

# Julie's Bicycle

SUSTAINING CREATIVITY



## Sustaining Great Art Environmental Report

**2012-2015**  
**Results and Highlights**



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ENGLAND**

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## Foreword

### Darren Henley OBE, Chief Executive, Arts Council England

The arts can delight, amuse, challenge and shock; they can show us alternative ways of living and thinking. And when it comes to the environmental agenda, the arts can do all those together.

The fact is that a growing population brings growing pressures on vital resources, on infrastructure and energy, on our housing and on our communities – and that includes arts and cultural organisations.

It is therefore one of the goals of our ten year strategy that we should support arts organisations, museums and libraries to become resilient and environmentally sustainable.

Three years ago we began a working relationship with Julie's Bicycle, the global environmental charity, and subsequently became the first arts funding body in the world to embed environmental sustainability into our major funding agreements.

This move was based on our conviction – shared by arts leaders – that a focus on the environment is no longer just 'nice to have' but an issue that is critical to good business.

Between 2012 and 2015, more than 700 regularly funded organisations were required to have an up-to-date environmental policy and action plan, and report on their energy and water usage. This result was the single biggest environmental dataset for the arts in the world.

This report explores the findings of these first three years. It contains some compelling data. Over the course of the programme, participation among our regularly funded organisations rose from 14% to 98%. And over the last two years there have been carbon savings of 12,673 tonnes worth £2.29m, an annual 5% decrease in absolute carbon dioxide emissions despite an increase in cultural activities. This report comes at a significant time. In early December, the UN Climate Change Conference 2015 (COP21) takes place in Paris. In the future, the issues of climate change will require all of us, including arts and cultural organisations, to take care in our use of resources, and to ensure that we do not pursue short-term gain at the expense of future generations.

Arts and cultural organisations can lead the way practically, but they can also help us to have a constructive dialogue about climate change and its effects on our planet and our people.

Over the last three years our partnership with Julie's Bicycle has produced not only a replicable reporting model but also a unique programme of environmental events, action research projects, network development, and support for arts and culture globally.

Reflecting on these last three years, we can see how far we have come. The 98% engagement statistic is evidence of great positive commitment. Let's continue the great work, and demonstrate leadership at organisational and sector levels. In this area, as in so many others, art and culture can make a huge difference to all our lives.

# Executive summary

In 2012 Arts Council England became the first arts funding body in the world to include environmental reporting in the funding agreements of its major programmes. The Arts Council partnered with Julie's Bicycle, an organisation specialising in environmental sustainability within the arts, to deliver this work.

The initiative had two clear aims:

- 1 To track environmental impacts from energy and water use, as carbon footprints, for the arts community over three years;
- 2 To inspire organisations to be more environmentally sustainable.

Julie's Bicycle was contracted to provide the technical tools and the supporting programme, and to spur the arts on to become more environmentally sustainable. Over 700<sup>1</sup> UK revenue-funded organisations, including theatres, galleries, museums, tours, festivals and concert halls, were required to report on energy and water using the Creative Industry Green (IG) carbon calculators. They were also asked to have an up-to-date environmental policy and action plan.

Julie's Bicycle provided the carbon calculators and learning materials, and ran two support strands: the technical training, analysis for the calculators, and policy and action plan development; and a national programme of events, networks, research and evaluation, case studies, guides and examples of arts practice.

The first three years of the partnership are now complete. Have we achieved our aims? Emphatically yes, and much more besides. An overwhelmingly positive response from cultural organisations all over the country has provided plenty of evidence of success, both qualitative and quantitative. This report presents the results of the partnership, focusing primarily on the Arts Council's reporting requirements. (A summary of the accompanying events and resource programme can be found in the Appendix.) It headlines the response, data analysis, added value, and other notable findings, and concludes with key priorities for the coming three years.

*Pentabus produce original plays examining the place of the rural world in contemporary society. Pentabus achieved its target of a 10% CO<sub>2</sub> emissions reduction in 2015 through a range of measures including using lower-carbon transport when touring, reducing business travel through increased use of Skype, and installing energy-efficient office lighting. Their audience travel survey has helped to promote lower-carbon travel options. The artistic director has encouraged the team to make use of existing stores, to borrow props and to form partnerships with local organisations such as the Shropshire Furniture scheme.*

“ We've found that embedding sustainability has bred ingenuity during the creative process. It is more of a challenge to create something within boundaries - something that can amaze an audience, but also save the environment and save money.

This challenge is the motivation, to walk down that road and be resourceful rather than to create something with unlimited materials and money. It pushes you to be better and think about things with a different logic, one that we are finding to be ultimately more rewarding.

Crayg Ward,  
Pentabus Green Champion



<sup>1</sup> Between 2012 and 2015 over 700 revenue-funded organisations, national portfolio organisations (NPOs), major partner museums (MPMs) and bridge organisations, were required to report on energy and water and to have an up-to-date environmental policy and action plan. National youth music organisations (NYMOs) joined the programme in 2013. 713 organisations in 2015: 683 NPOs, 16 MPMS (89 individual museums), 7 bridge organisations and 7 NYMOs. 704 organisations in 2013: 681 NPOs, 16 MPMS (96 individual museums) and 7 bridge organisations.



Headline findings

Response: engagement, guidance

- From a near standing start, almost all of over 700 organisations are engaged and taking action.
- 98% of reporting Arts Council funded organisations (699) were involved by 2015 compared to 14% in 2012.
- 90% (642) have an environmental policy and 86% an environmental action plan.
- Almost all of those who can report are now reporting.
  - 69% (492) reported.
  - 23% (164) were unable to report. These comprise organisations who typically don't own or rent a building; are unable to access energy and water invoices; or have impacts which are too sporadic or small to measure meaningfully.
  - Only 8% didn't report at all.
- 40% have gone beyond the Arts Council's reporting requirements.
- 80%<sup>2</sup> now consider themselves engaged or very engaged with environmental sustainability.
- There have been many imaginative and solutions-driven responses evidenced in the case studies, workshops, exchanges, action-research and new initiatives.
- ~2000 participants attended one or more events and 41 case studies were provided by arts organisations.

*Liverpool Everyman's new building, opened in 2014 after a £27 million investment, acts as a creative hub, enabling the Everyman to realise its artistic, accessibility and environmental vision. The building uses a range of low-carbon energy sources, and has energy-efficient heating and cooling systems, materials and lighting. Most of the materials used in the building are recycled, reclaimed or sustainably sourced, and the building also features a number of water and biodiversity conservation measures. The building has been acclaimed by audiences and critics alike, and has won various awards including the 2014 RIBA Stirling Prize.*

Results: tracking impact and reducing emissions

Between 2013 and 2015:

- 12,673 tonnes CO<sub>2</sub>e and £2.29m was saved with an average 5% decrease in CO<sub>2</sub>e emissions each year, despite growth of the sector.
- 99% of CO<sub>2</sub>e emissions reductions resulted from energy savings. Water use remained stable overall.
- Two thirds of organisations reduced their energy use.
- Scaling these results up across all cultural buildings in the UK would see savings of £15m.<sup>3</sup>
- In the first year of reporting (2012), it was also possible to track savings of 748 tonnes CO<sub>2</sub>e and £176,000 from a sample group which already had data on energy and water use for 2011.
- The IG Tools have generated a robust dataset, the single biggest environmental dataset for the arts globally.

Added value: money, morale and reputation

- There have been clear benefits for the organisations themselves.
- 51% reported financial benefits.
  - 67% reported team morale benefits (rising to 71% for engaged and very engaged organisations).
  - 43% reported reputational benefits.
  - 70% found their environmental policy useful when applying for funding and 69% when engaging with stakeholders.
  - 92% found having an environmental action plan helped to manage and reduce environmental impacts.
  - 85% found the plan useful for communicating actions.

*In 2014, 'Human Nature' brought together artists, horticulturists, architects and choreographers to create new work focused on the growing seasons and nature, drawing from the choreographic roots of Siobhan Davies Dance.*

<sup>2</sup> 80% of 253 respondents to 2015 evaluation survey i.e. 202 organisations.

<sup>3</sup> £15 million potential total industry savings has been calculated by applying a 3% reduction on an estimated annual electricity spend of £86.4m and a 15% reduction on an estimated gas spend of £37m in the 2013/14 financial year and a 4% and 9% reduction respectively in the 2014/15 financial year, based on original research by the Oxford Environmental Change Institute, estimating the energy spend of the 16,000 buildings constituting the cultural sector in the UK.

## Cultural shifts: a global movement with momentum

- This initiative has reinforced a sustainability movement in culture with far-reaching potential.
- Much of the progress has come from the middle rather than the top of organisations.
- Despite this, a number of key Arts Council organisations have positioned sustainability at the centre of their organisational leadership.
- The initiative has generated a comprehensive and internationally referenced resource library charting the diversity and range of creative responses. It is widely seen as a model of outstanding practice. This is important in the context of international policy and global trends, particularly in the run up to the critical 2015 climate talks in Paris, COP21.
- The theatre and visual arts communities are the most proactive in all areas of environmental sustainability but they consider themselves to be doing the least<sup>4</sup> revealing an evolving maturity about the scale and complexity of the issues.
- There are clear priorities for the next three years of the partnership.

## Other key findings

- 17 organisations produce **50%** of the sector's carbon footprint.
- Organisations unable to report are not uninterested but are hampered by the nature of the Arts Council reporting requirements.
- Average annual savings of about **5%** are mainly being achieved through zero- or low-cost measures.
- The internal culture within the Arts Council is gradually shifting, with greater environmental and carbon literacy and engagement across the organisation.
- Almost all (**96%**) of the 33 relationship managers who contributed to the Arts Council evaluation believe that the programme has made, or can make, a positive difference to their portfolios, and some Relationship Managers (RMs) are well informed and committed.

## Key conclusions and priorities for 2015-18: creating a stronger cultural sector together

The weight of material gathered over the last three years proves that the business case and the creative case for cultural engagement with sustainability work best when they work together. The partnership approach, fundamental to the initiative's success, has generated confidence and ambition, key components of leadership. The framework for such leadership will be developed in the coming months, with specific resources for boards, governing bodies and executives; an emerging cohort of Arts Council funded organisations with sustainability leadership built into their funding agreements; and a series of leadership events. Arts Council England will focus on strategic leadership internally and across the portfolio between 2015 and 2018.

Reporting requirements and support are being better tailored to the diversity of the sector in 2015 - 18.

To date, savings have mainly been achieved through zero- and low-cost measures but a small number of organisations are already investing in lower carbon buildings and we expect to see the results of these investments in the next few years. Investment will be essential to achieve reductions beyond business-as-usual.

The combined results of the last three years give us much more than data on carbon. Fresh perspectives on the arts have prompted many organisations to commit their time, investment and creativity into exploring environmental sustainability. The success of the partnership has important lessons for policy: the combination of light-touch funding requirements; relevant and tested practical resources; regular events; networks and team support; expertise to hand; and the critical leadership from the sector have all contributed to make it work. Building environmental sustainability into the fabric of the arts not only delivers on its promise, but adds inherent long-term value to organisations and the sector as a whole.

## 1. Introduction

The most critical climate talks for over two decades will take place in Paris at the end of 2015. COP21 brings together 196 countries to negotiate a new legally binding universal agreement which aims to limit greenhouse gas emissions and keep global temperature below two degrees of warming. These talks, alongside the UN Sustainable Development Goals launched in October<sup>4</sup>, aim to generate the political and investment framework which, over the next several decades, will be the vital building blocks for a sustainable world. So this is an auspicious moment to present the findings of the first three years of Arts Council England's flagship environmental reporting programme.

The Arts Council programme was originally conceived in the wake of the notoriously disappointing climate talks, COP15, that took place in December of 2009. It was designed to do what the talks had failed to achieve: to activate and inspire the arts community to make environmental sustainability a major priority. It set out to be relevant to all aspects of arts practice, to be both manageable and action-oriented, and to coincide with the Arts Council's 2012 - 15 funding cycle.

