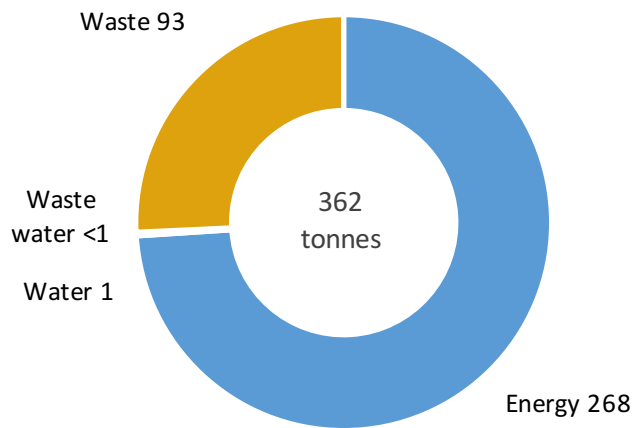
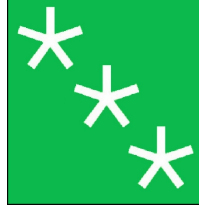


Reading 2016

Total score: 51/100

creative
green



Carbon footprint 2016

362 tonnes CO2



Equal to 818 flights from London to New York

Environmental Highlights

Commitment

31/45

- * environmental policy and sustainability report
- * clear environmental responsibilities
- * communications and engagement with staff, sponsors, contractors, artists and audience

Understanding

10/15

- breadth and depth of understanding of environmental impacts across eight years
- environmental data informs actions and progress is tracked

Improvement

8/40

- 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

About Reading Festival

Reading Festival is an annual music festival that takes place on the August bank holiday weekend. It is held at Little John's Farm in Central Reading, near the Caversham Bridge. It is the world's oldest popular music festival.

	2009	2010	2011	2012	2013	2014	2015	2016
Location	peri_urban	peri_urban	peri_urban	peri_urban	peri_urban	peri_urban	greenfield	peri_urban
Camping	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Number days	3	3	3	3	3	3	3	3
Tickets sold or capacity	86999	86999	98338	99172	104093	114897	89999	90000
Audience days	247997	247997	256989	269172	283093	318023	269997	270000



About Reading Festival's Certification

Reading Festival has been awarded a 3 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 Reading Festival's seventh Creative Green certification. In 2015 Reading also achieved a 3 star rating.

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>.

Reading Festival Scored 31/45 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
<ul style="list-style-type: none"> • Environmental policy produced by Festival Republic covering: waste, energy, water, transport, noise, air and light pollution, ecology, heritage and procurement • Festival Republic takes a leading role within the events community such as through Powerful Thinking • Dedicated sustainability team rolls out environmental initiatives • Post-event Sustainability Report is circulated to staff • Engagement with staff through intranet, website, newsletters and emails etc • Sustainability team liaises with traders and concessions through planning meetings, delivery and debrief stages. Targets, monitoring systems and environmental requirements are agreed and communicated • Comprehensive environmental information is also uploaded to the artist intranet platform • Audience environmental messaging (covering policy, actions, initiatives and carbon footprint) on website, social media, signage and onscreen 	<ul style="list-style-type: none"> • Continue to be a leader within the events community and weave sustainability into all mission and strategy document, including mention of your carbon target and Creative Green achievements • Create a central procurement policy that collates all existing procurement documents • Celebrate achievement with your staff, volunteers and contractors. Explain through your policy how far you've come and where you want to get to. • Commission more creative content and programmes tackling environmental themes. Participate in The Season, an international initiative to promote creative responses to climate change in 2018

Reading Festival Scored 10/15 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

Direct impacts	2009	2010	2011	2012	2013	2014	2015	2016
Energy use								
Water use								
Wastewater volumes								
Waste generation								
Production travel								
Indirect impacts	2009	2010	2011	2012	2013	2014	2015	2015
Audience travel								



Highlights	Recommendations
<ul style="list-style-type: none"> • Reporting of direct impacts(energy, water and waste) for eight years. • Generators are monitored on site and analysis on efficiency is conducted. • Monitoring audience, production and staff travel • Annual retrospective sustainability reports are produced by the Sustainability Coordinator. The reports collate all environmental impact data, reviewing performance and making recommendations for future improvement. 	<ul style="list-style-type: none"> • Improve the audience travel survey • Collect data on a further environmental impact such as artist/crew travel: mode - plane, train, coach, car etc. - and distances. • Continue working with waste, water and energy contractors and use data on environmental impacts to inform actions and business practice and to determine the results of the actions taken. • Communicate summary data to stakeholders to increase environmental understanding.

