantastic and really helped me feel confident about what I need to do within our organisation.'

Was there anything you found particularly useful?

Top answers in order of frequency:

1. The Industry Green Tools demonstration.
2. The clear explanation of Arts Council England environmental reporting requirements for 2012/13.
3. Breakout sessions and the opportunity to learn about what other organisations are doing.
4. One-on-one time with Julie's Bicycle staff.
5. The case studies presented throughout the workshop.
6. The resources covered in the workshop.

Was there anything you didn't find useful/could have been improved?

Top answers in order of frequency:

1. The emphasis on buildings and offices, frustrating for some events and touring organisations.
2. Breakout groups format.
3. Would have liked more time spent on environmental policy and action plans compared to the Industry Green Tools.
4. The workshop was more oriented to starters and less suitable for more experienced participants.
5. The quality of equipment used in some venues could have been improved.
6. Workshop promotion could have been improved
7. The lack of significant presence from Arts Council staff, in some cases.

Any other comments?

Selected responses:

'Generally, I found the meeting quite positive and inspiring. It is much easier to be motivated on green issues when there is a sense that everyone is in it together.'

'Despite my comments, I find the workshops/presentations really helpful - particularly the opportunity to share ideas with other arts bodies and learn from others examples. Thanks!'

'Really enjoyed the session, it was incredibly useful to get a really good understanding of the IG Tools as we embark on this individually and together – gave people much more confidence and a thorough understanding of the whole process and also the tools.'

'I enjoyed the afternoon. I felt it did a good job of being interesting and informative without being preachy. Well done!'

'Good balance of information and practical examples. It was good to be grouped with similar organisations for the break out session and our facilitator was good at taking on board sector specific issues as well as identifying helpful examples for us to explore.'

Selected other ideas/requests:

- audience travel case studies
- green suppliers
- green energy tariffs
- green vehicles for touring
- impartial advice on equipment (boilers, LEDs, heaters, etc)
- more example policies on the Julie’s Bicycle website
- signpost to other free resources and services, eg EU/public funded audits/initiatives
- recycling materials, especially timber, for museums and galleries
- recycling waste electronics
- regulation and compliance
- staff engagement support

Webinar feedback**A) Introduction**

18 webinars were carried out in late 2012 and early 2013. 154 organisations participated with 368 attendances (some attended a number of webinars). An evaluation survey was circulated after each webinar, asking the following questions:

- What did you hope to gain from attending?
- Did you feel that your expectations were met? If not, why?
- Was there any additional information you would like to see included in future webinars?
- Did you experience any technical issues while on the webinar (eg sound, visual, etc)?
- Any other comments?

B) Responses

121 people completed the evaluation. Their responses have been anonymised and aggregated, where relevant.

Q: Did you feel that your expectations were met? If not, why?

- 104 of the 121 respondents (86 per cent) answered ‘Yes’.
- those who answered ‘No’ mainly gave the following two points as the reason(s) why:
 - technical issues (sound, visual, etc) made it hard to follow the presentation

- having seen one or two webinars already, there was too much repetition in the introductory slides and not enough time spent on the specific topic of the webinar

Q: Did you experience any technical issues while on the webinar (eg sound, visual, etc)?

- 51 of the 121 respondents (42 per cent) experienced some technical difficulties from predominantly two of the webinar sessions

Overall, most respondents gave positive feedback, and found the webinar format useful and informative. Positive feedback was also given on the accessibility of the webinars for all individuals with disabilities. An excerpt of the positive comments given in the surveys is presented below:

‘Good resource and already saving on travel expenses!’

‘Thank you for making the information clear, I feel I can begin with confidence now!’

‘Webinars are a really convenient way of sharing this kind of learning experience.’

'Thank you for an informative session – I was a little apprehensive on how a webinar would work as this is first I have ever taken part in and it was a very useful and enjoyable experience.'

'I attended a few of the webinars and think they are a fantastic way to provide help and support in a time efficient manner and I find the questions tab at the side a comfort in case I have any questions arising from what is being discussed (a lot of the time my questions are answered through other people's questions, so this again is extremely useful to hear other people are in similar positions).'

'The case study format really suits these webinars.'

'It was very reassuring. Access for disabled people not bad at all – I think it would work well for visually impaired users as long as the texting could be large font? THANK YOU.'