Since then there have been some encouraging signs of an improving outlook: the findings of the latest IPCC Fifth Assessment Report<sup>5</sup> are widely accepted and political rhetoric is more positive (notably from the USA and China, who struck a joint deal to curb emissions in late 2014). Clean technologies and markets have rapidly expanded and global investment in clean energy increased by 16%, from 268 billion dollars to 310 billion, between 2013 and 2014.<sup>6</sup> The UK has steadily reduced its CO<sub>2</sub>e<sup>7</sup>

since 1990 and in the second quarter of 2015 renewable energy surpassed coal and supplied 25% of the UK's electricity.<sup>8</sup> But with the recent dismantling of many of the financial and policy incentives which have driven these emissions reductions, the onus falls more onto civic society to support the ambitions of COP21.

The place that climate change occupies culturally is also shifting, and the range and scope of voluntary mandates has grown rapidly: faith, business, energy, investment, divestment and community movements all over the world are finding both voice and solutions. The policies and frameworks decided at COP21 will determine infrastructure and investment for decades and this will filter down to the arts world, just as at COP15. Now there are growing numbers of artists and creative leaders calling for action on climate change and sustainable innovation.

And there is creativity: the work of artists such as Jeremy Deller, Marcus Coates, Alice Sharp, Rachel Pimm, Alison Turnbull, Adam Chodzko, Alex Hartley, Andy Goldsworthy, Jonathon Dove, Steve Waters, Matthew Herbert, Lemn Sissay, Siobhan Davies, Ackroyd and Harvey, Sabrina Mahfouz and many more. This cultural movement is being taken forward by such organisations as Free Word, Bow Arts, Blast Theory, Chrysalis Arts, Glyndebourne, Ironbridge Gorge Museum, In Between Time Productions, Cape Farewell, LIFT, the London Theatre Consortium, Live Art Development Agency, Manchester Partnership MPM, Sage Gateshead, Seven Stories, Tipping Point, Young Vic, Battersea Arts Centre, Pentabus, Performances Birmingham, Liverpool

Everyman, Royal National Theatre, Tobacco Factory, the Whitworth Art Gallery, Artsadmin and Contact Theatre.

As Arts Council England and Julie's Bicycle embark on another three-year partnership there is no doubt that the cultural movement will keep on breaking new ground, but the three simple ideas at the heart of the original programme remain. The first is that climate change is as much a cultural as a scientific issue. Human decision-making is often not rational: it is driven by desires and fears rooted in unconscious values shaped by context and the stories we tell. Without recognising this, attempts to address climate change are unlikely to succeed. Second, it is clear that collective environmental knowledge and action, delivered collaboratively and at scale, will lead to cultural change. We have plenty of evidence testifying to that in the pages of this report. Third, the creative community, the epicentre of culture, has a special contribution to make to the world: it shapes and builds culture, identity, communities and values.

But the value of the arts does not just rest on great storytelling. The arts are creating a space where new ideas can take shape, and be tested and developed into real solutions: energy providers working with festivals on new renewable technologies, designers creating closed-loop production systems for theatre, circular business modelling for festival waste and kinetic clothing for dance. In short, it has a vital role in shaping humanity.

Transformational change is happening at a cultural level. We all have played some part in that and want to share our story. We have proven that the arts sector can evolve into a strong, sustainable force at the core of culture. So, whilst politicians, engineers and scientists lead these discussions, we also need to prioritise the crucial role of the creative community in helping us reach a real and meaningful tipping point in the transition to a balanced, fair and low-carbon future.



<sup>4</sup> <http://www.un.org/sustainabledevelopment/sustainable-development-goals/>

<sup>5</sup> <http://ipcc.ch/report/ar5/syr/>

<sup>6</sup> <http://about.bnef.com/presentations/clean-energy-investment-q4-2014-fact-pack/content/uploads/sites/4/2015/01/Q4-investment-fact-pack.pdf>

<sup>7</sup> There are seven 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 (CO<sub>2</sub>), per unit of gas. To deal with this, scientists use carbon dioxide equivalent (CO<sub>2</sub>e) as a common denominator for the main greenhouse gases so they can express the climate impacts in a single measure.

<sup>8</sup> <https://www.gov.uk/government/policies/greenhouse-gas-emissions>



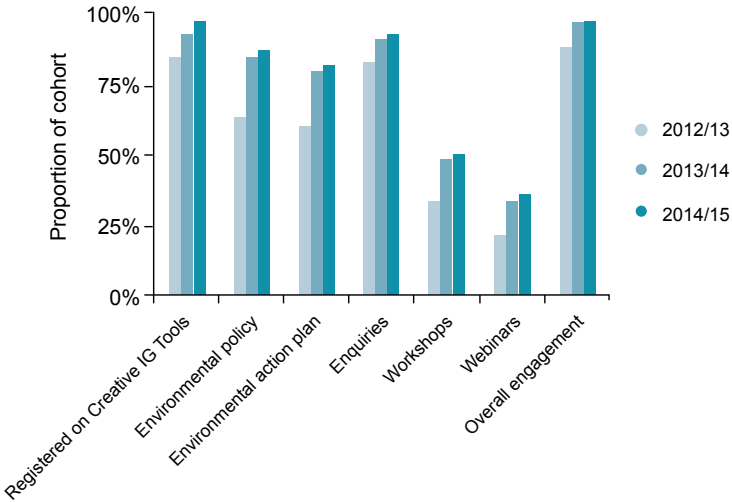
2. A positive response

This report focuses on the results of the Arts Council's reporting requirements. A summary of the accompanying support, events and resource programme can be found in the Appendix.

The three-year reporting initiative has been widely adopted, with 98% (699 organisations) involved in 2015 compared, with 14% (99 organisations) at the start. Developing an environmental policy and action plan, and measuring energy and water use are funding requirements.

Figure 1. shows how organisations have engaged in the initiative across the period and Table 1. shows how organisations have met the reporting requirements.

Figure 1. Levels and means of involvement with programme 2012/13 to 2014/15



Note: the Creative IG Tools are Julie's Bicycle's carbon calculators for venues, outdoor events, indoor events, offices, productions and tours.

When asked to consider whether reporting requirements make a positive difference, most respondents said that they do, although the figures declined slightly between 2013 and 2015. 84% of respondents to the 2015 evaluation survey<sup>9</sup> 'agreed' or 'strongly agreed' that the reporting requirements make a positive difference to the sector as a whole, compared with 86% in 2013. 75% 'agreed' or 'strongly agreed' that they make a positive difference to their organisation, compared with 79% in 2013. This slight decline can perhaps be explained by a 'normalisation' of environmental engagement across the reporting group.

During years two and three, Julie's Bicycle increased support to the Arts Council's Relationship Managers (RMs)<sup>10</sup>, particularly on their efforts to communicate the value of reporting. Only 33 RMs (19%) contributed to the 2015 evaluation but the vast majority (96%) of these respondents are 'excited by' and/or 'an advocate of' environmental sustainability, an increase from 85% in 2014, based on responses from 35 RMs (22%). However, this low response rate is itself an indicator of the need for increased engagement with RMs.

Table 1. Meeting reporting requirements 2012/13 to 2014/15

	2012/13		2013/14		2014/15	
	Number*	%	Number	%	Number	%
Provided environmental data	493	70	486	68	491	69
Couldn't provide meaningful data but gave a reason why	141	20	164	23	162	23
Didn't provide any data or give a reason why	70	10	64	9	60	8
Had an environmental policy	463	66	608	85	642	90
Uploaded policy on the Creative IG Tools	N/A	N/A	N/A	N/A	357	50
Had an environmental action plan	431	61	570	80	613	86
Uploaded action plan on the Creative IG Tools	N/A	N/A	N/A	N/A	491	69

\*The number of organisations increased from 704 in 2012/13 to 713 in 2014/15, mainly as national youth music organisations were required to report from year two.

Figure 2. Positive difference the requirements have made, or can make, to the sector as a whole – 2015

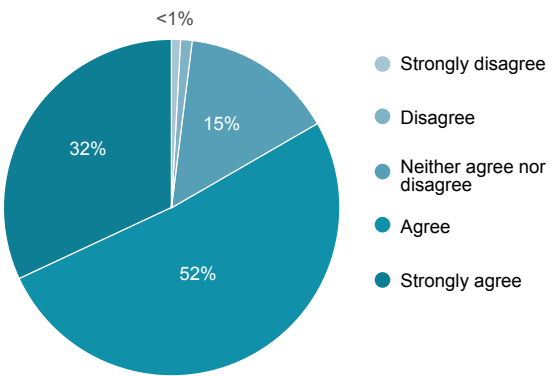
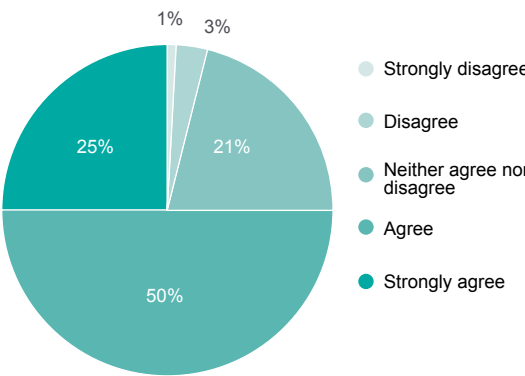


Figure 3. Difference the requirements have made, or can make, for organisations – 2015



<sup>9</sup> 253 respondents to the annual evaluation survey in 2015, a 35% response rate; 323 respondents in 2014, a 45% response rate; and 354 respondents in 2013, a 50% response rate.  
<sup>10</sup> Relationship managers: responsible for managing Arts Council England relationships with organisations, with a specialism in an art form, based in one of The Arts Council's designated regions in England.

## 3. From environmental literacy to leadership

### 3.1 A shift in engagement

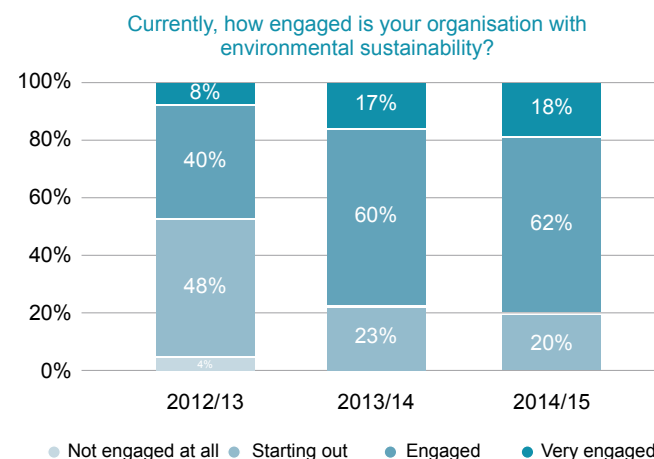
Levels of environmental awareness and commitment to environmental improvement have steadily increased over the past three years.

- **Ninety per cent** of organisations had an environmental policy in 2015 compared with **66%** in 2013. Half of these had uploaded their policies on the online reporting tools.<sup>11</sup>
- **86%** of organisations had an environmental action plan in 2015 compared with **61%** in 2013. Over two thirds of these had uploaded their action plans on the online reporting tools.

This shift in environmental awareness is generating a range of practical and creative responses.

Levels of engagement are high. 202 organisations or **80%** of respondents to the 2015 evaluation survey<sup>12</sup> consider themselves 'engaged' or 'very engaged' with environmental sustainability, compared to 170 organisations or **48%** of survey respondents in 2013.

