Julie's Bicycle
SUSTAINING CREATIVITY

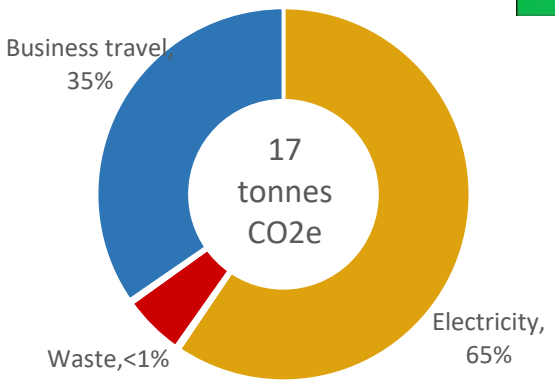
creative green

Gate Theatre 2015/16

creative green

Total score 77/100

41/40 Commitment
8/15 Understanding
28/40 Improvement



Carbon footprint 2015

17 tonnes CO2

Equal to 38 flights from London to New York

Environmental Highlights

Energy	• 39% decrease in energy emissions compared to 2014/15; per performance has decreased 42% since 2012/13 • Received a grant for a new air handling unit, helping a 37% decrease in electricity consumption since 2014/15 • Energy use emissions per m2 well below sector average
Waste	• Total waste generation decreased by 66% compared to 2014/15 • 55% of all waste in 2015/16 was recycled
Water	• Water use increased by 20% compated to 2014/15; and up 12% per audience member • Water use per m2 below sector average
Travel	• Air travel accounted for 73% of business travel emissions due to the 34,091 passenger kms flown long-haul • The remaining travel emissions were due to the train journeys totalling 17,784 km

About Gate Theatre

Gate Theatre is a producing theatre in the heart of Notting Hill, London. There are 7 full-time employees and 3 part-time (assumed 8 FTE). The venue had 173 performances in 2015/16 compared to 179 in 2014/15. The venue (with office and storage area) has a total floor area of 390m2.



Key venue data	2012/2013	2013/2014	Previous year 2014/2015	Current year 2015/2016	% change current vs previous	% change current vs baseline
Number of performances	198	188	179	173	⇧ -3.4%	⇩ -12.6%
Number of tickets sold	11,481	11,125	10,958	10,236	⇩ -6.6%	⇧ -10.8%

About Gate Theatre's Certification

Gate Theatre has been awarded a 4 star Creative Green rating in recognition of its commitment and achievement in embedding environmental sustainability in its operations and activities, following assessment and environmental data analysis by Julie's Bicycle.

This is Gate Theatre's first Creative Green certification as they join the London Theatre Consortium.

Full details of the assessment and scoring and data analysis upon which the star rating is based are provided in the completed Creative Green assessment form.

Creative Green was developed by Julie's Bicycle to recognise environmental commitment and achievement in the creative sector – venues, events and offices. On average 35 organisations have been certified each year since it was launched in 2009. Find out who else is currently certified at http://www.juliesbicycle.com/services/industry/whos-certified.

Gate Theatre Scored 41/45 for Commitment

Commitment is assessed based on:

- environmental policy and action plan
- integration of environmental sustainability in broader business mission, strategy or planning
- environmental responsibilities
- environmental procurement and sourcing
- stakeholder communications and engagement

Highlights	Recommendations
• 'Green Gate' environmental policy and action plan which is clear in its scope and specific to Gate's small scale, and sits in a significant place in the Business Plan • Well considered environmental procurement including stationery, skip collections, taxis, cleaning products, lighting and printers • Active sharing within staff of sustainable ideas, challenges and information including monthly green challenges • Green Gate communication within contracts for Creative Teams, as well as in welcome packs for all actors and other creatives • List of props currently in storage to encourage re-use • Green Gate communication in all email signatures • All costumes either kept or donated to local charity shop • Signage around theatre to encourage audiences to recycle • Mentoring a new theatre on the work of Green Gate • Has beome a member of the London Theatre Consortium	• Adopt an environmental reduction target explicitly in the environmental policy that is aligned with the UK government's Climate Act and the Paris Agreement • Prepare an environmental and ethical procurement policy with guidelines and critieria to make it clear and transparent the principles by which suppliers are selected. Review other suppliers procured from to see if further greening of the supply clean is possible. • On procurement investigate switch ing to a green electricity tariff • Use a green rider when doing off-site work • Explore possibilities for undertaking programming with sustainability themes

Gate Theatre Scored 8/15 for Understanding

Understanding is assessed based on:

- breadth and depth of understanding of environmental impacts
- extent to which environmental data is used inform action and track progress in reducing impacts

Gate Theatre scored 11/15 for Understanding due to its in-depth understanding of its environmental impacts and monitoring of energy and water data for four years, as well as monitoring of audience and business travel.

