JULIE'S BICYCLE ***

TAKING THE HEAT OUT OF MUSIC

REPORT

Jam Packed

Part 1: Audience Travel Emissions from Festivals

May 2009

Foreword

Melvin Benn

CEO Festival Republic

Over the last decade the festival sector has grown enormously: in 2008 over a million festival goers gathered to share music and company. In the same decade the consequences of fossil fuel based economies have become horribly clear – nothing short of the widespread destruction of ecosystems, and dramatic climate events on an unimaginable scale. The latest science suggests that the current trajectory of greenhouse gas (GHG) emissions will trigger a temperature rise above 6 degrees – the worst case scenario suggested by the Intergovernmental Panel on Climate Change[1].

Many festivals have made real efforts to reduce environmental degradation. Recycling waste, Waste Vegetable Oil biodiesel, locally sourced food supplies, responsible water use, composting, and occasionally on-site renewable energy have been part of festival planning for some time now. In their beautiful locations greenfield festivals can, and some do, strongly communicate the ethics of sustainability.

But we need to do much more, starting with the reduction of GHG emissions. This comes down to two areas: travel and transportation to the event and the energy supply to the site.

The biggest problem, by far, is audience travel: it produces 68%[2] of the festival sector's total emissions and 24% of all music audience travel emissions.

This report is the first cross industry response to this issue. We've started by examining audience attitudes and behaviour in relation to festival travel. This is only one piece of the picture, but an important one; over the next year we hope to extend our research to concerts and touring.

We have a big opportunity to make a difference and I invite other event organisers from across the cultural and sports sectors to work with us on this problem.

I would like to thank all the promoters, volunteers, travel operators, researchers, scientists and the thousands of festival goers who contributed to this study. The list of contributors, at the back of this report, gives an idea of the scale of this undertaking. It is the largest of its kind and we hope that, at the very least, it has captured a rich data set which might inform all of us responsible for making festivals in the UK and Ireland the best in the world and the most climate responsible too. I would particularly like to thank Dr Anable for her authoritative and encouraging words, Meegan Jones, Catherine Bottrill and Stavros Papageorgiou for their extraordinary work, and Alison Tickell and Catherine Langabeer at Julie's Bicycle, without whom we would not have started this project at all.

Finally, if we are to bring our emissions down to manageable levels and adapt to existing climate impacts every last one of us must focus on this issue, understand what we can do, and get on with doing it.

[1] IPCC (2007a). Intergovernmental Panel on Climate Change 4th Assessment Report – Climate Change 2007: Synthesis Report – Summary for Policymakers. Cambridge University Press, Cambridge

[2] Approximately 57,000 tonnes (t) of Carbon Dioxide equivalent (CO_2e)

Foreword

Dr Jillian Anable

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Achieving the UK Government's targets to reduce carbon emissions will only be possible if all sectors of the economy pull strongly in the same direction. The transport sector accounts for almost a third of UK Carbon Dioxide emissions and yet is the only sector where emissions have been consistently rising year on year. Due to ever rising transport demands, technological solutions are extremely unlikely to come on line quickly enough to reverse this trend. Thus, developing low carbon transport networks and encouraging different journey patterns are critical. If transport continues to shirk its responsibility, which areas will compensate?

Yet, when policy makers and researchers approach transport problems, they put most effort into urban journeys for commuting and the journey to school. This is despite the fact that the latter accounts for less than 2% of all distance travelled by surface transport modes. By contrast leisure activities, largely ignored, are responsible for around 40%.

This study is a vital attempt to begin to redress this balance and examine travel choices from a different angle. It is a pioneering piece of research into the travel patterns and demands of an important UK leisure activity – music festivals. By bringing together evidence from across the festival sector, the study has provided a rich picture of the issues at play for affecting audience travel choices. From this new evidence can come concrete actions to influence audience travel behaviour and to greatly improve low carbon travel options.

But, in my view, this study has the potential to reach far beyond its immediate sphere of influence. Whilst music festivals themselves are responsible for a small fraction of journeys made by individuals, the music industry is a centerpiece of the broader cultural sector. Together, these industries can play a pivotal role in shaping leisure travel to minimise its environmental impact thereby making a significant contribution to transport emission reductions.

Even more important is the power of music, popular culture and associated social networks to influence issues of sustainability and the bounds of what is 'normal' behaviour. Music is a source of inspiration and creativity, and this certainly holds true for festivals, which bring together a community for extraordinary experiences. Although the emissions of the sector are relatively small they expose audiences to alternative ways of doing things that if mainstreamed into everyday life could greatly reduce emissions.