**Figure 4. Shift in engagement 2012/13 to 2014/15**



*In the lead up to the Time to Act climate march in 2015, the London-based **Arcola Theatre** created an engaging infographic countdown on their website. The audience uncovered facts about Arcola's sustainability journey, from installing solar panels to fitting LED lights.*

**Seventy-four per cent** of theatres responding to the 2015 evaluation survey consider themselves 'engaged' or 'very engaged', compared with **41%** at the beginning of the initiative.

Many organisations have highlighted the value of sharing experience and good practice at the regional workshops delivered as part of the support programme. There is significant evidence of this from collaborations such as the London Theatre Consortium, Newcastle Gateshead Cultural Venues and Manchester Arts Sustainability Team, demonstrating how this type of exchange can accelerate learning and catalyse significant progress.

*The **London Theatre Consortium's** Sustainability Group consists of thirteen theatres committed to changing their operational culture. The group works to develop and share practical measures which reduce energy use and other environmental impacts, with a CO<sub>2</sub> emissions reduction target of 60% by 2025. Several theatres have programmed work around sustainability and climate change, such as Young Vic's *Classics for a New Climate*, and developed creative audience-awareness campaigns.*



***Aldeburgh Music** reduced its electricity use by 10% between 2010 and 2014, mainly as a result of installing voltage optimisation, an energy saving technology which brings the voltage supplied into a building in line with what is required by equipment, machinery and appliances. Aldeburgh Music recently invested in 40 solar photovoltaic panels and a biomass boiler to further reduce CO<sub>2</sub> emissions.*

<sup>11</sup> From 2015 onwards, organisations are asked not only to state if they had an environmental policy and action plan, but also to upload the corresponding documents on the Creative IG Tools.

<sup>12</sup> 253 respondents to the annual evaluation survey in 2015, a 35% response rate; 354 respondents in 2013, a 50% response rate.



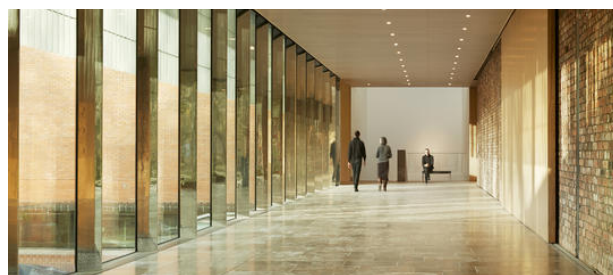
### 3.2 Increasing leadership

Increased environmental understanding and action by Arts Council England organisations over this time has corresponded with increasing levels of ambition, an emergent vision and desire for greater leadership.

Research carried out in 2014<sup>13</sup> on the cultural and creative sectors' environmental actions and attitudes showed that 63% of organisations judged to be leaders on environmental sustainability in the cultural sector were from the Arts Council reporting group.

Despite some examples of outstanding senior leadership, much leadership mainly comes from the middle level of organisations – from those tasked with measuring and managing impacts – rather than from executives.

The relationship between creative content and its organisational context is closely linked, the context often framing the content. The recent proliferation of artistic responses and creative invention around sustainability is connected to the flourishing confidence, expertise and literacy seen across the creative community. Those who do most to engage with and reduce their impacts, in particular the visual arts and theatre, also seem increasingly to reflect this engagement in their artistic output.



*The Whitworth Art Gallery has been actively engaged in environmental sustainability since 2008, with a team of environmental champions working on technical measures and behavioural change. Environmental sustainability was at the heart of its recent £15 million project to refurbish and extend its historic building. The design focused on the use of the building envelope, natural daylight and natural ventilation systems, and low-carbon technologies to reduce energy consumption and CO<sub>2</sub>e emissions, whilst a brown roof, landscaping and planting using native species and wild flowers, and introducing bee hives contribute to biodiversity. The gallery advocates the use of reusable displays and sustainably sourced materials for exhibitions. Raising environmental awareness with staff, visitors and other stakeholders and engaging with them on environmental behaviour change was, and continues to be, a key area of focus for the gallery to ensure the sustainability of its building in use. This experience has bridged to the Whitworth's audiences and informs wider thinking, from its schools' programme to work with artists.*

### 3.3 Leading by example

The Arts Council reporting initiative is inspiring others nationally and internationally. For instance, Oxford City Council and Creative Scotland introduced similar requirements last year. And the Arts Council was a key contributor to the 2014 work carried out by the International Federation of Arts Councils and Cultural Agencies (IFACCA)<sup>14</sup>, in partnership with Julie's Bicycle, to map environmental engagement and good practice among its members.

The Arts Council recognises the importance of demonstrating its own environmental leadership. It is working closely with staff to integrate environmental thinking across the board. And since moving offices in 2014, it has been developing an environmental policy and reporting for its own estate.

*Artsadmin's biennial 2 Degrees Festival is a week-long programme of events, workshops, talks, debates, performances and installations by international artists who are making cutting-edge responses to climate change. The festival aims to inspire ideas, connect communities and empower people to find and create solutions for a sustainable future.*



*University of Cambridge Museum's 'Green Museums' enables audiences to examine the environment from a cultural perspective. Highlighting and exploring the environmental stories of its collections, it explores themes such as: Adapting to Threat; Straight Science, Green Buildings and Earth Stories and Imagery.*

“ The arts are a really powerful tool with which to bring forward new ideas and influence social norms. But as well as talking about sustainability, promoting and making work about it, we need to make sure we are practising what we are (and should be) preaching.

Claire Woodhill,  
Green Champion, Artsadmin

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<sup>13</sup> Sustaining Creativity Survey: Actions and attitudes from the creative community: environmental sustainability 2014, Julie's Bicycle and BOP Consulting

<sup>14</sup> D'Art Report 34b – The arts and environmental sustainability: an international overview, International Federation of Arts Councils and Cultural Agencies and Julie's Bicycle, November 2014

## 4. A shared evidence base

### 4.1 Data with purpose

Sixty-nine per cent of organisations now use a common reporting framework, generating the single biggest environmental dataset for the arts globally.

The resulting information and metrics are enabling organisations to:

- better understand their environmental impacts and identify how to reduce them;
- monitor environmental performance and track the results of their actions;
- compare performance against their peers using energy and water-use benchmarks.

Julie's Bicycle has also used the insights from evaluation surveys for both reporting organisations and relationship managers to improve the support provided and develop communications around the value and benefits of environmental engagement.



Image courtesy of HandleBards

In the summers of 2013 and 2014 the *HandleBards* cycled 2,000 miles around the UK and Europe. They carried their sets, props, costumes and camping equipment to perform Shakespearean plays on four bikes. The travel generated just one tonne of CO<sub>2</sub> emissions, by using the ferry, compared with 52 tonnes CO<sub>2</sub> if they had used cars. The company will be working with designers and engineers to integrate the bikes into the show, powering lighting and mechanical contraptions and also generating electricity to charge phones and laptops as they cycle.

*Heads Together Productions* has worked to ensure that its new building is energy-efficient. As well as achieving a 'B' rating for its Energy Performance Certificate (EPC), it has also won the Royal Institution of Chartered Surveyors (RICS) Award for Best Building for Community Benefit in Yorkshire based partly on its environmental actions.

Over the last year, *Somerset Film and Video Ltd.* reduced gas use by 17%, mainly by adjusting time settings. It also reduced business travel emissions by 16%, mainly through increased use of car sharing. Over the coming year they will be installing energy efficient lighting and updating production kit to further reduce emissions and costs.

### 4.2 Reporting progress

We've seen a marked shift in reporting with 69% of 700 target organisations submitting environmental data by 2015. 23% were unable to provide meaningful data, as they were either:

- sharing space in a building with larger Arts Council organisations already providing data on environmental impacts;
- building tenants who couldn't access specific data from their landlords, or;
- working remotely from home.

Just 8% did not report at all. The level of robust data<sup>15</sup> increased from 56% in 2012/13 to 63% in 2014/15.

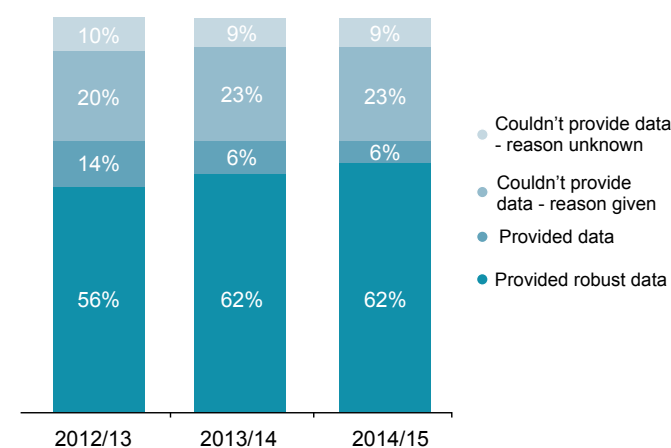
Reporting has generally been easier for medium to large building-based organisations – often with significant utility costs – which own, lease or at least have high levels of control over their buildings and utilities. It was more difficult for:

- smaller organisations which don't own or rent a building – often the case for music, literature and dance organisations – and have found it difficult to access meaningful energy and water data, and;
- non-building-based activities, notably outdoor events, productions and tours, whose impacts were too sporadic or small to measure meaningfully.

Reporting has evolved beyond measuring energy and water use to cover a broad range of impacts from a diverse range of activities, building a better understanding of impacts in relation to the size, scale and nature of activity within the reporting group. Many organisations are now reporting on waste and travel for example.

By 2015, 39% of all organisations had exceeded the minimum reporting requirements, compared with 21% in 2013. In 2013 only venues and offices were reporting, but by 2015, touring companies, festivals and outdoor events and productions were also reporting.

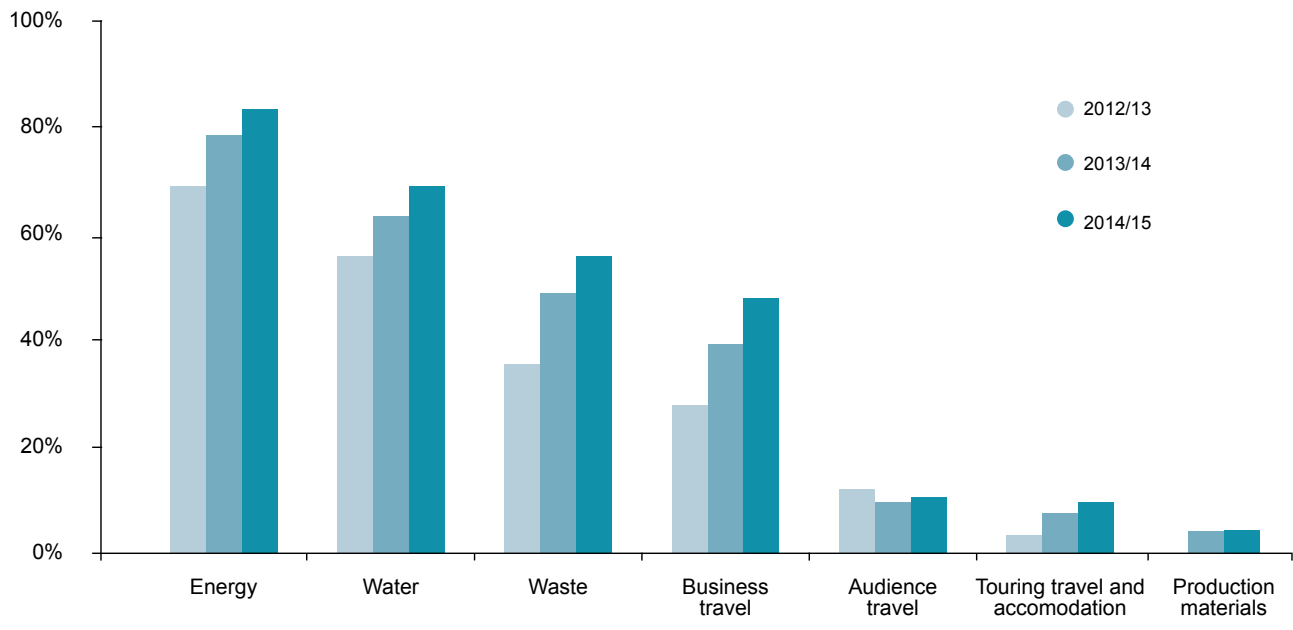
Figure 5. Reporting levels and data quality – 2012/13 to 2014/15



<sup>15</sup> All data submitted is reviewed to determine if it can be included in the carbon footprint analysis. Data typically excluded from the analysis includes data which covers less than a twelve month period, e.g. due to building refurbishments or moves, and data which is significantly different to sector average for buildings or outdoor events of a similar size.