Direct impacts measured	2012/13	2013/14	2014/15	2015/16
Energy use				
Water use				
Wastewater volumes				
Waste generation				
Business travel				
Indirect impacts measured	2012/13	2013/14	2014/15	2015/16
Staff commuting				
Audience travel				

Highlights

- Waste going in and out of buildings is recorded by the bag by staff, as the buildings are shared
- All non recyclable or compostable waste goes to an energy-from-waste plant
- Audience travel and business travel are both measured
- Information on environmental impacts is used to inform actions - the Green Gate Policy and Action Plan is updates each year to include targets for energy use, water use and waste based on the previous year's results.

Recommendations

- Monitor material use (programmes, office paper use,and other paper uses) to be able to track to identify opportuniities for minimising waste.
- Ensure staff communting travel survey results contain distance of travel and mode of transport so this data can be uploaded to the IG tools and the carbon footprint of staff travel can be tracked
- Consider monitoring energy in more depth, e.g. taking meter readings on a weekly and monthy basis; and then analyse for opportunities to identify further savings and to evaluate the success of efficiency and behaviour change improvements.

Gate Theatre Scored 28/40 for Improvement

Improvement is assessed based on:

- quantifiable reductions in direct environmental impacts, i.e. impacts over which an organisation has direct control such as energy use and waste generation, both total and relative impacts
- actions to address indirect environmental impacts, i.e. impacts over which an event has limited or no direct control, such as audience travel

Gate Theatre's score is based on reductions in its total environmental impacts:

- 42% decrease in energy use emissions between 2014/15 and 2015/16, and 36% decrease since 2012/13.
- 28% decrease in water usage between 2012/13 and 2015/16.
- 68% decrease in waste generation between 2014/15 and 2015/16, and 68% decrease since 2012/13.

Gate Theatre's score is also based on reductions in its relative environmental impacts:

- 7% decrease in energy use emissions per performance between 2014/15 and 2015/16, and 13% increase since 2012/13.
- 17% decrease in water usage per audience member between 2012/13 and 2015/16, and 21% decrease since 2013/14.
- A 67% decrease in waste generation per audience member between 2014/15 and 2015/16, and 66% decrease since 2013/14.

Environmental impact trends (based on direct and indirect impacts)

	Unit	2012/2013	Previous year 2014/2015	Current year 2015/2016	% change current vs previous	% change current vs baseline
Mains electricity	kWh	0	32,655	20,517	-37%	-36%
Energy use emissions (all sources)- absolute	tonnes CO2e	Y+4 vs Y+5	17.6	10.3	-42%	-36%
Energy use emissions (all sources) - relative	kg CO2e per performance	-15,956.0	98.1	59.3	-39%	-26%
Water use - absolute	m3	-6	49	55	12%	-28%
Water use - relative	litres per audience member	-7	4	5	20%	-19%
Waste generation - absolute	tonnes	0.1	13.8	4.4	-68%	-68%
Waste generation - relative	kg per audience member	0.0	1.3	0.4	-66%	-65%

* The baseline year for energy use and water is 2012/13. The baseline year for waste is 2013/14.

Highlights	Recommendations
• Successful in securing for a grant for a new, more energy efficient air handling unit, aiding the 37.2% decrease in electricity consumption between 2014/15 and 2015/16 • Reuse of scrap paper by making notebooks, and a campaign for paperless meetings helped the 68.1% waste reduction between 2014/15 and 2015/16 • Use of hippos in the office and theatre toilets has contributed towards the 27.6% decrease in water consumption since the baseline • Best practice monitoring of waste by recording in-house what goes in and out of the building has given Gate the ability to track and cut down on waste generation	• Consider monthly analysis of water usage through billing, to closer track and set targets to make savings • Continue developing energy saving initiatives, e.g.: - working with the partnered pub and restaurant on energy management and efficiency, plus environmental and ethical food and beverage offerings - introduce a switch-off policy for lighting, electrical and IT equipment • Switch to a 'green tariff' electricity from your current energy supply contract

Your Impacts and Performance in Numbers

This section provides further detail on your direct and indirect environmental impacts and how they have changed over time, covering both increases and decreases. Its aim is to support you to:

- track and understand performance over time
- identify where you are doing well and areas for further improvement

Carbon footprint trends (based on direct and indirect impacts)