Reading Festival Scored 8/40 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

Environmental impact trends (based on direct and indirect impacts)

		Baseline year 2009	Previous year 2015	Current year 2016	% change current vs previous year	% change current vs baseline year	Trend over time
Diesel use (all types)	litres	114540.0	131192.0	134804.0	3%	18%	
	litres per audience day	0.5	0.5	0.5	3%	8%	
Energy use emissions (all sources)	tonnes CO2e	278.9	263.5	267.5	2%	-4%	
	kg CO2e per audience day	1.1	1.0	1.0	2%	-12%	
Water use	m3	1789.0	0.0	1771.0	na	-1%	
	litres per audience	7.0	0.0	6.6	na	-6%	
Waste	tonnes	590.3	800.0	616.3	-23%	4%	
	kg per audience day	2.4	3.0	2.3	-23%	-4%	
Audience travel	tonnes CO2e	1763.0	0.0	358.5	na	-80%	
	kg CO2e per audience day	7.1	0.0	1.3	na	-81%	

* Water baseline is 2011



Highlights	Recommendations
<ul style="list-style-type: none"> • Excellent reductions from 2015 in waste generated (-23%). Recycling rate is fantastic 68%, stable from 2015. • Compared to 2009, energy emissions have reduced 12% • BlaBlaCar has been partnering with Festival Republic festivals since 2014, achieving a notable increase in the number of rides offered at all festivals. • 16% of total diesel consumed is biodiesel, surpassing the sector benchmark of 15%. This avoided emissions of 56 tonnes of CO₂e. 	<ul style="list-style-type: none"> • Focus on energy and water now • Continue working with waste, water and energy contractors to identify opportunities for efficiency. • Use the Creative IG Tools to report all travel data to Julie's Bicycle. • Continue working with traders and bars, both in terms of planning energy use and waste management. Incentivise good practice through a green trader awards. • Introduce reusable cups • Increase vegetarian and vegan options and ensure useable food from campsites and traders is donated to a local food bank

The recommendations above take into account the following internal Festival Republic recommendations for Reading which Julie's Bicycle fully endorse:

- Create a communications plan, including regular meetings with marketing team to produce for example more green messages on the app.
- Recruit and retain more green messengers and incentivise arena recycling.
- Improve incentives for and visibility of car sharing on website and social media, provide a priority carpark for liftsharers, improve comms and add incentives for public transport and provide more incentives for coach travel.
- Agree waste classification system in advance and remind all crew and contractors about recycling, and penalize sponsors and suppliers if they do not recycle.
- Ensure staff/crew/volunteers know where to get green and orange bags, more comms about cup&bottle return especially signs at bars, improve location and visibility of cup&bottle return point including façade reused at all festivals.
- Receive list of caterers and traders at least one month in advance from production/licensing to improve comms with them, and add responsible and local food sourcing to policy and comms.
- Discuss generator efficiency with ZAP Consultancy, investigate/increase mains supply, compare tech specs and actual use, invest in LED lights, invest in more cabling to reduce number of generators.
- Hold monthly update with sponsorship team to ensure smooth comms and take advantage of opportunities

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:

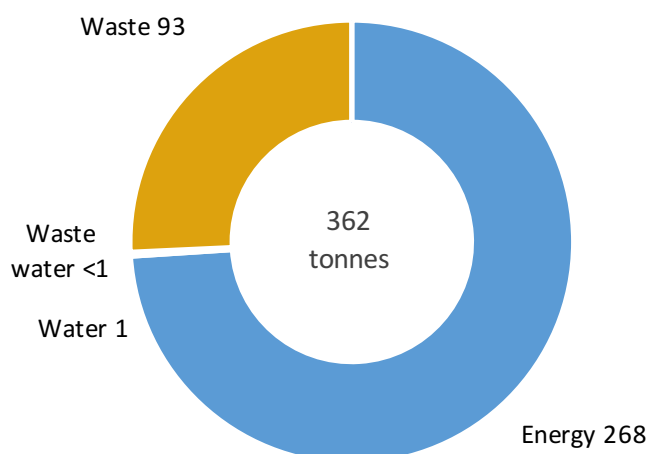
- track and understand performance over time
- identify where you are doing well and areas for further improvement

Carbon footprint trends (based on direct and indirect impacts)

		Baseline year 2009	Previous year 2015	Current year 2016	% change current vs previous	% change current vs baseline
Energy	tonnes CO2e	278.9	263.5	267.5	2%	-4%
Water	tonnes CO2e	0.6	0.0	0.6	na	-1%
Waste water	tonnes CO2e	0.5	0.6	0.5	-15%	-1%
Waste	tonnes CO2e	590.3	800.0	93.1	-88%	-84%
Total carbon footprint	tonnes CO2e	869.2	1,064.0	361.6	-66%	-58%
Total relative carbon footprint	kg CO2e per audience day	3.5	3.9	1.3	-66%	-62%
Audience travel	tonnes CO2e	1,763.0	0.0	358.5	na	-80%
Total carbon footprint including audience travel	tonnes CO2e	2,632.2	na	720.2	na	-73%
Total relative carbon footprint including audience travel	kg CO2e per audience day	10.6	na	2.7	na	-75%

* water baseline is 2011

Carbon footprint for Reading Festival 2016 - tonnes of CO2e





Energy Use

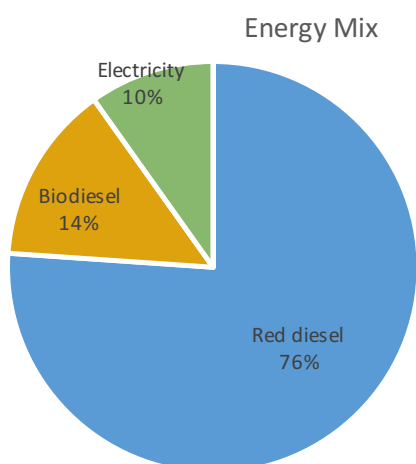
Reading is largely powered by diesel generators, with 16% of the fuel being WVO biodiesel, compared to 13% in 2015.