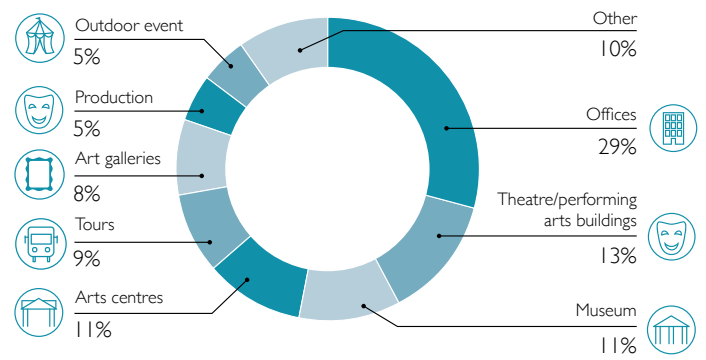


Figure 6. Reporting by source of impact – 2012/13 to 2014/15



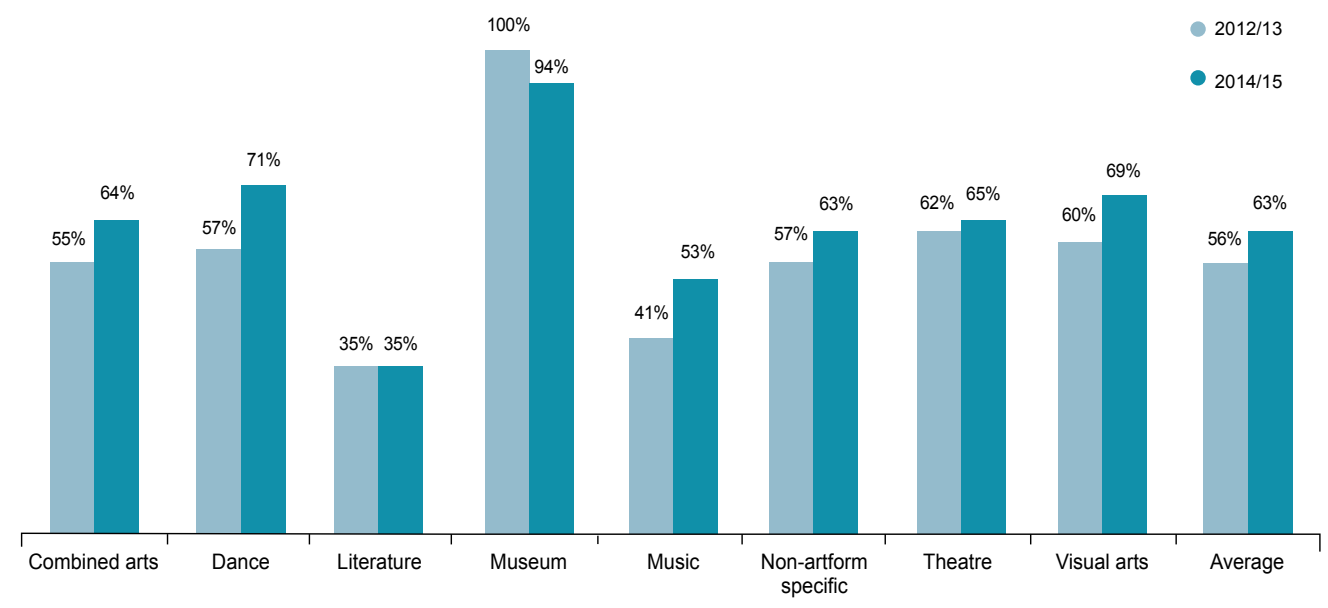
Artform has a significant influence on the extent to which an organisation can provide meaningful and robust data. Museums, visual arts and theatre, which comprise a high number of medium to large building-based organisations, have the highest levels of robust data – 94%, 69% and 65% respectively. Literature and music have lower levels of robust data – 35% and 53% respectively. Music comprises a high number of smaller organisations such as National Youth Music Organisations (NYMOs) and a few larger venues.

Figure 7. Reporting by type of activity - 2014/15



Newcastle Gateshead Cultural Venues (NGCV) have been working with councils, charities and transport providers to explore ways of promoting walking, cycling and the use of public transport to their employees and visitors. As well as undertaking staff and audience surveys to better understand travel needs and habits, venues have also contributed to several behaviour change campaigns, including Car Free Days, National Bike Week and Family Explorers North East, a project that helps families enjoy a wider range of cultural experiences using sustainable transport modes.

Figure 8. Levels of robust data by artform – 2012/13 and 2014/15



Overall, the reporting requirements have had most value for organisations not already engaged on sustainability and less value for organisations with well-established environmental commitment and practices and a small number which interpreted the reporting requirements solely as a matter of compliance.

mac birmingham invested £7,000 in installing efficient LED lighting, working in partnership with local company Eco2Energy. It is projected to save around £3,000 a year on its energy bills as a result. mac birmingham is now looking into replacing a further 250 lights to increase financial and energy savings.

Julie's Bicycle has responded to the evolution in and challenges of reporting in a number of ways, notably:

- tailoring resources to different activities and impacts, such as webinars for outdoor events, productions and tours, and guides on waste and water management at outdoor events, sustainable production and touring;
- developing the Creative IG Tools, for example, diversifying the range of impacts an organisation can account for, allowing users to compare performance over time and against sector benchmarks and creating a policy and action plan upload feature;
- increasing support for Relationship Managers (RMs) in their role working with reporting organisations, for example through RM reporting workshops, briefings and Creative IG Tools training;
- using case studies to communicate the benefits of environmental reporting and action as well as examples of good practice.



4.3 Benchmarking

Reporting has been a major contributor to creating a set of energy and water benchmarks. These provide greater insight into energy and water use and allow organisations to compare their environmental performance with the sector average. The latest benchmarks cover:

- museums and galleries – based on data from 57 museums, 43 art galleries and 52 art centres;
- performing arts – based on data from 6 concert halls and 105 theatres;
- offices – based on data from 196 offices.

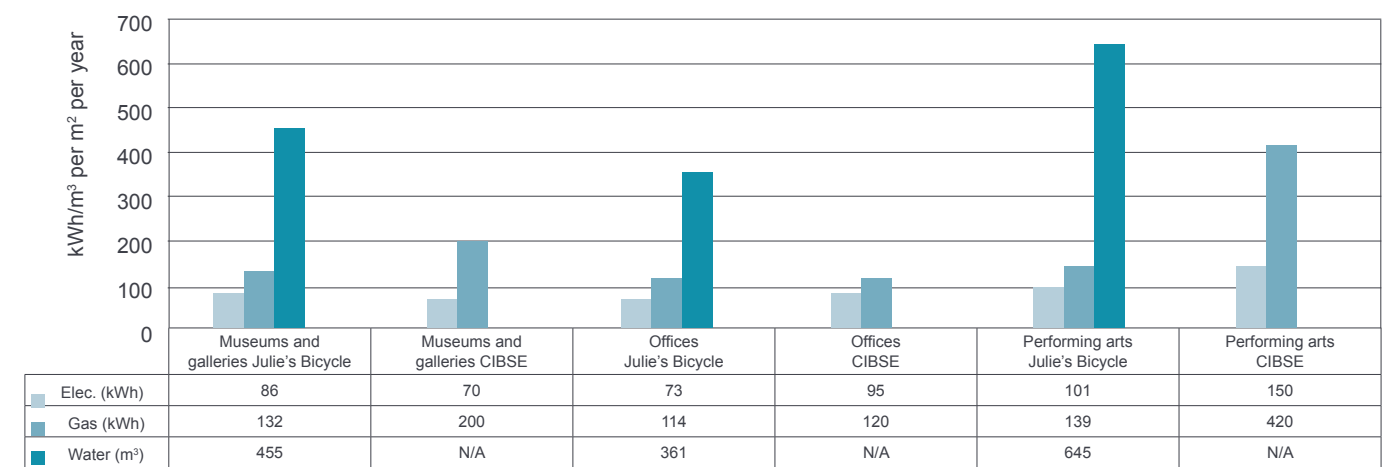
By relating energy and water use to floor area, the benchmarks make it simpler to compare energy and water use no matter the size or scale of an organisation. The Creative IG Tools now automatically compare an organisation's energy and water use against the benchmarks. The benchmarks show that offices are the least energy and water intensive, followed by museums and galleries, and that performing

arts buildings are the most energy and water intensive. This can be explained by the fact that:

- offices tend to have more limited operating hours and little energy-intensive technology and equipment;
- museums and galleries have longer operating hours, specialist lighting and strict environmental conditions for collections requiring higher levels of energy use;
- performing arts buildings have the longest operating hours and have energy-intensive equipment for productions.

The benchmarks have been endorsed by the Chartered Institute of Building Services Engineers (CIBSE), the body responsible for benchmarking the built environment across England. Our research and data show that the equivalent CIBSE benchmarks<sup>16</sup> overestimate gas consumption, especially in the case of performing arts.

Figure 9. Julie's Bicycle sector benchmarks compared with CIBSE equivalents



<sup>16</sup> CIBSE has three sets of equivalent benchmarks: general offices, cultural activity and entertainment halls. Cultural activity covers: art galleries; arts centres; libraries; and museums. Entertainment halls cover: auditoria; casinos; cinemas; concert halls; dancing schools; entertainment halls; and theatres. CIBSE TM:46 is their technical memorandum on the energy performance of different types of activities and buildings.

5. Building resilience

5.1 Understanding impacts

The total carbon footprint<sup>17</sup> of 449 organisations in 2014/15 was 107,784 tonnes of CO<sub>2</sub>e. Energy use is the biggest source of emissions, generating 97% of the footprint. Theatres, art centres, concert halls and museums together constitute over three quarters of the total reported footprint.

Table 2. Carbon footprint by activity - 2014/15

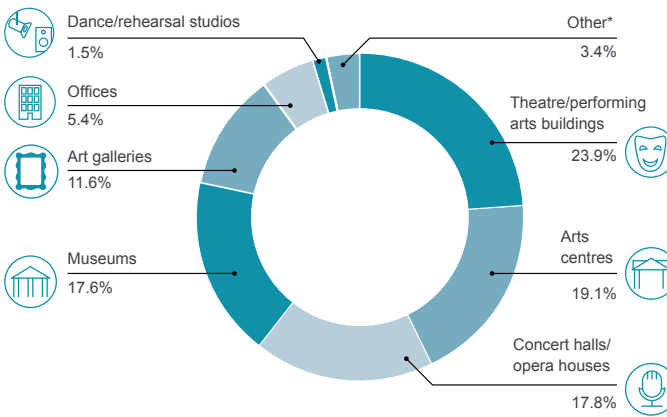
	Tonnes CO <sub>2</sub> e	%
352 cultural buildings	101,030	93.7
201 offices	5,778	5.4
58 tours	831	0.8
33 productions	96	0.09
33 outdoor events	49	0.05
Total	107,784	

17 organisations constitute 50% of the total 2014/15 carbon footprint due to the size and scale of their buildings and corresponding energy demand. A number of these organisations, such as Royal National Theatre and Sage Gateshead, are already taking significant steps to reduce their impacts, for example investing in energy efficient heating and cooling and installing low energy lighting systems.