Carbon footprint	Unit	2012/2013	Previous year 2014/2015	Current year 2015/2016	% change current vs previous	% change current vs baseline
Electricity	tonnes CO2e	16	18	10	-42%	-36%
Water	kg CO2e	26	17	19	12%	-28%
Waste water	kg CO2e	54	35	39	12%	-28%
Landfill waste	kg CO2e	0	2,387	918	-62%	-71%
Recycled waste	kg CO2e	0	181	50	-72%	-65%
Total carbon footprint	tonnes CO2e	16	20	17	-14%	8%
Total relative carbon footprint	kg CO2e per performance	81	113	100	-11%	23%

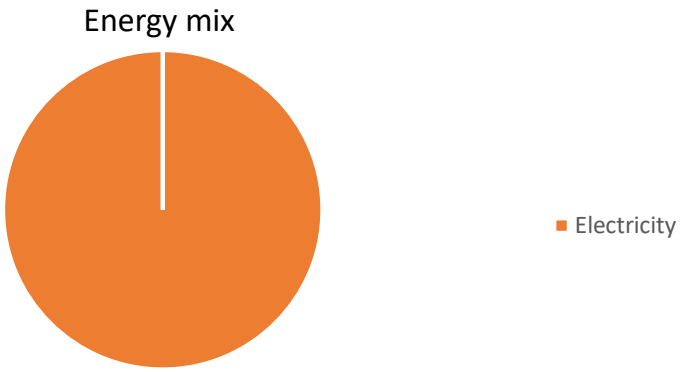
Energy Use

Gate Theatre is runs on 100% electricity. No gas is used.

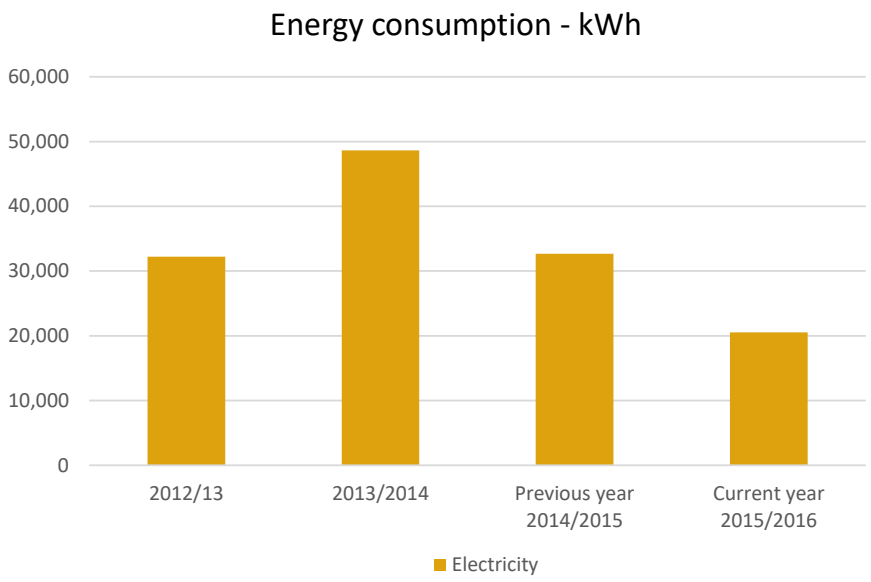
• Total energy use decreased by 37% between 2014/15 and 2015/16 and by 36% since 2012/13 baseline.

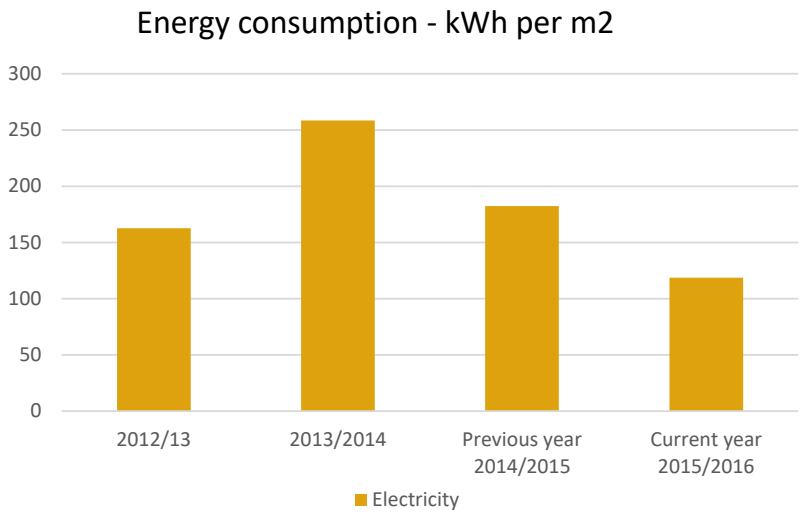
• Electricity use per m2/year is 53 kWh, which is approximately half the Julie's Bicycle energy benchmark for performing arts venues.