Comparing 2016 with 2015

- Absolute energy use has increased by: 3%
- Relative energy use has increased by: 3%

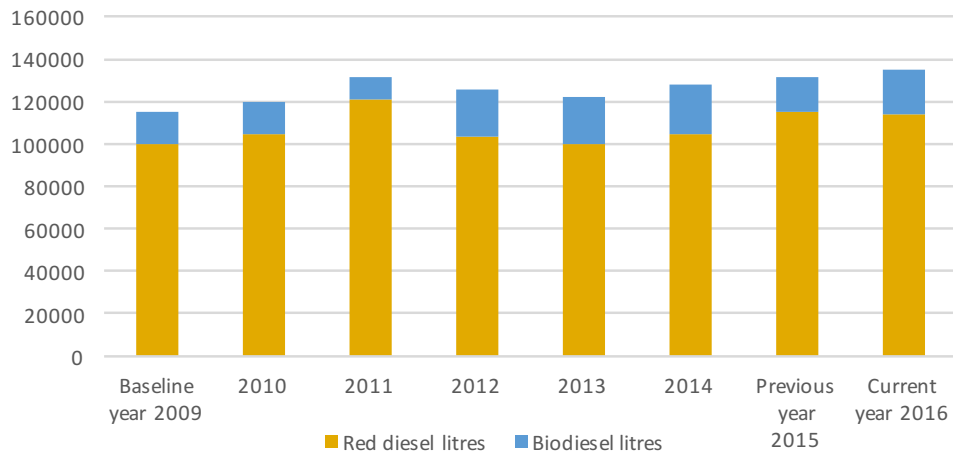
Comparing 2016 with 2009 (the baseline year)

- Absolute energy use has increased by: 18%
- Relative energy use has increased by: 8%

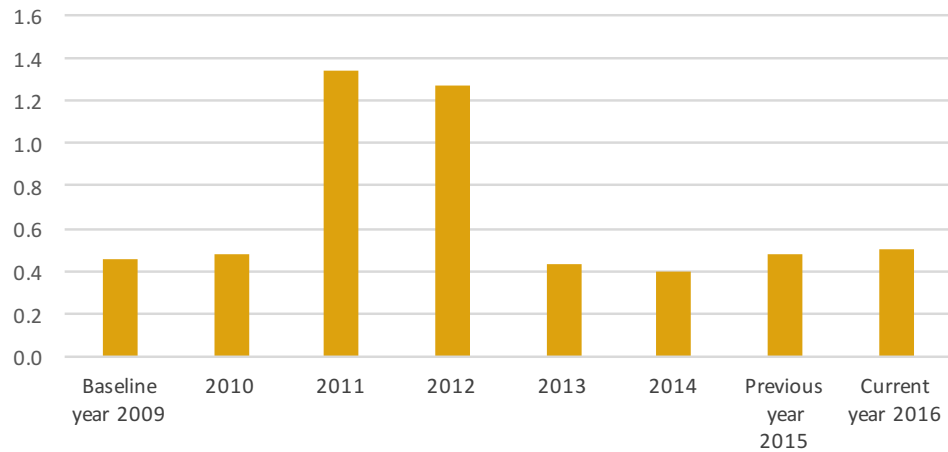


		Baseline year 2009	Previous year 2015	Current year 2016	% change current vs previous	% change current vs baseline
Diesel use (all types) - absolute	litres	114,540	131,192	134,804	3%	18%
Diesel use (all types) - relative	litres per audience	0.5	0.5	0.5	3%	8%
Red diesel	litres	99,540	114,692	113,766	-1%	14%
Red diesel	litres	85,000	98,456	97,486	-1%	15%
Concession red diesel	litres	14,540	16,236	16,280	0%	12%
Biodiesel	litres	15,000	16,500	21,038	28%	40%
Biodiesel	litres	15,000	16,500	21,038	28%	40%
Concession biodiesel	litres	0	0	0	na	na
Biodiesel as % of total diesel	%	0	0	0	3%	3%
Bottled gas	litres	37,218	0	0	na	-100%
Electricity	kWh	3,400	0	14,719	na	333%