Only a small number of complaints were received, summarised here

'I found it disappointing not being able to see/know who else was participating in the webinar, and not being able to see the questions as they were given. I had hoped for more discussion with the group rather than sitting listening to a presentation, and to have been able to make direct contact with others in similar situations.'

'I was only able to catch 10 minutes. I rushed back from a prior commitment to catch the second half but the conference call was only 40 minutes not an hour so that was disappointing. I have fixed obligations on Wednesdays so it is unfortunate how your webinars are scheduled. Having the two different times of day on two different days would have made access more feasible for more people including myself.'

'Some of the introductory slides weren't necessary for people that have already watched the first couple of webinars in the series, although I understand that they may be necessary for people who are still not aware of the requirements.'

'Disappointing as all our time is precious – but understand that technology doesn't always work. Thanks for trying.'

'For 40 of the 50 minutes the presentation covered the same information as had been seen in some/all of the previous webinars. This is not a good use of either your time or your audience's time.'

'The webinars are excellent and I appreciate not everyone sees every one. This could be improved by doing a brief summary of previous topics and then mention that if people have not seen previous versions they should contact you to get recordings of earlier topics.'

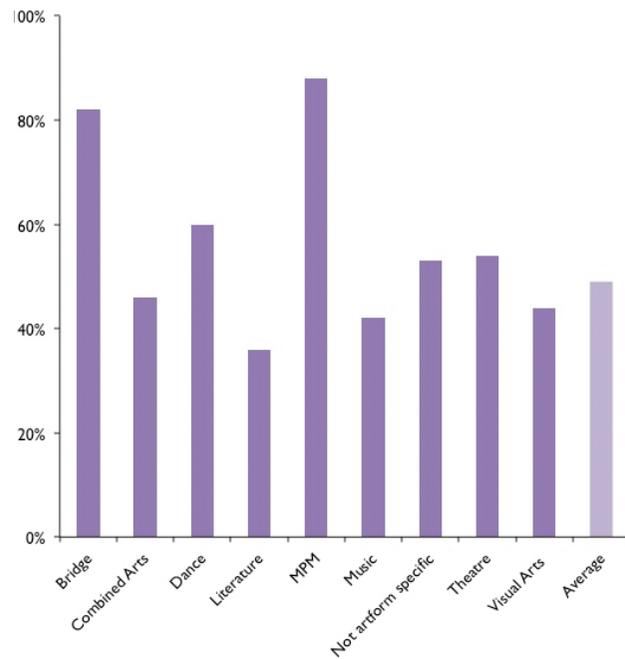
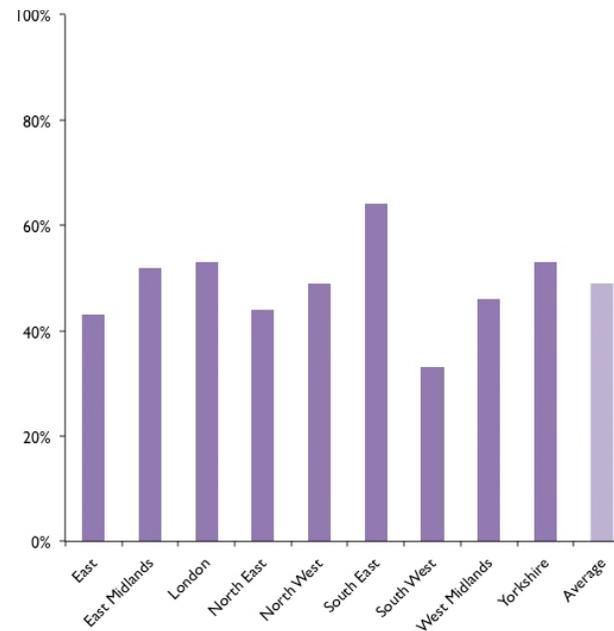
Year 1 evaluation

A) Introduction

The year one evaluation survey was conducted in September 2013. The overall response rate was 55 per cent (354 out of the total 635 National portfolio organisations, Major partner museums and Bridge organisations which engaged). Some respondents didn't answer all the questions in the survey, so response rates are sometimes lower than 354.