Part of the process of becoming a climate responsible society is embedding low carbon choices in all aspects of social life. But leisure travel embodies notions of freedom, convenience and spontaneity all of which are closely associated with car travel. Altogether, understanding how to influence leisure travel patterns could unlock far-reaching changes in attitudes and choices about travel.

I am hopeful this study is the start of something much bigger. More work is needed to understand travel patterns and motivations for different types of leisure activity. Greater attention by policy makers and service providers requires a more substantial evidence base on which to design holistic solutions which match people's lives and expectations.

This is a much welcomed start from the music industry on which to build momentum with other cultural sectors, transport academics and policymakers. I hope they come together to devise visionary approaches and policies to understand and influence social norms and travel practices and reduce carbon emissions.

Executive Summary

UK Transport Emissions

In December 2008 The UK Climate Change Act committed to legislation a reduction in GHG emissions of 80% by 2050[3] and in April 2009 the Chancellor unveiled the world's first carbon budget[4], pledging to cut emissions to 34 per cent on 1990 levels by 2020. In this context, domestic transport accounts for nearly a third of UK carbon emissions – 129 million t CO_2 per year.

Since 1950 the population of the UK has increased by a fifth from 50 million to 60 million people. In that same period passenger miles travelled per year have increased 4-fold, from 136 to 508 billion. Even more significantly most of these journeys were taken by car. In 1952, 27% of passenger miles were by car, 42% by bus or coach and 18% by train. But by 2005, a staggering 85% of passenger miles were by car with just 6% by bus or coach and 7% by train.

Significantly, 39% of passenger miles are generated by leisure activities[5].

Central government has introduced a number of policies intended to reduce transport emissions, such as: vehicle exercise duty, fuel taxes, renewable transport fuel obligation, fuel efficiency labelling on new cars, consumer awareness campaigns, investment in public transport networks as well as support for electric cars and re-charging infrastructure. However, these policies have not been, and are not going to be, enough to deliver CO_2 cuts of 26 million tonnes.

Achieving this shift will require a new, integrated vision of transport policies, infrastructure, technologies and practices which will involve central and local government, travel operators, businesses and users.

This study investigates the attitudes and behaviours of audiences travelling to festivals as the first contribution towards lowering travel emissions in the music industry.[6]

Music Industry & Audience Travel

The UK music industry is not a carbon intensive industry. However, it has committed to understanding its GHG emissions profile and reducing its impact alongside the national 80% reduction target. Furthermore, it is an important lifestyle industry with global reach, and therefore has a responsibility to promote low carbon living.

In 2008, Julie's Bicycle released the findings of the report First Step: UK Music Industry Greenhouse Gas Emissions 2007[7]. The report identified that annual audience travel to music events accounts for 43 per cent (231,000 t CO_2e) of GHG emissions from the UK music industry[8].

Julie's Bicycle convened a small group, chaired by Melvin Benn (CEO Festival Republic) and supported by a wider constituency of promoters, to identify next steps. Research priorities were to analyse audience attitudes to festival travel and other live events, promote dialogue between operators, promoters and local authorities, and identify barriers and opportunities to reduce emissions.

Audience travel is an indirect GHG emissions source and therefore impossible for the music industry to control wholly by itself. It requires a complex, imaginative and coordinated approach across a range of parties, taking into account transport infrastructure, audience attitudes, commercial pressures, and local concerns. Committed partnerships focused on emissions reductions are needed between the music industry, local authorities, travel operators and non-government organisations.

[3] www.decc.gov.uk/en/content/cms/legislation/cc_act_08

[4] The UK budget 2009 promised to cut greenhouse gases by 34% by 2020 through so-called carbon budgets, which fix binding limits on greenhouse gas emissions over five-year periods. The 34% target is in line with the advice of the government's independent watchdog, the Committee on Climate Change.

[5] Department of Transport (2008). Transport Statistics Great Britain 2007, 33rd Edition. The Stationery Office, London

[6] Julie's Bicycle has commissioned a piece of research on touring impacts and opportunities, and will be researching travel to live events (arenas and venues) as the second stage of this project.