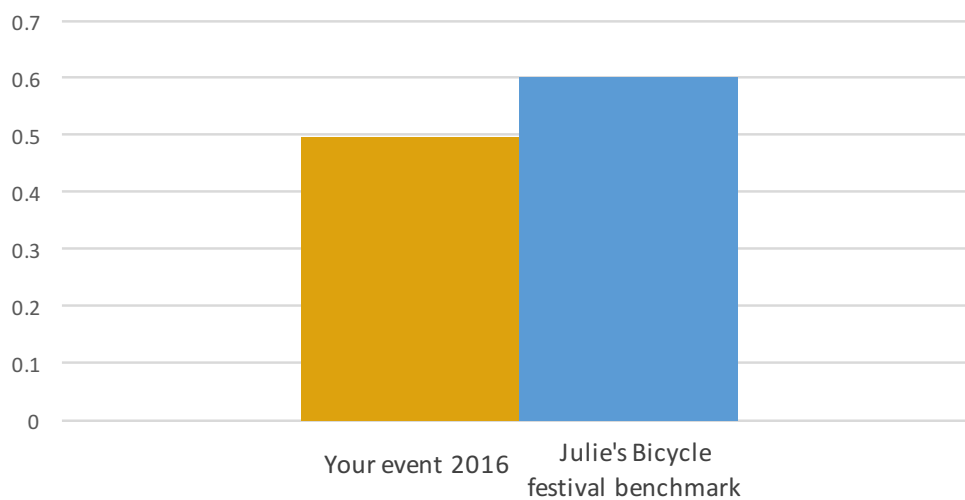
Total diesel use - litres



Relative diesel use - litres per audience day



Litres diesel per audience day





Energy Use Emissions

Reading's energy use generated 268 tonnes CO₂e in 2016. Using biodiesel avoided emissions of 56 tonnes.

Comparing 2016 with 2015

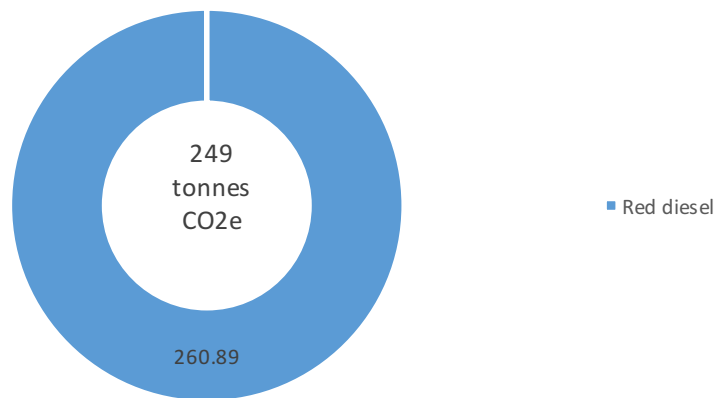
- Absolute energy emissions have increased by: 2%
- Relative energy emissions have increased by: 2%

Comparing 2016 with 2009 (the baseline year)

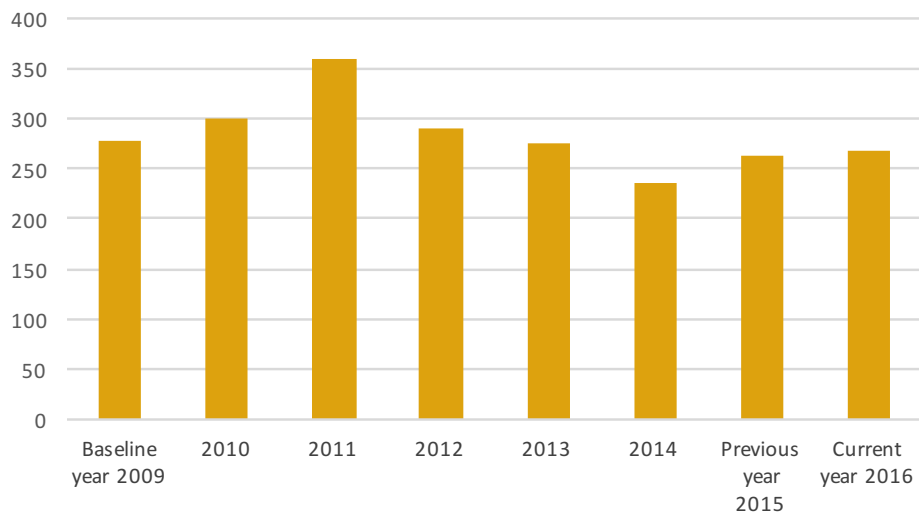
- Absolute energy emissions have decreased by: -4%
- Relative energy emissions have decreased by: -12%

		Baseline year 2009	Previous year 2015	Current year 2016	% change current vs previous	% change current vs baseline
Energy use emissions (all sources) - absolute	tonnes CO ₂ e	278.9	263.5	267.5	2%	-4%
Energy use emissions (all sources) - relative	kg CO ₂ e per audience day	1.1	1.0	1.0	2%	-12%
Red diesel	tonnes CO ₂ e	221.2	263.5	260.9	-1%	18%
Biodiesel	tonnes CO ₂ e	0.0	0.0	0.0	na	na
Bottled gas	tonnes CO ₂ e	55.9	0.0	0.0	na	-100%
Electricity	tonnes CO ₂ e	1.8	0.0	6.6	na	265%
Emissions avoided using biodiesel instead of red diesel	tonnes CO ₂ e	39.0	44.2	56.3	28%	44%