Table 3. Carbon footprint by source of impact – 2014/15

Source of impact	Tonnes CO <sub>2</sub> e	%
Electricity	79,716	74
Gas	24,278	23
Waste	2,071	2
Water	806	1
Accommodation (touring)	434	0.4
Travel and freight (touring)	397	0.4
Other (outdoor event energy use and production materials)	81	0.1
Total	107,784	

Figure 10. Carbon footprint by building type – 2014/15



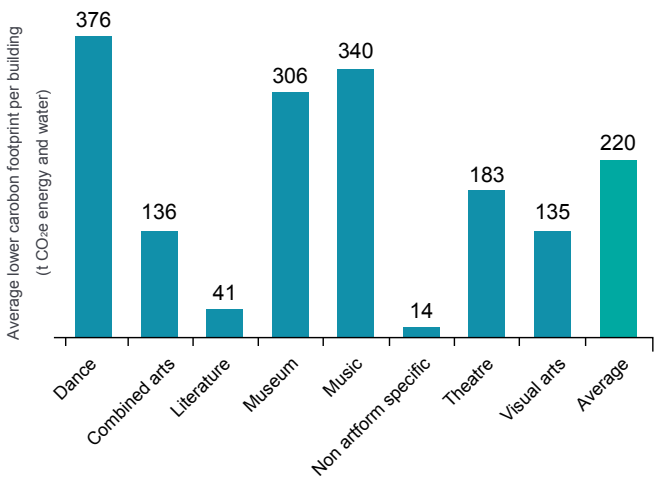
\*'Other' covers building types and activities which generated less than 1% of the total carbon footprint.

Building type: clubs (large and small), arts studios, libraries, cinemas workshops warehouses or stores.

Activities: tours, productions, outdoor events.

<sup>17</sup> A carbon footprint is a measure of the climate change impact of a product, country, person, company etc. in terms of greenhouse gas emissions, measured in units of carbon dioxide (CO<sub>2</sub>e). CO<sub>2</sub>e emissions are calculated by applying a carbon conversion factor to, for example, kilowatt hours (kWh) of electricity and gas used, litres of water used, tonnes of timber used, tonnes of waste to landfill.

Figure 11. Average carbon footprint per building by artform – 2014/15



*Tyne and Wear Museums and Archives have been working with Demeter to install water monitoring across the Discovery Museum to identify leakages and improve water use management.*

*FACT (Foundation for Art and Creative Technology) reduced its gas use by 32% by adjusting the running times of its boiler and increasing the frequency of boiler maintenance intervals from six to three months.*



*Manchester Arts Sustainability Team (MAST) is a cross-sector network of cultural and arts organisations working together to reduce their environmental impacts. Chaired by Royal Exchange Theatre, other members include Contact Theatre, Manchester Art Gallery, the Whitworth Art Gallery, Manchester International Festival and the Lowry. MAST is committed to achieving an average 7% reduction in absolute emissions from energy use (electricity and gas) on an annual basis. Between 2012/13 and 2013/14, 10 of its 13 members reduced emissions from energy use, with an average saving of 8%. This represents a collective saving of £218,436 on energy spend and 770 tonnes of CO<sub>2</sub> emissions.*

5.2 Increasing efficiency and financial savings

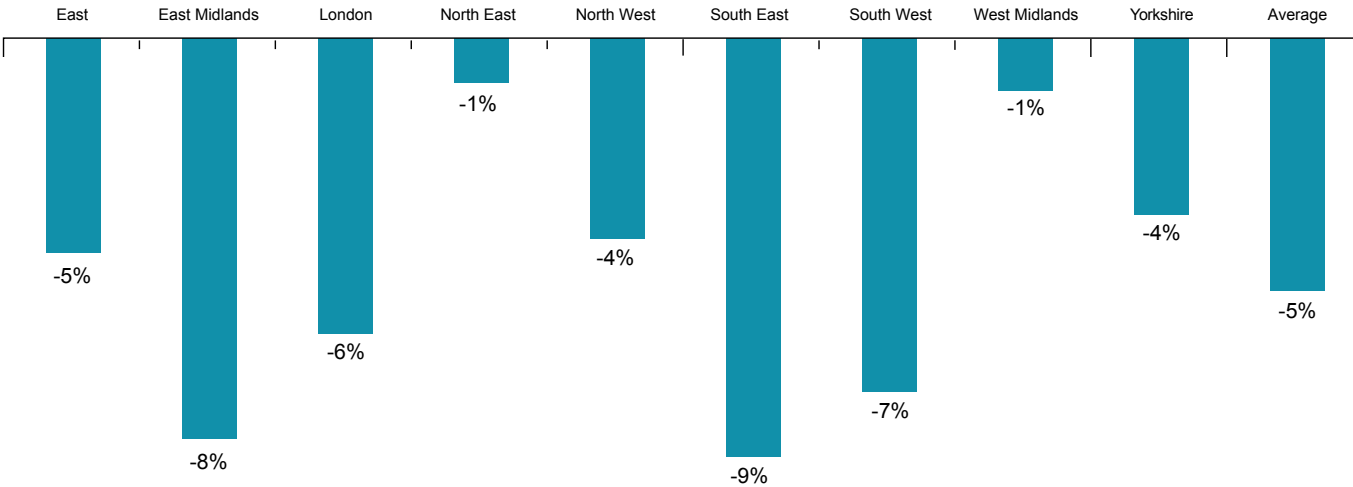
Over two years, reductions across the reporting group saved 12,673 tonnes of CO<sub>2</sub>e emissions – equivalent to cost savings of £2.29 million.<sup>18</sup>

Ninety-nine per cent of emissions reductions were achieved through energy saving measures. Water use has remained stable across the reporting group over the three years, an indication that it has not been a priority in terms of reducing environmental impacts. Compared with energy use, water use is not a significant source of CO<sub>2</sub>e emissions. It does however impact on water scarcity, quality and availability.

Carbon savings between 2013 and 2014 were 7,063 tonnes CO<sub>2</sub>e, a 6.2% reduction, and 5,610 tonnes CO<sub>2</sub>e between 2014 and 2015, a 5% reduction. These reductions have been achieved despite a 7.8% increase in cultural activity over the same two years.<sup>19</sup>

Scaled up across all cultural buildings in the UK these savings would equal 85,000 tonnes of CO<sub>2</sub>e, equivalent to £15 million cost savings.<sup>20</sup>

Figure 12. Annual CO<sub>2</sub>e savings per region – 2013/14-2014/15



<sup>18</sup> CO<sub>2</sub>e savings are net savings, i.e. savings made overall after taking both increases and decreases in emissions into account. £2.29m cost savings are calculated by applying average electricity and gas tariffs of 11p and 3p per kWh respectively to the net savings in electricity and gas use.  
<sup>19</sup> National portfolio organisation and major partner museum statistics for 2014/15  
<sup>20</sup> Applying a 3% reduction on an estimated annual electricity spend of £86.4m and a 15% reduction on an estimated gas spend of £37m in the 2013/14 financial year and a 4% and 9% reduction respectively in the 2014/15 financial year based on original research by the Oxford Environmental Change Institute estimating the energy spend for 16,000 buildings constituting the cultural sector in the UK.

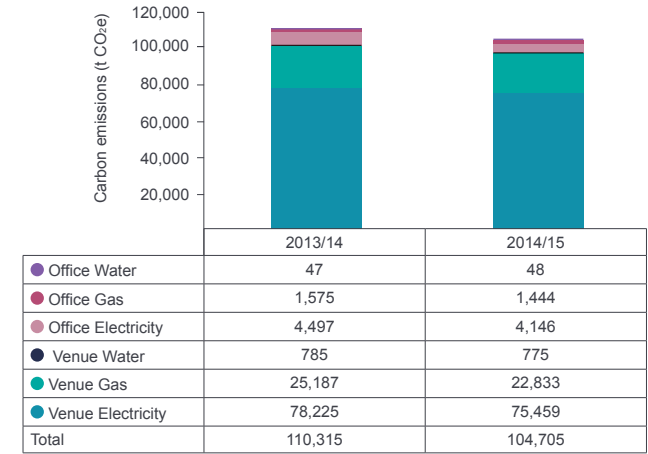


*ActionSpace is an independent arts charity based in London which supports the development of artists with learning disabilities and creates innovative projects for people with learning disabilities to engage with the visual arts. As a member of the Tooting Work and Play Scrapstore they can source and exchange unused materials with other organisations, access a wide variety of high quality art materials that might otherwise be thrown away and also find an eclectic range of recycled materials. This has inspired ActionSpace artists to create innovative, cutting edge artwork that has been shown in exhibitions around the UK.*

One hundred and ninety-three venues achieved an average CO<sub>2</sub>e reduction of 5% between year two and year three. Performing slightly better, 103 offices achieved an average reduction of 8% over the same time period, possibly due to the fact that, unlike venues, their energy use is not influenced by changes in performances and visitors.

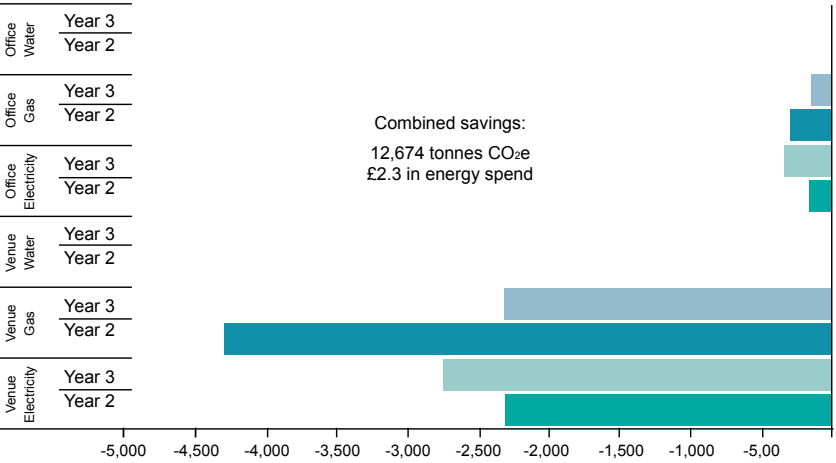
Different levels of CO<sub>2</sub>e savings have been realised in different regions. This is not an indicator of one region performing better than another, simply an indicator of the number and size of organisations (and their buildings) in a region.

Figure 13. Absolute reduction in CO<sub>2</sub>e emissions – 2013/14–2014/15



*Norwich Arts Centre has been installing water saving taps and water displacement devices in order to reduce the amount of water used on site.*

Figure 14. Cumulative CO<sub>2</sub>e and cost savings from energy use reduction 2012/13-2014/15



Average annual savings of 5% are mainly being achieved through zero- or low-cost measures. Some organisations are already making longer-term investments in lower carbon, more energy efficient buildings and equipment, many with support from the Arts Council's capital grants funding. As most of these new or refurbished buildings are either not yet, or not long, in operation, it is still too early to know the extent to which they will meet energy and carbon performance expectations. However, we expect to see the results of these investments in terms of reduced emissions over the next few years.



*For Nottingham Playhouse, securing funding for their £1.9 million redevelopment project was a challenge. They found a solution with the city council which allowed them to avoid borrowing from commercial lenders, with the council providing a £230,000 loan towards improving energy efficiency and waiving rent on the building for 13 years. Increasing energy efficiency and reducing CO<sub>2</sub> impacts were a key element of the redevelopment which was completed early in 2015. Nottingham Playhouse, which had a strong understanding of the building's energy performance before its redevelopment, expects the investment to reduce energy use by 30% and save about £55,000-£58,000 annually.*



5.3 Making the business case

Acting on environmental impacts can have a range of tangible benefits beyond CO<sub>2</sub> emission reductions. The results of the 2015 annual evaluation survey showed:

- Fifty-one per cent reporting financial benefits;
- 67% reporting benefits to team morale;
- 43% reporting reputational benefits.