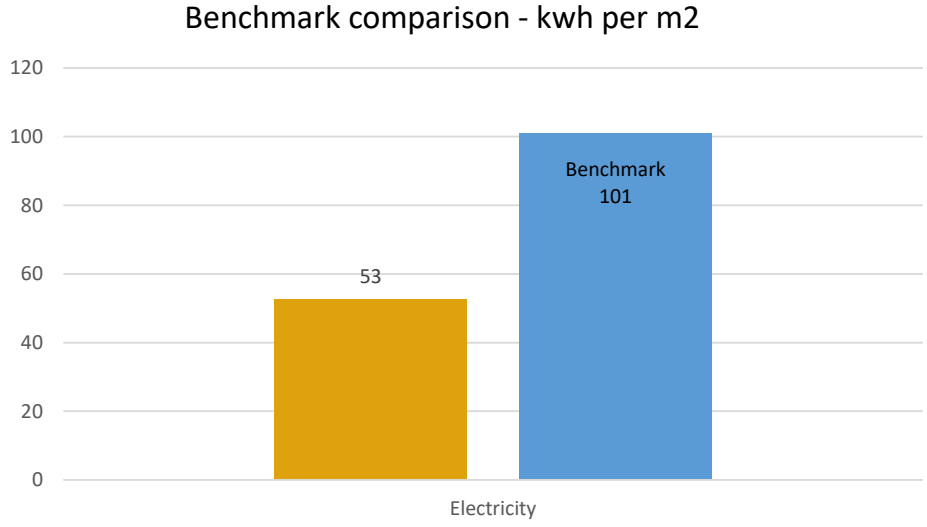
• The decrease in total energy use between 2014/15 and 2015/16 is due to stakeholder awareness campaigns and upgrade of the air handling unit to a more energy efficient one.



Energy use	Unit	2012/2013	Previous year 2014/2015	Current year 2015/2016	% change current vs previous	% change current vs baseline
Energy use (electricity and gas) - absolute	**kWh**	32,204	32,655	20,517	-37%	-36%
Electricity	**kWh**	32,204	32,655	20,517	-37%	-36%
Energy use (electricity and gas) - relative	**kWh per performance**	163	182	119	-35%	-27%
Electricity	**kWh per performance**	163	182	119	-35%	-27%


Energy consumption - kWh
60,000
50,000
40,000
30,000
20,000
10,000
0
2012/13
2013/2014
Previous year 2014/2015
Current year 2015/2016
Electricity


Energy consumption - kWh per m2
300
250
200
150
100
50
0
2012/13
2013/2014
Previous year 2014/2015
Current year 2015/2016
Electricity


Benchmark comparison - kwh per m2
120
100
80
60
40
20
0
53
Benchmark 101
Electricity