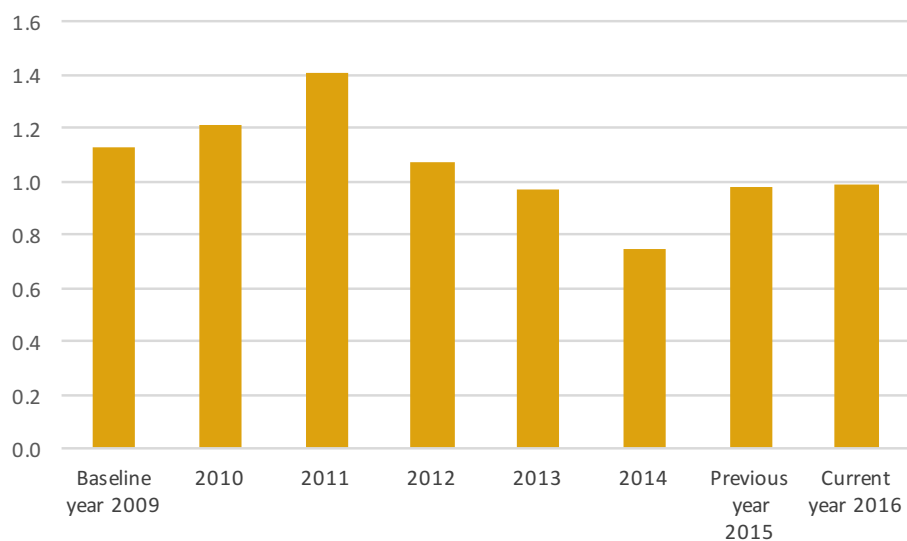
Energy use emissions by source 2016



Energy use emissions - tonnes CO2e



Energy use emissions - kg CO2e per audience day





Water

Reading used 1771 cubic metres (m3) of water in 2016, which works out as 6.6 litres per audience day, approximately half the JB benchmark. Waste water production was 664 m3.

Comparing 2016 with 2015 is not possible due to missing data

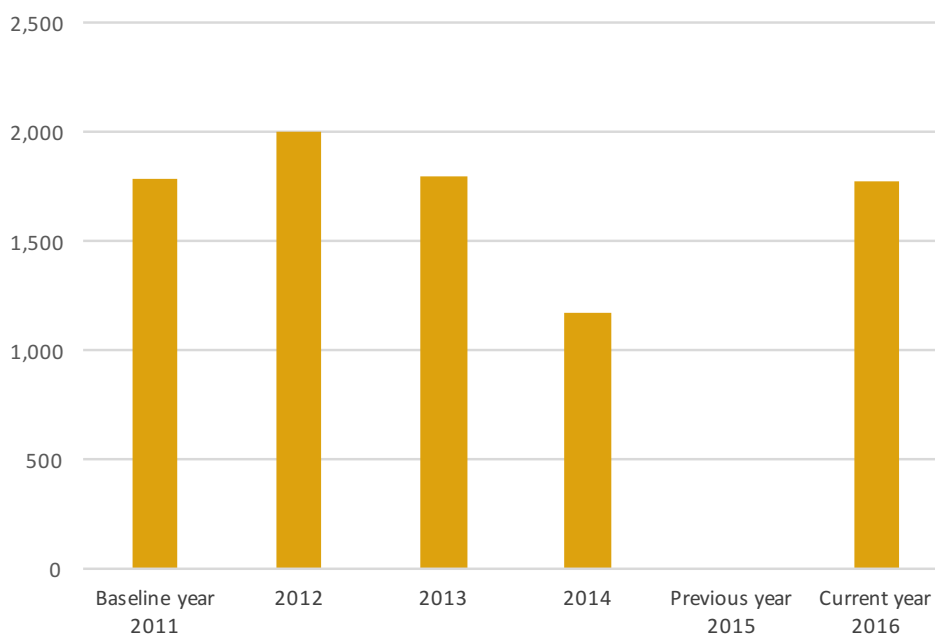
Comparing 2016 with 2011 (the baseline year)

- Absolute water use has decreased by: -1%
- Relative water use has decreased by: -6%