The more engaged an organisation, the greater the benefits. Of those organisations which consider themselves 'engaged' or 'very engaged':

- Fifty-seven per cent reported financial benefits;
- 71% reported benefits to team morale;
- 49% reported reputational benefits.

These findings resonate with those of the 2014 Sustaining Creativity survey<sup>21</sup> of publicly funded and commercial arts organisations in England, Scotland and Wales, which showed that of the 337 respondents:

- Fifty-five per cent had seen financial benefits as a result of action;
- 40% had experienced benefits to their profile and reputation.

In the 2015 evaluation survey organisations were asked what, if any, difference having an environmental policy and action plan had made. Among the respondents:

- Seventy per cent found their environmental policy useful when applying for funding and 69% when engaging with stakeholders.
- 92% found having an environmental action plan helped to manage and reduce impacts and 85% found it useful for communicating its actions.



The Ironbridge Gorge Museum Trust has progressed over the last few years from being a Green Tourism Business Scheme member to achieving a Green Tourism Scheme Gold Star Award in 2014. "... reporting has enabled us to successfully co-ordinate and consolidate our environmental awareness and targets."

6. Key conclusions and recommendations

The conditions for future leadership are ripe.

We now need a framework to cultivate leadership. This framework is being developed with:

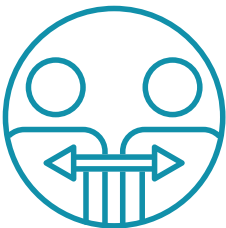
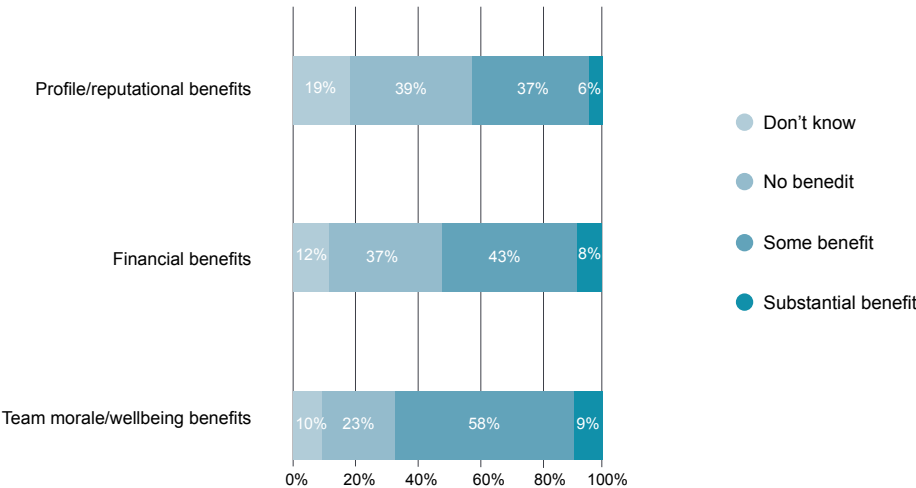
- specific resources for boards, governing bodies and executives;
- an emerging cohort of Arts Council funded organisations with sustainability leadership built into their funding agreements;
- a series of leadership events.

We must reflect and respond to diversity.

Reporting requirements and support need to better respond to the diversity of the sector and to organisations' levels of engagement, whether beginners or leaders.

- Greater flexibility has already been built into 2015-18 reporting requirements.
- Different options and approaches to encompass a range of organisations to participate.

Figure 15. Benefits of taking environmental action – 2014/15



<sup>21</sup> Sustaining Creativity Survey: Actions and attitudes from the creative community: environmental sustainability 2014, Julie's Bicycle and BOP Consulting

### Investment will be essential to achieve reductions beyond business as usual.

- Given the uncertainty over future funding and government support for renewable energy and energy efficiency, it is important, more now than ever, to support organisations in accessing longer-term funding opportunities.
- Julie's Bicycle has already begun working with the Arts Council to develop support on its capital grant funding programme. Julie's Bicycle is also developing a funding portal which will identify sources of support for sustainability initiatives and investment.

### We need to better understand and communicate the value of sustainability to the arts, and communicate its success.

- We need to continue to evaluate the case for sustainability and how this relates to business resilience.
- More research is needed to understand the relationship between environmental literacy and 'doing' and how this stimulates cultural shifts.
- More work is needed to track where and how artistic content is being shaped by environmental challenges.
- Leaders and achievements must be championed widely.
- Challenges and successes, especially case studies, should be amplified.
- The characteristics of the partnership that have made it
- Successful should be disseminated widely, to support similar
- Initiatives, especially in the context of policy development.

# Appendix – Support, events and resources

From 2012 to 2015, Julie’s Bicycle ran two programmes with Arts Council funding to inspire and support environmental change in the sector:

- a support programme to help revenue-funded organisations meet environmental reporting requirements (a Service Level Contract), and;
- a national programme of events, action-research, network development and resources (funded through Grants for the Arts).

## 1. Environmental reporting support

Julie’s Bicycle supported reporting organisations through a range of events, online resources and a telephone and email helpdesk, focused on:

- measuring and reporting on environmental impacts;
- establishing environmental policies and action plans, and;
- good environmental practice.

Julie’s Bicycle also produced annual reports on the results of each year of the reporting initiative.

[Sustaining Great Art, Year 1 report](#)  
[Sustaining Great Art, Year 2 report](#)

Standard modules		
Years 1-3	Years 2-3	Years 2-3
<ul style="list-style-type: none"><li>• Understanding environmental reporting requirements</li><li>• Creating environmental policies and action plans</li><li>• Using the IG Tools for online reporting</li></ul>	<ul style="list-style-type: none"><li>• Environmental reporting case studies</li><li>• Environmental reporting troubleshooting</li></ul>	<ul style="list-style-type: none"><li>• Going beyond environmental reporting requirements</li><li>• Communicating success</li><li>• Staff engagement</li></ul>
Tailored modules Years 2-3		
By size <ul style="list-style-type: none"><li>• Environmental reporting, policies and action plans for organisations with 5 employees or less</li><li>• Environmental reporting, policies and action plans for organisations with 100 employees or more</li><li>• Environmental reporting, policies and action plans for MPMs and large multi-venue organisations</li></ul>	By activity <ul style="list-style-type: none"><li>• Environmental reporting, policies and action plans for cultural buildings and venues</li><li>• Environmental reporting, policies and action plans for offices</li><li>• Environmental reporting, policies and action plans for outdoor events</li><li>• Sustainable touring</li><li>• Sustainable productions and exhibitions</li></ul>	

## 1.1 Workshops and webinars

Julie’s Bicycle carried out a total of 19 environmental reporting workshops and 31 webinars:

- 14 regional environmental reporting workshops for revenue funded organisations, with 355 organisations attending;
- 5 regional environmental reporting workshops for Arts Council Relationship Managers, with approximately 30 participants, and;
- 31 environmental reporting webinars, with 252 organisations attending.

Content was adapted over time to address emerging needs and themes and webinar recordings are available through the Julie’s Bicycle Vimeo channel and website.

## 1.2 Creative Industry Green Tools

The [Creative Industry Green \(IG\) Tools](#) are a suite of carbon calculators which different types of creative organisations, from venues to productions, can use to establish their carbon footprint, track performance over time and compare against sector benchmarks.

The tools have been adapted to Arts Council reporting requirements and developed over three years on the basis of feedback from reporting organisations using the tools. Key developments include:

- diversifying the range of impacts an organisation can account for;
- allowing users to compare performance over time and against sector benchmarks;
- creating an environmental policy and action plan upload feature.

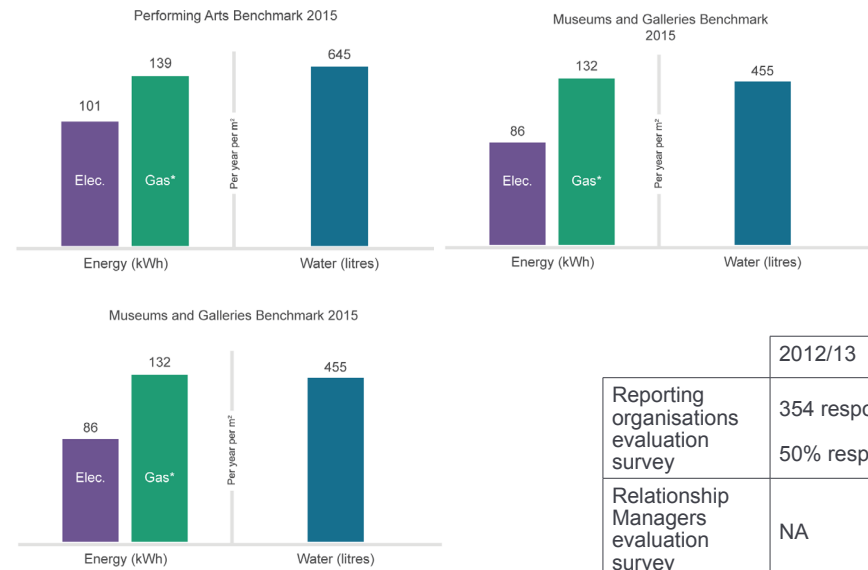


1.3 Energy and water benchmarks

Julie's Bicycle has established a set of benchmarks, which allow organisations to compare their energy and water use with the sector average, whatever the size or scale of an organisation. Arts Council reporting data has been a major contributor to the benchmarks. The latest benchmarks cover:

- museums and galleries – based on data from 57 museums, 43 art galleries and 52 art centres;
- performing arts – based on data from 6 concert halls and 105 theatres;
- offices – based on data from 196 offices.

The benchmarks have been endorsed by the Chartered Institute of Building Services Engineers (CIBSE), the body responsible for benchmarking the built environment across England.



1.4 Environmental reporting helpdesk and website

Julie's Bicycle has a dedicated team to provide telephone and email support to Arts Council England reporting organisations. Telephone support is available 9.30 - 5.30pm, five days a week.

Julie's Bicycle has also created a specific Arts Council England environmental reporting section on its website which provides information on the reporting requirements, related resources such as the environmental policy and action plan guidelines, and information on using the Creative IG Tools.

1.5 Evaluation surveys

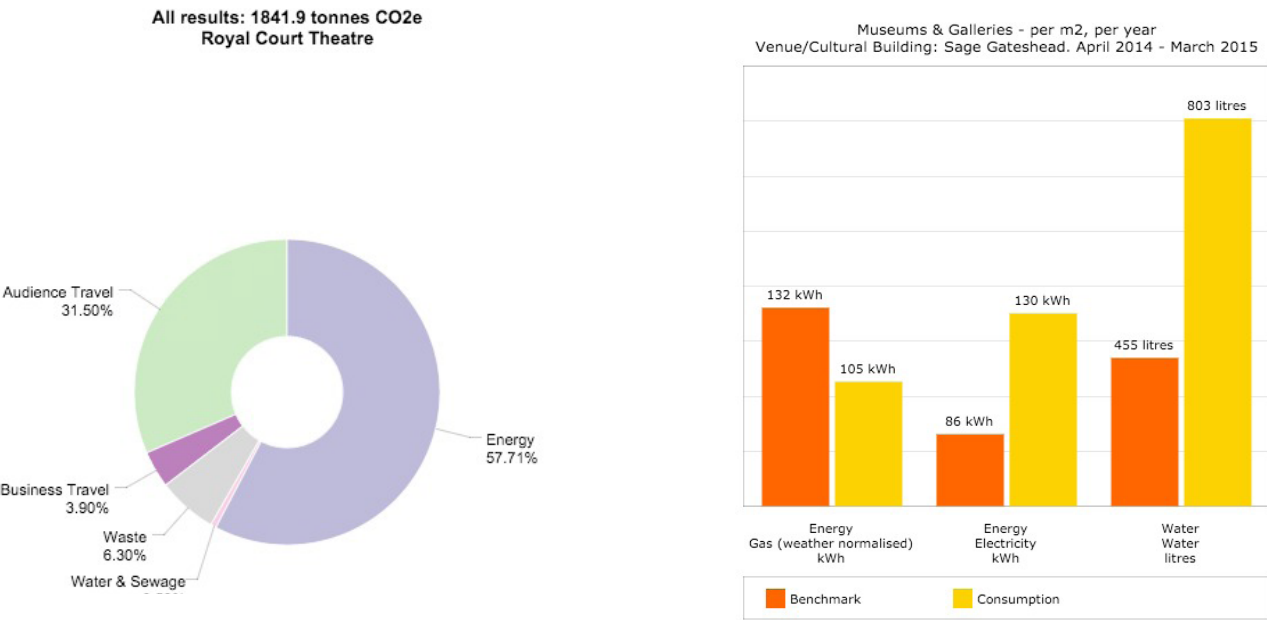
Julie's Bicycle conducted three annual evaluation surveys of reporting organisations and is using the insights gained to improve the support provided and develop communications around the value and benefits of environmental engagement. Two annual evaluation surveys of Arts Council Relationship Managers also provided valuable feedback for developing and improving support and communications.