Table 1. number of respondents by region and artform

Region/Artform	Bridge	Combined arts	Dance	Literature	Major partner museum	Music	Non artform specific	Theatre	Visual Arts	Grand Total
East	1	2	1			3		6	1	14
East Midlands		7	5					4	6	22
London	1	16	9	10	2	21	2	50	22	133
North East		4	4	3	2	1		2	4	20
North West	1	14	2	2	1	2	1	10	10	43
South East	1	6	3	1	2	3		5	7	28
South West		9	1		2	1	2	8	3	26
West Midlands		4	5	2	2	2		5	4	24
Yorkshire	1	10	4	1	3	4	3	10	8	44
Grand Total	5	72	34	19	14	37	8	100	65	354

Graph 2. respondents by artform**Graph 3.** respondents by region**B) Survey responses****Q1. Engagement with environmental sustainability**

At the start of this project how engaged was your organisation with environmental sustainability?

A) Very engaged

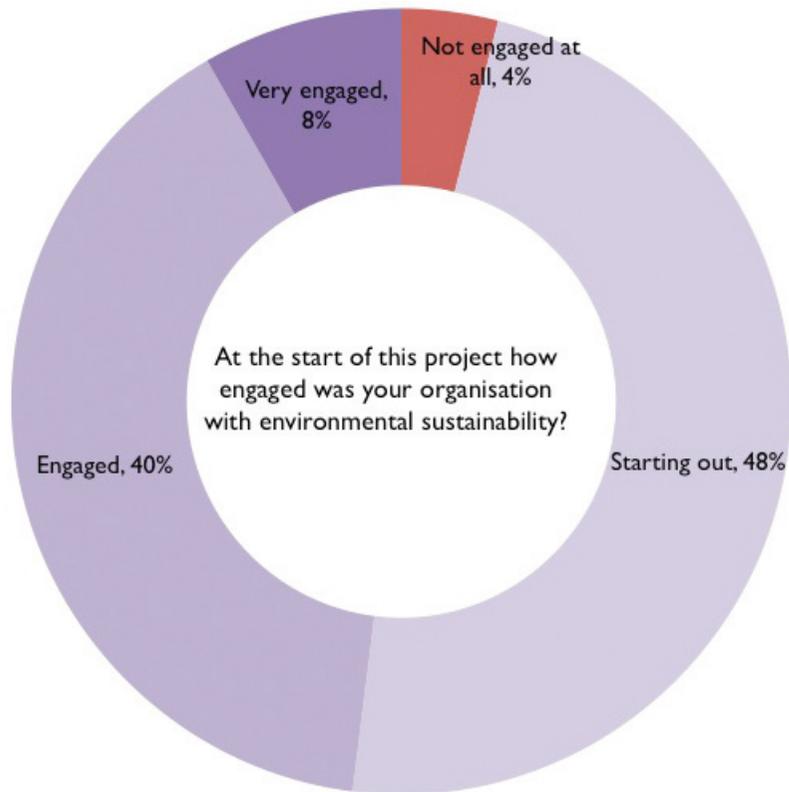
B) Engaged