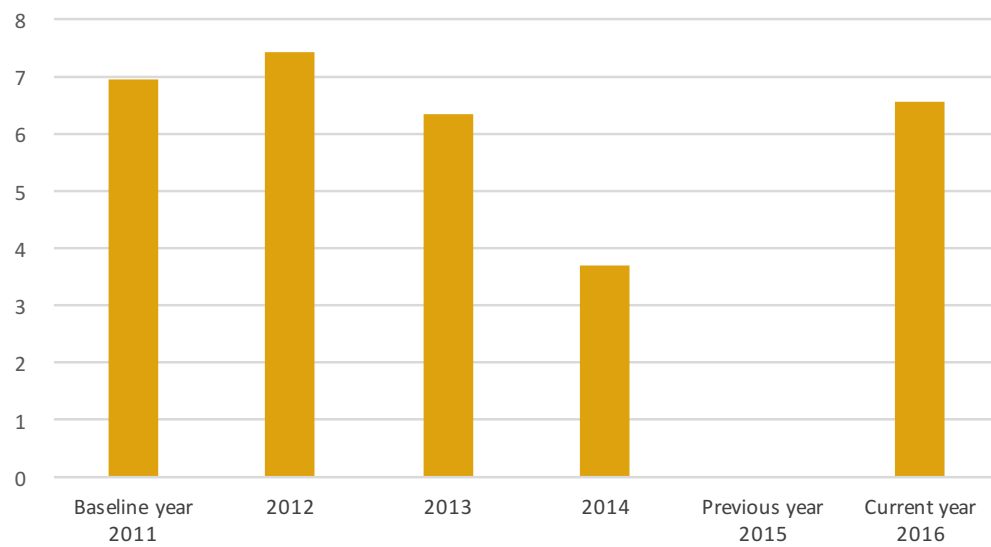
Water and wastewater

		Baseline year 2011	Previous year 2015	Current year 2016	% change current vs previous	% change current vs baseline
Water use - absolute	m3	1789.0	0.0	1771.0	na	-1%
Water use volumes - relative	litres per audience day	7.0	0.0	6.6	na	-6%
Water use	m3	1789.0	0.0	1771.0	na	-1%
Waste water	m3	673.0	780.8	663.7	-15%	-1%
Total water and waste water	m3	2462.0	780.8	2434.7	212%	-1%

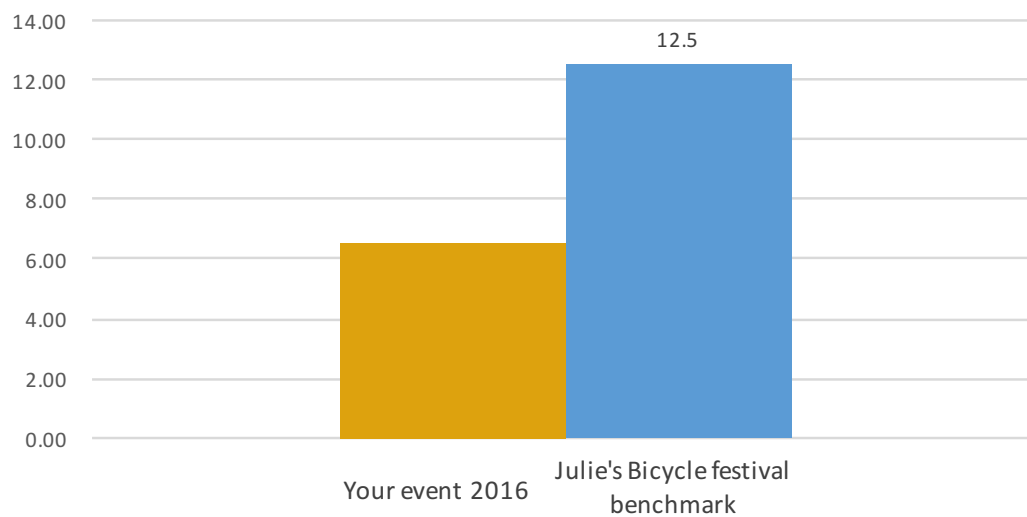
Water use - m3



Water use - litres per audience day



Litres water per audience day





Waste

Reading generated 616 tonnes of waste in 2016, which works out as 2.3 kg per audience day, lower than the JB benchmark. The recycling rate is a fantastic 68%, the achievement of which avoided 166 tonnes of CO₂e.

Comparing 2016 with 2015

- Absolute waste production has decreased by: -23%
- Relative waste production has decreased by: -23%

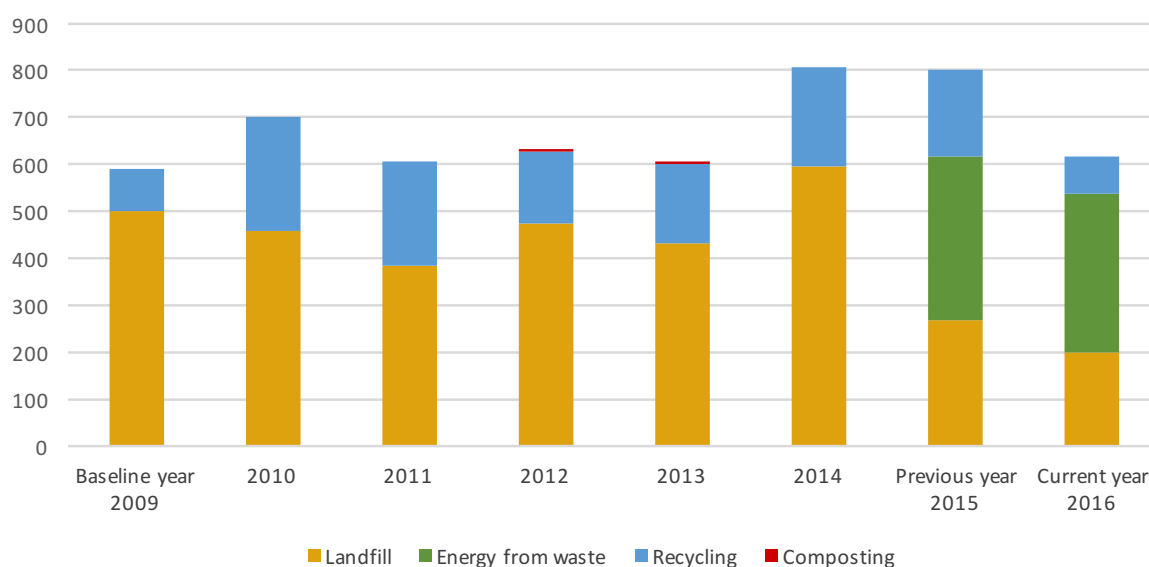
Comparing 2016 with 2009 (the baseline year)