	2012/13	2013/14	2014/15
Reporting organisations evaluation survey	354 respondents 50% response rate	323 respondents 45% response rate	253 respondents 35% response rate
Relationship Managers evaluation survey	NA	35 respondents 21% response rate	33 respondents 19% response rate

Creative IG Tools activities and impacts

Sources of impact	User categories					
	Offices	Venues	Festivals and outdoor events	Indoor events	Tours	Production
Energy	X	X	X	X	X	
Water	X	X	X	X		
Waste	X	X	X	X		
Business travel	X	X		X		
Audience travel		X	X	X		
Freight					X	
Artist and crew travel					X	
Accommodation					X	
Set design and management						X
Lighting sound and effects						X

Example of Creative IG Tools functionality



## 2. Grants for the Arts sustainability programme

Between 2012 and 2015, Julie's Bicycle delivered a national programme of events, action-research, network development and resources to inspire and support Arts Council funded organisations across England and the broader sector, funded through Grants for the Arts.

Key themes were:

- sustainable production and design;
- green dance;
- green literature;
- energy efficiency, innovation and renewable energy take-up for festivals and outdoor arts;
- value and environmental sustainability;
- the circular economy.

The programme was developed to provide both guidance on operational and practical environmental responses and inspiration on emerging sustainability themes of relevance to the arts. It is worth noting that the resources and case studies developed as part of this programme encompassed a much wider spectrum of topics and themes.

## 2.1 Sustaining Creativity

[Sustaining Creativity](#) was a series of conversations, events and publications exploring environmental challenges, drivers of change, and the opportunities that transformative solutions offer to the creative community, aiming to:

- inspire cultural leadership on sustainability;
- extend ambition about what is possible using real examples;
- highlight some key shifts needed to develop a sustainable creative infrastructure;
- foster confident decision-making that looks beyond political and funding cycles;
- produce a series of events and publications.

The Sustaining Creativity Survey, carried out by Julie's Bicycle, in partnership with BOP Consulting, was the most comprehensive survey to date with leaders of creative and cultural organisations on environmental sustainability. We surveyed cultural institutions from music, theatre, visual arts, museums, literature and combined arts, representing a total audience of 70 million and combined turnover of £1 billion. The results, based on responses from 377 organisations, are published on the [Julie's Bicycle website](#).

## 2.2 Events

Julie's Bicycle held 16 events across England, events curated by the arts and focusing on inspiring practical and creative responses. In total 1,520 free tickets were booked for these events. All event information is available on the [Julie's Bicycle website](#).

Value and Cultural Spaces

[www.juliesbicycle.com/latest/events/245-sustaining-creativity-value-and-cultural-spaces](http://www.juliesbicycle.com/latest/events/245-sustaining-creativity-value-and-cultural-spaces)

Praxis: Culture and Sustainability

[www.juliesbicycle.com/latest/events/4208-culture-and-sustainability](http://www.juliesbicycle.com/latest/events/4208-culture-and-sustainability)

Making Creative Places Sustainable

[www.juliesbicycle.com/latest/events/5159-making-creative-places-sustainable](http://www.juliesbicycle.com/latest/events/5159-making-creative-places-sustainable)

Sustaining Creativity: Circularity Showcase

[www.juliesbicycle.com/latest/events/380-circularity-showcase](http://www.juliesbicycle.com/latest/events/380-circularity-showcase)

Sustaining Creativity: E-Waste Tear-down

[www.juliesbicycle.com/latest/events/471-e-waste-workshop](http://www.juliesbicycle.com/latest/events/471-e-waste-workshop)

Sustaining Creativity: Plastics Tear-down

[www.juliesbicycle.com/latest/events/545-closed-loop-tour-and-workshop](http://www.juliesbicycle.com/latest/events/545-closed-loop-tour-and-workshop)

Sustaining Creativity: Scenery Tear-down

[www.juliesbicycle.com/latest/events/561-scenery-salvage-tour-and-workshop](http://www.juliesbicycle.com/latest/events/561-scenery-salvage-tour-and-workshop)

Sustaining Creativity: Data Lab Showcase

[www.juliesbicycle.com/latest/events/586-sustaining-creativity-data-lab-showcase](http://www.juliesbicycle.com/latest/events/586-sustaining-creativity-data-lab-showcase)

Sustaining Creativity: Value and Cultural Spaces

[www.juliesbicycle.com/latest/events/245-sustaining-creativity-value-and-cultural-spaces](http://www.juliesbicycle.com/latest/events/245-sustaining-creativity-value-and-cultural-spaces)

Green Arts: Sustainable Responses from the Literature Sector

[www.juliesbicycle.com/latest/events/1032-sustainable-responses-from-the-literature-sector](http://www.juliesbicycle.com/latest/events/1032-sustainable-responses-from-the-literature-sector)

Sustaining Creativity Lab

[www.juliesbicycle.com/latest/events/1054-sustaining-creativity-lab](http://www.juliesbicycle.com/latest/events/1054-sustaining-creativity-lab)

Sustainable Design and Production, Manchester

[www.juliesbicycle.com/latest/events/1104-sustainable-design-and-production](http://www.juliesbicycle.com/latest/events/1104-sustainable-design-and-production)

Sustainable Design and Production, Newcastle

[www.juliesbicycle.com/latest/events/1112-sustainable-design-and-production](http://www.juliesbicycle.com/latest/events/1112-sustainable-design-and-production)

Sustainable Design for the Arts

[www.juliesbicycle.com/latest/events/1152-sustainable-design-for-the-arts](http://www.juliesbicycle.com/latest/events/1152-sustainable-design-for-the-arts)

Green My Production

[www.juliesbicycle.com/latest/events/1180-green-my-production](http://www.juliesbicycle.com/latest/events/1180-green-my-production)

The Power Behind Festivals Symposium

[www.juliesbicycle.com/latest/events/1296-the-power-behind-festivals-symposium](http://www.juliesbicycle.com/latest/events/1296-the-power-behind-festivals-symposium)

## 2.3 Practical guides

Julie's Bicycle published 12 practical guides on a range of environmental topics and for different types of cultural activities, all of which can be downloaded from the [Julie's Bicycle website](http://www.juliesbicycle.com/resources/julies-bicycle-website).

Productions and Exhibitions Guide  
[www.juliesbicycle.com/resources/productions-and-exhibitions](http://www.juliesbicycle.com/resources/productions-and-exhibitions)

Touring Guide  
[www.juliesbicycle.com/resources/touring-guide](http://www.juliesbicycle.com/resources/touring-guide)

Water Management at Outdoor Events Guide  
[www.juliesbicycle.com/resources/water-management-at-outdoor-events](http://www.juliesbicycle.com/resources/water-management-at-outdoor-events)

Waste Management at Outdoor Events Guide  
[www.juliesbicycle.com/resources/waste-management-at-outdoor-events-guide](http://www.juliesbicycle.com/resources/waste-management-at-outdoor-events-guide)

Procurement Guide  
[www.juliesbicycle.com/resources/procurement-guide](http://www.juliesbicycle.com/resources/procurement-guide)

Greening the Office Guide  
[www.juliesbicycle.com/resources/greening-the-office-guide](http://www.juliesbicycle.com/resources/greening-the-office-guide)

Sustainable Merchandise Guide  
[www.juliesbicycle.com/resources/sustainable-merchandise-guide](http://www.juliesbicycle.com/resources/sustainable-merchandise-guide)

Sustainable Production Guide  
[www.juliesbicycle.com/resources/sustainable-production-guide](http://www.juliesbicycle.com/resources/sustainable-production-guide)

The Power Behind Festivals Guide  
[www.juliesbicycle.com/resources/the-power-behind-festivals-guide](http://www.juliesbicycle.com/resources/the-power-behind-festivals-guide)

Outdoor Events Guide  
[www.juliesbicycle.com/resources/outdoor-events](http://www.juliesbicycle.com/resources/outdoor-events)

Energising Culture Guide  
[www.juliesbicycle.com/resources/energising-culture](http://www.juliesbicycle.com/resources/energising-culture)

Working from Home Guide  
[www.juliesbicycle.com/resources/working-from-home-guide](http://www.juliesbicycle.com/resources/working-from-home-guide)

## 2.4 Factsheets

Julie's Bicycle published 9 new factsheets on a range of environmental topics, all of which can be downloaded from the [Julie's Bicycle website](http://www.juliesbicycle.com/resources/julies-bicycle-website).

Green Dance Factsheet  
[www.juliesbicycle.com/resources/green-dance-factsheet](http://www.juliesbicycle.com/resources/green-dance-factsheet)

Energy Procurement Factsheet  
[www.juliesbicycle.com/resources/energy-procurement-factsheet](http://www.juliesbicycle.com/resources/energy-procurement-factsheet)

Key Climate Facts Factsheet  
[www.juliesbicycle.com/resources/key-climate-facts](http://www.juliesbicycle.com/resources/key-climate-facts)

Biofuels Factsheet  
[www.juliesbicycle.com/resources/biofuels-factsheet](http://www.juliesbicycle.com/resources/biofuels-factsheet)

Food Factsheet  
[www.juliesbicycle.com/resources/food-factsheet](http://www.juliesbicycle.com/resources/food-factsheet)

Print and the Environment  
[www.juliesbicycle.com/resources/print-and-the-environment-factsheet](http://www.juliesbicycle.com/resources/print-and-the-environment-factsheet)

Paper and the Environment  
[www.juliesbicycle.com/resources/paper-and-the-environment-factsheet](http://www.juliesbicycle.com/resources/paper-and-the-environment-factsheet)

Forestry Stewardship Council and the Arts  
[www.juliesbicycle.com/resources/fsc-and-the-arts](http://www.juliesbicycle.com/resources/fsc-and-the-arts)

Green Riders for Touring  
[www.juliesbicycle.com/resources/green-rider](http://www.juliesbicycle.com/resources/green-rider)



## 2.5 Case studies

Julie's Bicycle compiled 41 case studies, all of which are available on the [Julie's Bicycle website](#).