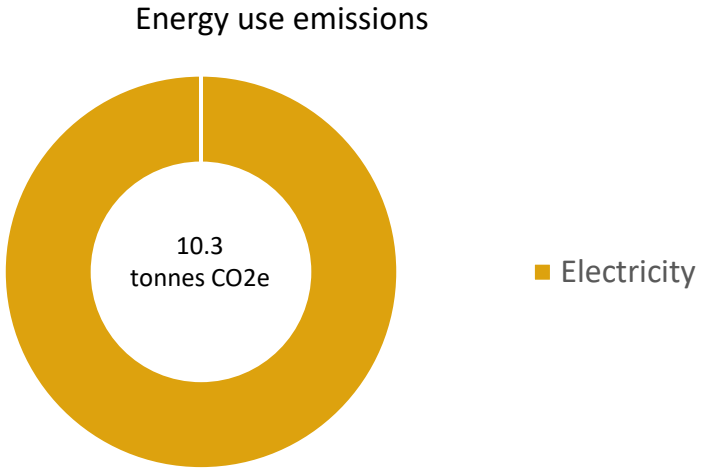
Energy Use Emissions

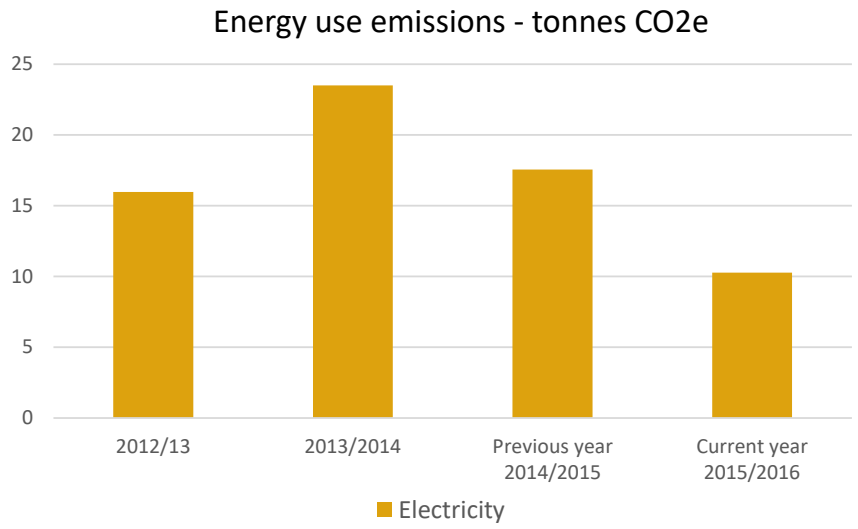
Gate Theatre's energy use generated 10.3 tonnes CO2e in 2015/16, which works out as 59.3 kg CO2e per performance.

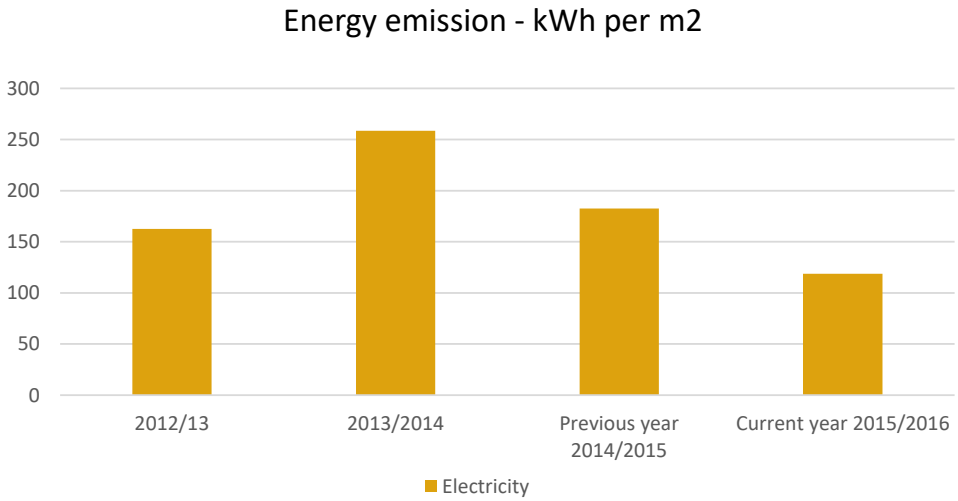
• Total energy use emissions decreased by 42% between 2014/15 and 2015/16 and decreased by 36% since 2012/13 baseline.

• Energy use emissions in 2015/16 were 59.3 kg per performance, which was a 42% and 36% reduction on the previous year and baseline year respectively.

Energy related emissions	Unit	2012/2013	Previous year 2014/2015	Current year 2015/2016	% change current vs previous	% change current vs baseline
Energy use emissions (all sources)- absolute	tonnes CO2e	16.0	17.6	10.3	-42%	-36%
Energy use emissions (all sources) - relative	kg CO2e per performance	80.7	98.1	59.3	-39%	-26%
Electricity	tonnes CO2e	16.0	17.6	10.3	-42%	-36%




Energy use emissions - tonnes CO2e
25
20
15
10
5
0
2012/13
2013/2014
Previous year 2014/2015
Current year 2015/2016
Electricity


Energy emission - kWh per m2
300
250
200
150
100
50
0
2012/13
2013/2014
Previous year 2014/2015
Current year 2015/2016
Electricity