- Absolute waste production has increased by: 4%
- Relative waste production has decreased by: -4%

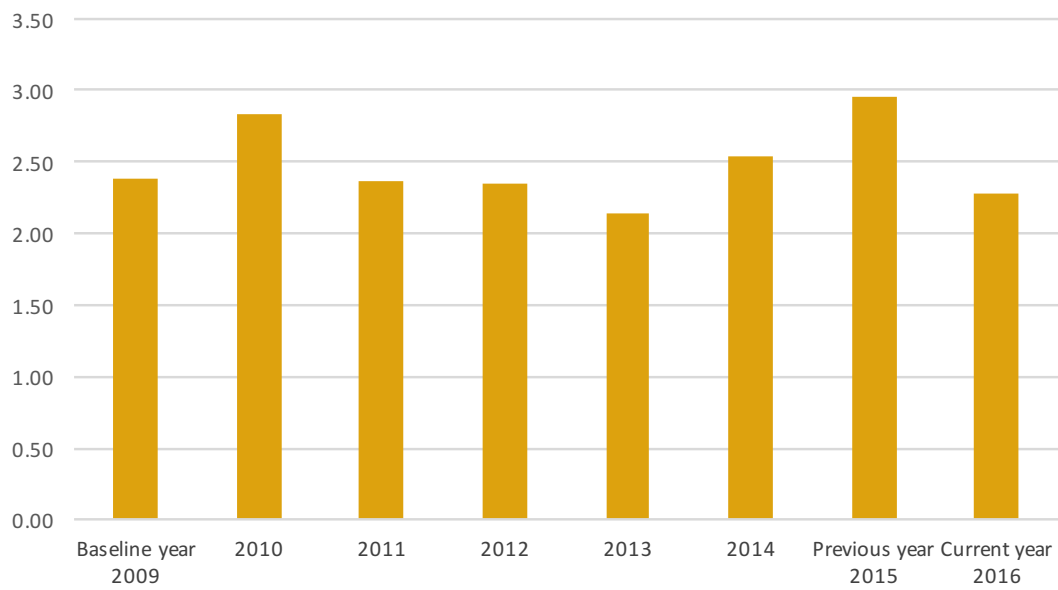
Waste

		Baseline year 2009	Previous year 2015	Current year 2016	% change current vs previous	% change current vs baseline
Waste generation - absolute	tonnes	590.3	800.0	616.3	-23%	4%
Waste generation - relative	kg per audience day	2.38	2.96	2.28	-23%	-4%
Landfill waste	tonnes	500.3	267.0	200.3	-25%	-60%
Energy from waste	tonnes	0.0	348.0	339.0	-3%	-3%
Recycling	tonnes	90.0	185.0	77.1	-58%	-14%
Composting	tonnes	0.0	0.0	0.0	na	na
% landfill	%	85%	33%	32%	-3%	-62%
% recycling (recycling + energy from waste + composting)	%	15%	67%	68%	1%	52%

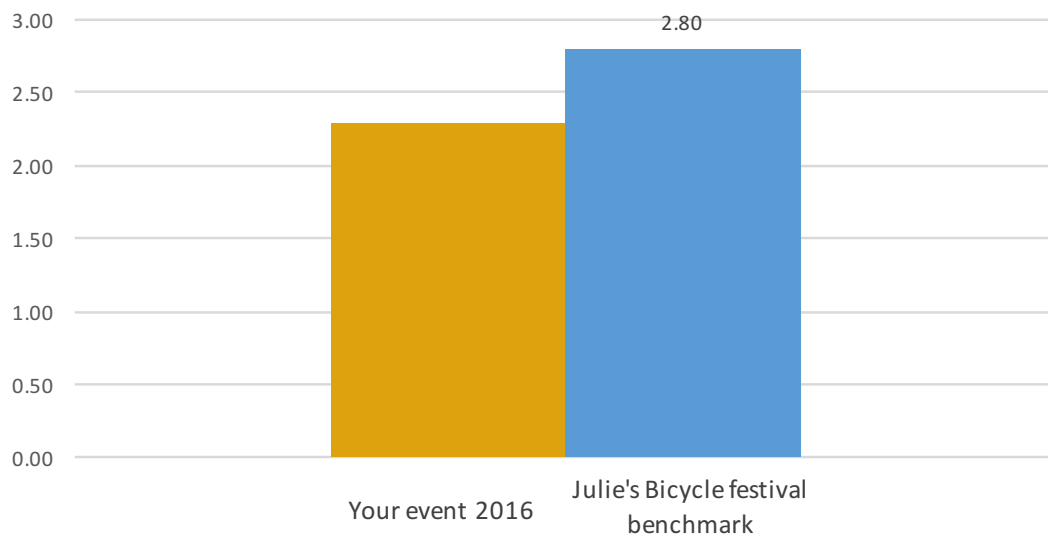
Waste - tonnes



Waste - kg per audience day



kg waste per audience day





Audience Travel Emissions

Emissions from audience travel (359 tonnes CO2e) have fallen significantly since 2009 though the method for estimating it has changed so the comparison is unreliable