Arcsystem Dimmable LED Lighting  
[www.juliesbicycle.com/latest/case-studies/3459-arcsystem-dimmable-led-lighting](http://www.juliesbicycle.com/latest/case-studies/3459-arcsystem-dimmable-led-lighting)

Arcola Theatre  
[www.juliesbicycle.com/latest/case-studies/2475-arcola-theatre](http://www.juliesbicycle.com/latest/case-studies/2475-arcola-theatre)

The Final Countdown: Arcola Theatre  
[www.juliesbicycle.com/latest/case-studies/5390-the-final-countdown-arcola-theatre-and-timetoact-climate-march-2015](http://www.juliesbicycle.com/latest/case-studies/5390-the-final-countdown-arcola-theatre-and-timetoact-climate-march-2015)

Arvon  
[www.juliesbicycle.com/latest/case-studies/4834-arvon](http://www.juliesbicycle.com/latest/case-studies/4834-arvon)

Attitude is Everything  
[www.juliesbicycle.com/latest/case-studies/5581-attitude-is-everything](http://www.juliesbicycle.com/latest/case-studies/5581-attitude-is-everything)

Ambassador Theatre Group Earth Hour  
[www.juliesbicycle.com/latest/case-studies/5094-atg-earth-hour](http://www.juliesbicycle.com/latest/case-studies/5094-atg-earth-hour)

After Miss Julie (Young Vic)  
[www.juliesbicycle.com/latest/case-studies/3410-after-miss-julie-at-the-young-vic](http://www.juliesbicycle.com/latest/case-studies/3410-after-miss-julie-at-the-young-vic)

Artichoke Lumiere  
[www.juliesbicycle.com/latest/case-studies/4215-artichoke-lumiere](http://www.juliesbicycle.com/latest/case-studies/4215-artichoke-lumiere)

Better Batteries  
[www.juliesbicycle.com/latest/case-studies/3481-better-batteries](http://www.juliesbicycle.com/latest/case-studies/3481-better-batteries)

The Bridgewater Hall  
[www.juliesbicycle.com/latest/case-studies/2518-the-bridgewater-hall](http://www.juliesbicycle.com/latest/case-studies/2518-the-bridgewater-hall)

Central School of Speech and Drama  
[www.juliesbicycle.com/latest/case-studies/3368-a-green-cabaret-at-central-school-of-speech-and-drama](http://www.juliesbicycle.com/latest/case-studies/3368-a-green-cabaret-at-central-school-of-speech-and-drama)

Cornerhouse  
[www.juliesbicycle.com/latest/case-studies/2616-cornerhouse](http://www.juliesbicycle.com/latest/case-studies/2616-cornerhouse)

Free Word  
[www.juliesbicycle.com/latest/case-studies/3758-free-word](http://www.juliesbicycle.com/latest/case-studies/3758-free-word)

Greater Manchester County Record Office  
[www.juliesbicycle.com/latest/case-studies/2683-greater-manchester-county-record-office](http://www.juliesbicycle.com/latest/case-studies/2683-greater-manchester-county-record-office)

Circus Space Staff Energy Awareness Campaign  
[www.juliesbicycle.com/latest/case-studies/5368-circus-space-staff-energy-awareness-campaign](http://www.juliesbicycle.com/latest/case-studies/5368-circus-space-staff-energy-awareness-campaign)

Contact Theatre  
[www.juliesbicycle.com/latest/case-studies/2603-contact-theatre](http://www.juliesbicycle.com/latest/case-studies/2603-contact-theatre)

Curve  
[www.juliesbicycle.com/latest/case-studies/4733-curve](http://www.juliesbicycle.com/latest/case-studies/4733-curve)

Car Sharing Schemes  
[www.juliesbicycle.com/latest/case-studies/4223-car-sharing-schemes](http://www.juliesbicycle.com/latest/case-studies/4223-car-sharing-schemes)

Festival Bus  
[www.juliesbicycle.com/latest/case-studies/4229-festivalbus](http://www.juliesbicycle.com/latest/case-studies/4229-festivalbus)

German Light Products GmbH (GLP)  
[www.juliesbicycle.com/latest/case-studies/4041-german-light-products-gmbh-glp](http://www.juliesbicycle.com/latest/case-studies/4041-german-light-products-gmbh-glp)

Glyndebourne  
[www.juliesbicycle.com/latest/case-studies/2672-glyndebourne](http://www.juliesbicycle.com/latest/case-studies/2672-glyndebourne)

Knowle West Media Centre  
[www.juliesbicycle.com/latest/case-studies/4555-knowle-west-media-centre](http://www.juliesbicycle.com/latest/case-studies/4555-knowle-west-media-centre)

Hay Festival  
[www.juliesbicycle.com/latest/case-studies/4817-hay-festival](http://www.juliesbicycle.com/latest/case-studies/4817-hay-festival)

London Theatre Consortium Sustainability Group  
[www.juliesbicycle.com/latest/case-studies/6069-cultural-networks-london-theatre-consortium](http://www.juliesbicycle.com/latest/case-studies/6069-cultural-networks-london-theatre-consortium)

Manchester Art Gallery  
[www.juliesbicycle.com/latest/case-studies/3746-manchester-art-gallery](http://www.juliesbicycle.com/latest/case-studies/3746-manchester-art-gallery)

Manchester Literature Festival  
[www.juliesbicycle.com/latest/case-studies/4842-manchester-literature-festival](http://www.juliesbicycle.com/latest/case-studies/4842-manchester-literature-festival)

Manchester International Festival  
[www.juliesbicycle.com/latest/case-studies/4332-manchester-international-festival-mif](http://www.juliesbicycle.com/latest/case-studies/4332-manchester-international-festival-mif)

Metal, Southend-on-Sea  
[www.juliesbicycle.com/latest/case-studies/5060-metal-southend-on-sea](http://www.juliesbicycle.com/latest/case-studies/5060-metal-southend-on-sea)

Midas Productions UK Ltd.  
[www.juliesbicycle.com/latest/case-studies/4059-midas-productions-uk-ltd](http://www.juliesbicycle.com/latest/case-studies/4059-midas-productions-uk-ltd)

National Theatre Wales  
[www.juliesbicycle.com/latest/case-studies/3676-national-theatre-wales](http://www.juliesbicycle.com/latest/case-studies/3676-national-theatre-wales)

Norwich Theatre Royal  
[www.juliesbicycle.com/latest/case-studies/5039-norwich-theatre-royal](http://www.juliesbicycle.com/latest/case-studies/5039-norwich-theatre-royal)

Peter and the Starcatcher  
[www.juliesbicycle.com/latest/case-studies/3583-sustainable-design-peter-and-the-starcatcher](http://www.juliesbicycle.com/latest/case-studies/3583-sustainable-design-peter-and-the-starcatcher)

Random House  
[www.juliesbicycle.com/latest/case-studies/3742-random-house](http://www.juliesbicycle.com/latest/case-studies/3742-random-house)

Royal Court Theatre  
[www.juliesbicycle.com/latest/case-studies/2733-theatre-local-royal-court-theatre](http://www.juliesbicycle.com/latest/case-studies/2733-theatre-local-royal-court-theatre)

Royal Exchange Theatre  
[www.juliesbicycle.com/latest/case-studies/2743-royal-exchange-theatre](http://www.juliesbicycle.com/latest/case-studies/2743-royal-exchange-theatre)

Royal Northern College of Music  
[www.juliesbicycle.com/latest/case-studies/2753-royal-northern-college-of-music](http://www.juliesbicycle.com/latest/case-studies/2753-royal-northern-college-of-music)

Sarah Bedell, Aspirational Arts Partnerships  
[www.juliesbicycle.com/latest/case-studies/5068-aspirational-arts-partnerships](http://www.juliesbicycle.com/latest/case-studies/5068-aspirational-arts-partnerships)

Town Hall Birmingham  
[www.juliesbicycle.com/latest/case-studies/2774-town-hall-birmingham](http://www.juliesbicycle.com/latest/case-studies/2774-town-hall-birmingham)

U-N-F-O-L-D Exhibition  
[www.juliesbicycle.com/latest/case-studies/3716-u-n-f-o-l-d](http://www.juliesbicycle.com/latest/case-studies/3716-u-n-f-o-l-d)

## 2.6 Videos, podcasts and blogs

32 videos and recordings of Julie's Bicycle events, webinars and case studies are available on the Julie's Bicycle Vimeo channel.

Event Recording: Value and Cultural Spaces at the Whitworth Art Gallery  
<https://vimeo.com/124305803>

Event Recording: Praxis – Culture and Sustainability  
<https://vimeo.com/123844941>

Event Recording: Sustaining Creativity – E-Waste Workshop and Circularity Showcase  
<https://vimeo.com/119333576>

Event Recording: Sustaining Creativity – Closed Loop Tour and Workshop  
<https://vimeo.com/119333034>

Event Recording: Sustaining Creativity – Scenery Salvage Tour and Workshop  
<https://vimeo.com/119332665>

Event Recording: Sustaining Creativity – Environmental Data Lab  
<https://vimeo.com/114764952>

Event Recording: Sustaining Creativity Lab – Tom Campbell  
<https://vimeo.com/113403652>

Event Recording: Sustaining Creativity Lab – John Holden  
<https://vimeo.com/113403649>

Event Recording: Sustaining Creativity Lab – Beatrice Rodgers  
<https://vimeo.com/113403513>

Event Recording: Sustaining Creativity Lab – Nat Hunter  
<https://vimeo.com/113403510>

Sustaining Creativity: An Introduction  
<https://vimeo.com/86977253>

Sustaining Creativity: Digital  
<https://vimeo.com/86991543>

Sustaining Creativity: Value  
<https://vimeo.com/87004125>

Sustaining Creativity: Nature  
<https://vimeo.com/87176840>

Sustainable Production  
<https://vimeo.com/87185355>

Green My Production  
<https://vimeo.com/87186614>

Case Study – Norwich Theatre Royal  
<https://vimeo.com/117910579>

Case Study – Sarah Bedell, Aspirational Arts Partnership  
<https://vimeo.com/117908464>

Case Study – Metal Southend  
<https://vimeo.com/117907947>

Webinar series 'collections':

- IG Tools 'How To' 2013, (3 videos): <https://vimeo.com/groups/igtools>
- Arts Council England Webinars 2014, (10 videos): <https://vimeo.com/groups/acewebinars2014>

## Podcasts

Valuing What You Do  
[www.mixcloud.com/JuliesBicycle/valuingwhatyoudo](http://www.mixcloud.com/JuliesBicycle/valuingwhatyoudo)

Financing Change  
[www.mixcloud.com/JuliesBicycle/financingchange](http://www.mixcloud.com/JuliesBicycle/financingchange)

Culture Change Conference – Alison Tickell  
 Opening Speech  
[www.mixcloud.com/JuliesBicycle/alison-tickell-opening-speech](http://www.mixcloud.com/JuliesBicycle/alison-tickell-opening-speech)

It's a Material World  
<https://www.mixcloud.com/JuliesBicycle/its-a-material-world>

Making Creative Spaces Sustainable  
<https://www.mixcloud.com/JuliesBicycle/making-creative-spaces-sustainable>

## Blogs

Regular blogs are posted on the [Julie's Bicycle website](#), both by the Julie's Bicycle team and contributors from the arts and creative industries.

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Image courtesy Julie's Bicycle  
 Photograph: Nicky Teegan

Quilt Performing Arts: Colour Me, 2014  
 Image courtesy Contact Manchester  
 Photograph: Joel Chester Fildes

Michael Pinsky, Plunge, 2012  
 Produced by Artsadmin and LIFT  
 Photograph: Kristian Buus

## About Julie's Bicycle

Julie's Bicycle is a leading global charity bridging the gap between environmental sustainability and the creative industries. Our aim is a creative community with sustainability at its heart and our goal is to provide the inspiration, expertise and resources to make that happen.

Julie's Bicycle has an unmatched track record of research specific to arts and cultural activity, which underpins everything we do. Our team brings together environmental expertise, and experience of the arts and cultural sectors and our website constitutes the most comprehensive resource library developed specifically for the arts and culture anywhere in the world.

We work with over 1,000 cultural organisations across the UK and internationally to help them measure, manage and reduce their environmental impacts. Over 2,000 companies large and small use the Creative IG Tools, our suite of carbon calculators, and our certification scheme is the recognised benchmark for sustainability achievement within the creative industries.

We believe the creative community is uniquely placed to lead and transform conversation around environmental sustainability and translate it into action.



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