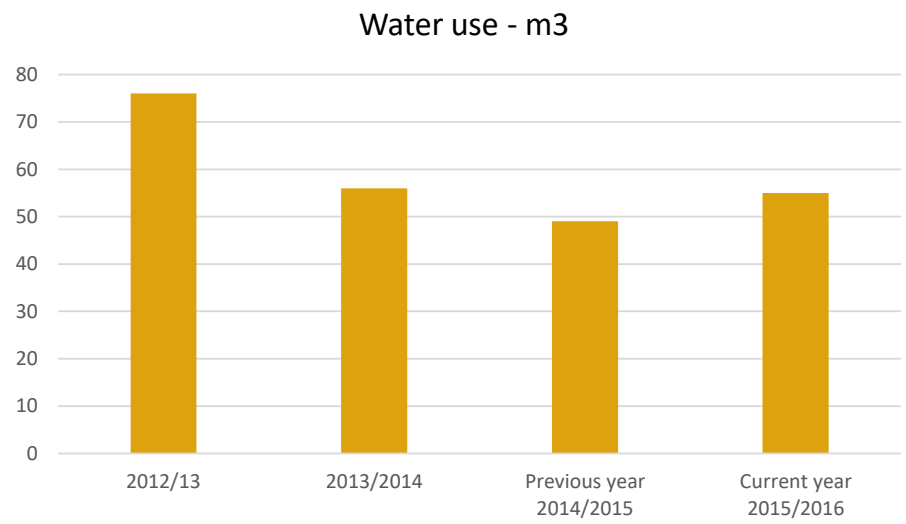
Water

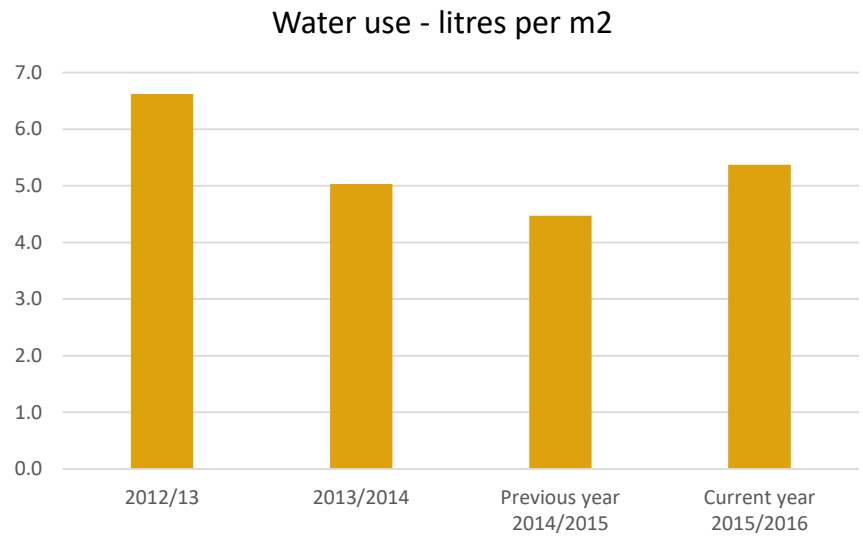
Gate Theatre used 55 cubic metres (m3) of water in 2015/16, which works out as 141 litres per metre squared (m2).

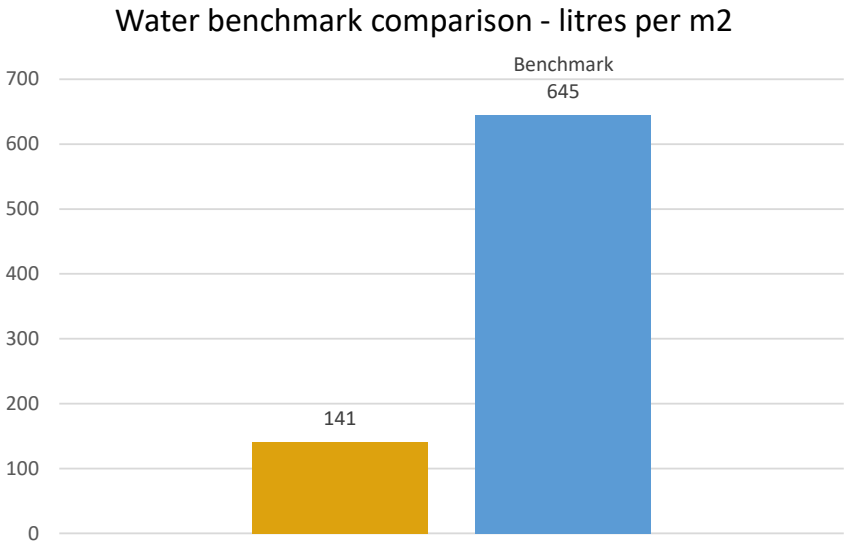
- Total water use increased by 12% between 2014/15 and 2015/16 but decreased by 28% since 2012/13.
- Water use per audience member increased 20% between 2014/15 and 2015/16, but decreased by 19% since 2012/13.
- Water use at 141 litres per m2 is 80% lower than the sector average.