C) Starting out

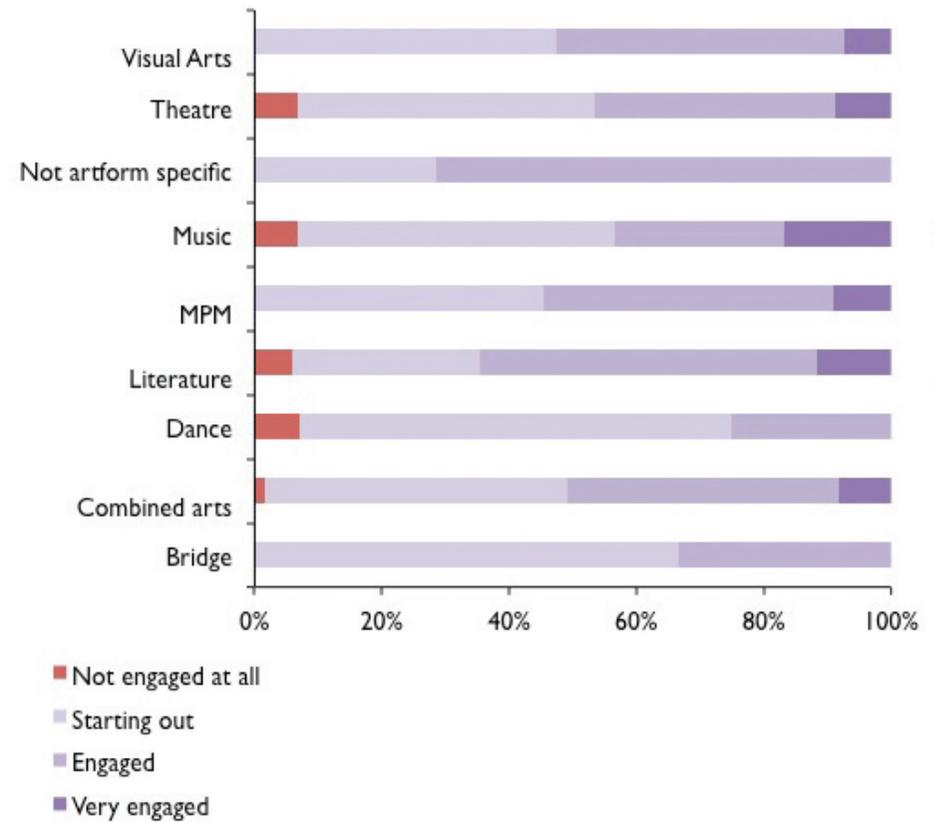
D) Not engaged at all

302 out of 354 people responded to this question. Graph 4 shows levels overall across the 302 respondents. Table 2 shows average levels of engagement per artform. Dance and Bridge organisations felt least engaged, whilst literature and Major partner museums felt most engaged.

Graph 4. level of engagement with sustainability (n=302)



Graph 5. level of engagement with sustainability by artform (n=302)



Q2. Attitudes to support, resources, Industry Green Tools and communications

With regards to the first year of the Arts Council environmental reporting (2012/13) please rate the following:

[Very good | Good | Average | Poor | Very poor | N/A]

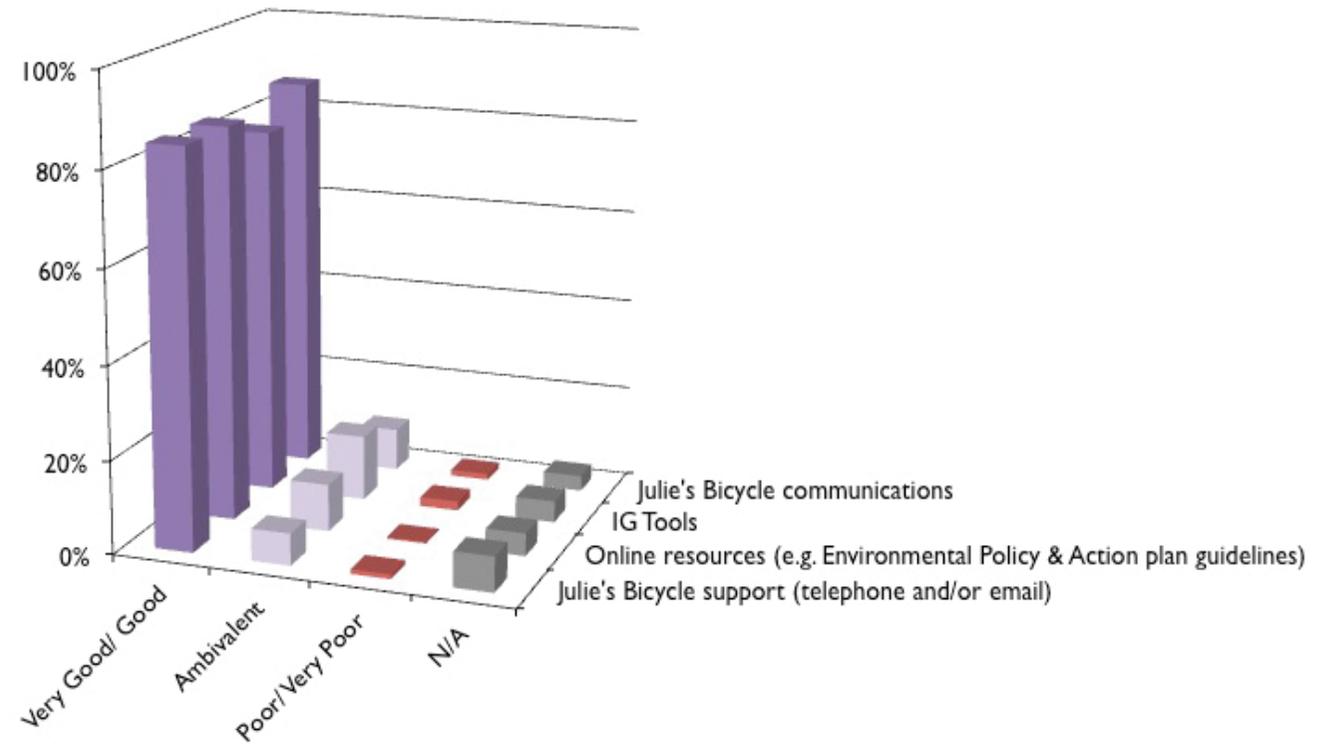
A) Julie's Bicycle support (telephone and/or email)