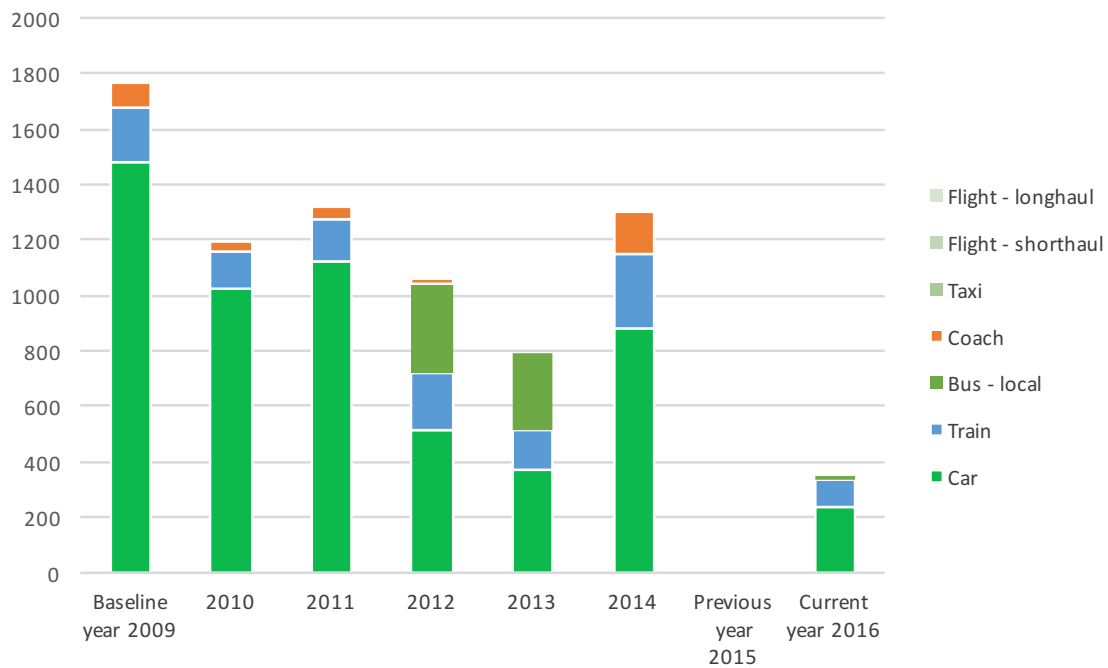
Comparing 2016 with 2015 - the data is unavailable.

Comparing 2016 with 2009 (the baseline year)

- Absolute audience travel has decreased by: -79.7%
- Relative audience travel has decreased by: -81.3%

		Baseline year 2009	Previous year 2015	Current year 2016	% change current vs previous	% change current vs baseline
Total audience travel related emissions - absolute	tonnes CO2e	1763.0	0.0	358.5	na	-80%
Total audience travel related emissions - relative	kg CO2e per audience day	7.1	0.0	1.3	na	-81%
Car - average (persons per car:	pkm	362.1	0.0	80.5	na	-78%
	tonnes CO2e	1483.9	0.0	240.7	na	-84%
	%	70.0	0.0	52.0	na	0%
Train - national	pkm	362.1	0.0	80.5	na	-78%
	tonnes CO2e	194.0	0.0	96.9	na	-50%
	%	13.0	0.0	27.4	na	0%
Bus - local	pkm	0.0	0.0	80.5	na	-44%
	tonnes CO2e	0.0	0.0	11.6	na	-96%
	%	0.0	0.0	1.6	na	0%
Bus - dedicated coach	pkm	482.8	0.0	80.5	na	-83%
	tonnes CO2e	85.0	0.0	9.4	na	-89%
	%	15.0	0.0	9.6	na	0%
Taxi - regular	pkm	0.0	0.0	80.5	na	#N/A
	tonnes CO2e	0.0	0.0	0.0	na	#N/A
	%	0.0	0.0	0.0	na	0%
Flight - shorthaul	pkm	0.0	0.0	0.0	na	#N/A
	tonnes CO2e	0.0	0.0	0.0	na	#N/A
	%	0.0	0.0	0.0	na	0%
Flight - longhaul	pkm	0.0	0.0	0.0	na	#N/A
	tonnes CO2e	0.0	0.0	0.0	na	#N/A
	%	0.0	0.0	0.0	na	0%

Audience travel emissions - tonnes CO2e



Audience travel emissions - kg CO2e per audience day