Water and wastewater

Water use	Unit	2012/2013	Previous year 2014/2015	Current year 2015/2016	% change current vs previous	% change current vs 2011
Water use - absolute	m3	76	49	55	12%	-28%
Water use - relative	litres per audience	6.6	4.5	5.4	20%	-19%
Water use	m3	76	49	55	12%	-28%
Waste water	m3	7	49	55	12%	-28%
Total water and waste water	m3	76	98	110	12%	-28%




Water use - litres per m2
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
2012/13
2013/2014
Previous year 2014/2015
Current year 2015/2016


Water benchmark comparison - litres per m2
700
600
500
400
300
200
100
0
Benchmark
645
141

Waste

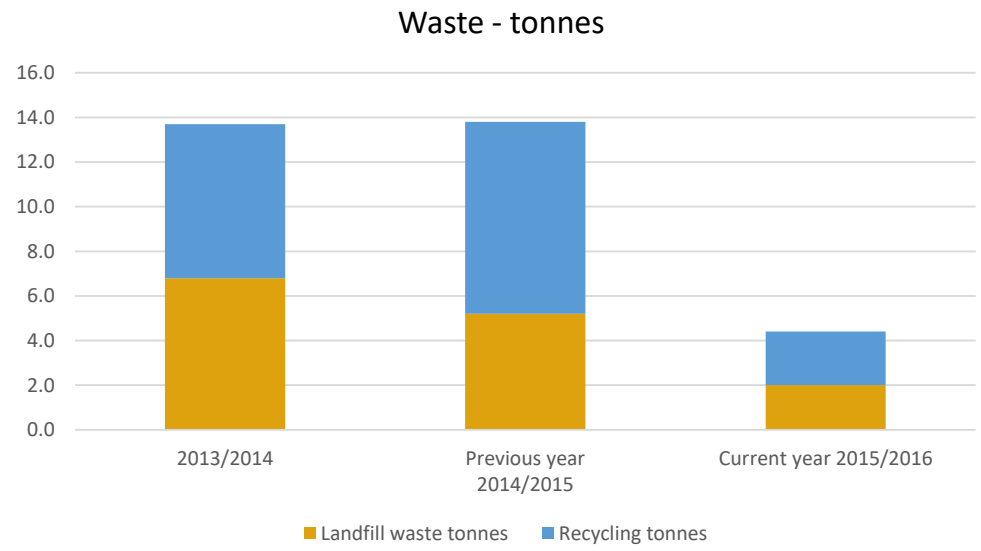
Gate Theatre generated 4.4 tonnes of waste in 2015/16, which works out as 0.43 kg per audience member

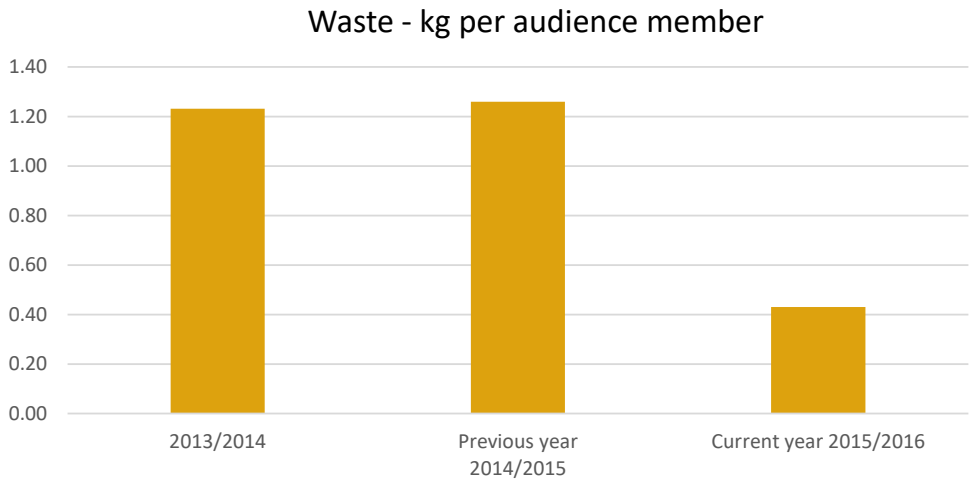
• Total waste volumes decreased by 68% between 2014/15 and 2015/16 and 68% since 2013/14.
• Waste volumes per audience member decreased by 67% between 2014/15 and 2015/16 and by 65% since 2013/14.

By recycling and composting waste instead of sending it to landfill, Gate Theatre avoided 1 tonne CO2e in 2015/16. However, 45% of all waste went to landfill in 2015/16, 8% more than in 2014/15.