B) Online resources (eg environmental policy and action plan guidelines)

C) Industry Green Tools

D) Julie's Bicycle communications

Graph 6. attitudes to support, resources, Industry Green Tools and communications



Q3. What difference can the environmental reporting requirements make

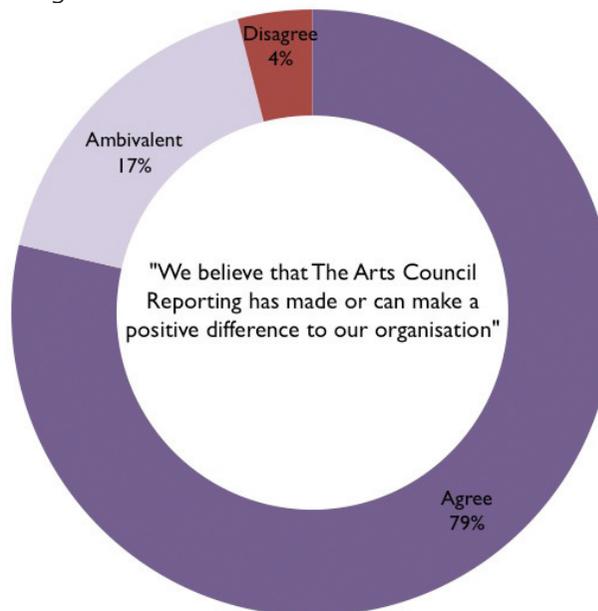
To what extent do you agree with the following sentences:

[Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree]

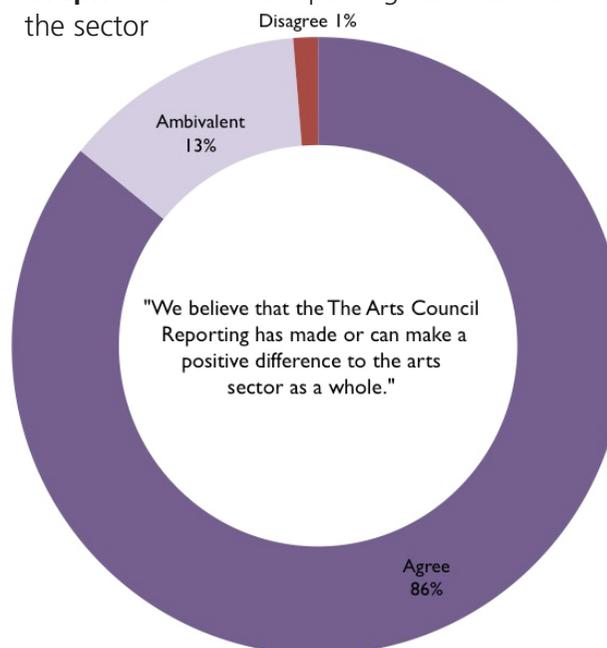
'We believe that the Arts Council environmental reporting has made or can make a positive difference to our organisation.'

'We believe that the Arts Council Environmental Reporting has made or can make a positive difference to the arts sector as a whole.'

Graph 7. difference reporting can make for organisations



Graph 8. difference reporting can make for the sector



The response to both statements was generally very positive, with slightly more respondents being positive about the second statement. This might be because some organisations feel the reporting requirements are not very applicable to their organisation, but appreciate that it could still be effective for the sector as a whole.