Waste

Waste	Unit	2013/2014	Previous year 2014/2015	Current year 2015/2016	% change current vs previous	% change current vs baseline
Waste generation - absolute	tonnes	0.0	13.8	4.4	-68%	-68%
Waste generation - relative	kg per audience	2013/2014	1.26	0.43	-66%	-65%
Landfill waste	tonnes	13.7	5.2	2.0	-62%	-71%
Recycling	tonnes	6.8	8.6	2.4	-72%	-65%
% landfill	%	690%	38%	45%	8%	-4%
% recycled + energy from	%	0%	62%	55%	-8%	4%




Waste - kg per audience member
1.40
1.20
1.00
0.80
0.60
0.40
0.20
0.00
2013/2014
Previous year 2014/2015
Current year 2015/2016

Glossary

Direct and indirect environmental impacts
Direct environmental impacts are impacts over which an organisation has direct control or influence, and generally relate to activities for which an organisation pays itself, as the best indicator of the level of control or influence. Under Creative Green the most common direct impacts are:

- Energy use
- Energy use emissions
- Waste generation
- Water use and waste water generation
- Production travel and transport emissions
- Business travel emissions
- Paper use

Indirect environmental impacts are impacts over which an organisation has limited or no control or influence and generally relate to activities for which an organisation does not pays itself. Under Creative Green, audience travel and staff commuting are the most common indirect impacts. While an organisation can take some action to provide or promote more sustainable travel alternatives to its audiences or employees, there are limits to what it can do e.g. a venue or an event cannot move location simply to reduce audience travel or staff commuting.

Absolute and relative impacts
Environmental impacts are expressed in both absolute terms, e.g. total litres of diesel used per year, total tonnes waste generated per year, and in relative terms. Relative impacts are established by dividing the impact reported (e.g. tonnes of waste or emissions) by an appropriate activity metric to provide a measure of the intensity of resource use or impact and also to allow comparability over time and across different sized organisations. So, for example, if a venue extends its building, a festival increases its audience capacity, or an office takes on more staff, different metrics such as m^2 of floor area, audience day or Full Time Equivalent employee can be used to enable comparisons over time and against sector averages. The resulting relative indicator e.g. kg of waste per audience day or kWh electricity per m^2, is an intensity ratio.

Weather normalisation
Gas use emissions are calculated using weather normalised data. This means gas use consumption is adjusted to take account of fluctuations in weather year-to-year. We do this by calculating consumption compared to the average weather conditions. We convert this weather normalised consumption into carbon emissions. This means the carbon footprint used to calculate your Creative Green score will not penalise or be overly generous because it is a cold or mild winter.

Benchmarks
Julie's Bicycle has developed a set of benchmarks to help organisations compare their environmental performance against the industry average for venues/cultural buildings, offices and outdoor events. All benchmarks have been developed using data collected by Julie's Bicycle through Creative Green certifications, Creative IG Tool accounts and partner organisations from across the creative and cultural sector. Further information is provided here.

Baseline year

Carbon footprint
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 equivalent (CO_2e). CO_2e 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.

Carbon dioxide equivalent (CO_2e)
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_2), per unit of gas. To deal with this, scientists use carbon dioxide equivalent (CO_2e) as a common denominator for the main greenhouse gases so they can express the climate impacts in a single measure.

Conversion factors
We apply the conversion factors of the year in question to the data of the year in question, using the official UK conversion factors provided at http://www.ukconversionfactorscarbonsmart.co.uk/. These factors are updated on an annual basis. The most up-to-date list of UK conversion factors used is provided for download on the Creative IG Tools.

The UK Government GHG Conversion Factors are annually updated with emissions factors and should be used to report on UK emissions. If we have not been able to provide the appropriate emission factor for your activity data or you have overseas operations, we you should refer to the emissions factors in the GHG Protocol calculation tools." You will need to take the international electricity factors from the Greenhouse Gas Protocol.

Relevant Standards and Tools

- Department of the Environment, Food and Rural Affairs (DEFRA) Environmental Reporting Guidelines: Including mandatory greenhouse gas emissions reporting guidance
- DEFRA UK greenhouse gas conversion factors
- World Resources Institute (WRI) and World Business Council on Sustainable Development (WBCSD) Greenhouse Gas Protocol

About Julie's Bicycle

Julie's Bicycle is a leading global charity bridging the gap between environmental sustainability and the creative industries. Our vision is a creative community with sustainability at its heart and our mission is to provide the inspiration, expertise and resources to make that happen. We work with over 1,000 arts organisations across the UK and internationally, large and small to help them measure, manage and reduce their environmental impacts.

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Tweet us: @juliesbicycle #CreativeGreen

About Creative Green

Creative Green is the environmental certification scheme for the creative sector – venues, events and offices. Its purpose is threefold:
recognise commitment and achievement
provide organisations with a means of tracking their journey of change and performance over time
inspire organisations to do more

Creative Green provides organisations not only with a means of demonstrating their environmental commitment to their audiences and communities but also the opportunity to be part of a creative community which shares the same commitment, and which, given its role in shaping and building culture, identity, communities and values, has the potential to drive the kind of transformational change we need to live within the limits of our planet.

Find out more about Creative Green here.