Q4. What was most useful from support, resources, Industry Green Tools and communications

What did you find most useful about: [Open ended response]

- A) Industry Green Tools
- B) Online resources (eg environmental policy and action plan guidelines)
- C) Support (telephone and/or email)
- D) Julie's Bicycle communications
- E) Other

Industry Green Tools – selected positive responses:

'Actually easy to use and interesting to see how data translated to environmental impact immediately.'

'Making our environmental impact more tangible to us.'

'The data that was produced was extremely good for such a small amount of input.'

'There is no way we could have calculated our carbon footprint without this, all aspects of it were excellent.'

'We have been able to include the facts and figures generated in our organisational info for funding applications.'

Online resources – selected positive responses

'A comprehensive set of documents that helped us to remember aspects of environmental reporting we might otherwise have overlooked.'

'Case studies for different types of organisations were useful for figuring out what is appropriate for our organisation.'

'Examples of policy templates and guidelines were very useful in determining what information was needed; fact sheets were also interesting to give background on why the reporting is necessary.'

Support (telephone and/or email) – selected positive responses:

'Excellent response times. Very helpful and understanding staff, able to answer queries and give good advice.'

'Superb. Very personal service. I know who I am talking to! Essential when feeling unsure/uncertain. Asking for help is all the easier.'

'The telephone support was immediate and very user friendly. The person we spoke to was very understanding of the sort of organisation we are and the position we are in which was motivating.'

'Extremely helpful as we have had numerous staff changes and they were dealt with very efficiently.'

Communications – selected positive responses

'I was glad of the sensibly timed reminders to act as a prompt to ensure it was completed on time.'

Q5. What could be improved from support, resources, Industry Green Tools and communications

What could be improved, changed and/or added with regards to:

[Open ended response]

A) *Industry Green Tools*

B) *Online resources (eg environmental policy and action plan guidelines)*

C) *Support (telephone and/or email)*

D) *Julie's Bicycle communications*

E) *Other*

Industry Green Tools – selected responses on what could be improved

- should be a museum slant, including fields and language
- questions often too theatre specific
- difficult for small organisations to use in a meaningful way
- a way of pro-actively addressing small organisations who may struggle to engage with the Industry Green Tools
- calculator for converting bill data to kWh
- option to export data to CSV or database
- resources on capturing the data required
- not able to create multiple activities with the same name
- explanation on what the carbon calculator means
- chart on how we're doing compared to benchmark

Resources – selected responses on what could be improved:

- the focus on carbon targets as the sole marker for assessment does not take any broader aspect of sustainability into account
- more real life examples as time goes on showing development
- more information about ethical sponsors and commercial companies
- additional funding and staff capacity to write these and implement them
- it might be helpful to have more streamlined documents. They are very detailed which means that some of the people we need to engage with them – eg trustees – become a little uneasy about the time they need to commit to absorb them properly
- advice for what festivals need to report in terms of energy usage and waste output could be clearer

Communications – selected responses on what could be improved:

- avoid conflicting information from the Arts Council and Julie's Bicycle
- sometimes there are a few too many emails
- perhaps a few more emails notifying us of inspirational steps other organisations have taken to inspire us

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Newcastle Gateshead Cultural Venues, Power Efficiency,
the Royal National Theatre, Sage Gateshead, Seven Stories
and Softtouch Arts.

About Julie's Bicycle

Currently working with over 1000 cultural organisations in the UK and Europe, Julie's Bicycle offers free online tools, research, and bespoke consultancy to help arts organisations measure, manage, and reduce their environmental impacts. Founded by the music industry, with expertise from the arts and sustainability, Julie's Bicycle bridges the gap between the creative industries and sustainability. Based on a foundation of peer-reviewed research, we sustain creativity, enabling the arts to create change.

Arts Council England and Julie's Bicycle entered into a partnership in 2012 to deliver an environmental support programme for National portfolio organisations, Major partner museums and Bridge organisations. The partnership, which runs from 2012 to 2015, combines the annual CO₂e measurement of energy and water use using Industry Green tools, and support to develop an Environmental Policy and an Action Plan for each organisation.

JULIE'S BICYCLE 
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