[7] Bottrill, C., Boycoff, M., Lye, G. and Liverman, D. (2008). First Step: UK Music Industry Greenhouse Gas Emissions 2007. Environmental Change Institute, Oxford University, Oxford

[8] ibid

Festival Audience Travel

The first part of our study, contained in this report, is focused on festival travel, and in particular greenfield festivals. Audience travel results in two-thirds (c 57,000 t CO_2e) of the festival sector's emissions and a quarter of all music audience travel emissions.

Festival audience travel represents only a small proportion of all UK travel emissions; however, engaging audiences around the environmental impacts of travel choices when attending these iconic events is a first step towards wider adoption of low carbon travel in everyday life.

Music festivals attract audiences from across the country. They are often not on convenient rail or bus networks, which can handle significant numbers. Consequently the car is perceived as the most convenient mode of transport.

Festivals are brief, seasonal events and it is assumed that all aspects – including audience travel – are the promoter's responsibility. But audience travel and the emissions caused by thousands of people travelling to festivals are produced by a complex chain of choices and influencing these choices means addressing a series of obstacles: lack of facilities, lack of demand, lack of audience incentives, local authority restrictions, temporary site structures and resident's impacts. Therefore, if audience travel emissions are to be reduced, a concerted and coordinated effort across the supply chain is required from promoters, ticket distributors, travel operators, local authorities and, importantly, the audience.

The Study of Audience Travel: Attitudes and Behaviours to UK Festivals

In the summer of 2008 fourteen festivals across the United Kingdom and Ireland participated in this study, commissioned by Julie's Bicycle and delivered in partnership with De Montfort University, the Environmental Change Institute, University of Oxford, Festival Republic, Live Nation, Surrey University and a team of volunteers from Bucks New University. All the contributing promoters donated tickets and incentives to the volunteer teams.

The festivals participating in the study are representative of major (more than 60,000 people) and large (between 20,000 to 60,000 people) festivals.

The findings were extrapolated from:

- analysis of car occupancy rates of at least 1,700 cars for 8 festivals

- geo-location analysis of distance travelled by festival goers using ticket mailing locations information from 4 festivals

- festival goer attitudinal survey completed by more than 1,200 people

- coach traveller attitudinal survey completed by more than 1,000 people

- promoter survey completed by 13 festival organisers

Findings

Headline findings of the study are presented below, but for a full presentation of results with an in-depth analysis we recommend you read the full report.

Audience travel behaviour

- Three-quarters of those going to a greenfield or peri-urban (i.e. within reasonable proximity to a city or town) festival travelled by car (72% and 68% respectively). The remaining proportion was fairly split between coach and train travellers.

- The average one-way distance travelled ranged from 70 miles to 140 miles depending on proximity to an urban area. The average car occupancy to festivals was between 2.36 to 2.77 people per car with the average found to be 2.6. Close to two-thirds (60%) of cars travelling to festivals have two or less people travelling in them.

- Half of greenfield and peri-urban festival goers were not aware of the availability of coach (55%) and train (47%) services. In addition, organised car liftshare schemes had the lowest level of awareness (26%).

Audience travel incentives

- The three most popular incentives that festival goers stated would encourage them to car liftshare were: food, drink, music vouchers (58%); preferential camping allocation (43%); and lower car parking rates (34%).

- The three most popular incentives that festival goers stated would encourage them to use public transport were: discount on public transport ticket (60%): food, drink, music vouchers (54%); and preferential camping allocation (32%).

- A large proportion of festival goers (43%) were willing to pay a notional £2 on their festival entrance ticket if the money was used to improve public transport infrastructure. However, a larger proportion (56%) were not willing to pay an additional £2. Festival goers at festivals further away from public transport were more willing to pay the £2 to improve public transport services.

Carbon responsibility for travel emissions

- Festival goers perceive trains (39%) as producing the lowest carbon emissions per person travelling 100 miles, followed by coach (32%) and car with 2 people (12%). Almost a fifth (17%) of respondents did not know which transport mode would produce the lowest carbon emissions. In actuality a coach at full capacity is likely to be the most carbon efficient transport mode, especially for greenfield festivals.

- A third (39%) of festival goers thought that they were most responsible for reducing carbon emissions; a third thought responsibility lay primarily with festival organisers (34%); and the remaining festival goers thought that either transport operators, local authorities or national government were most responsible for festival goers' travel emissions.

- More than half of festival organisers participating in this study have done, or are doing, carbon audits to estimate the GHG emissions resulting from audience travel to their festivals. The information from these audits is intended to inform the development of a transport strategy that would reduce emissions and alleviate traffic congestion for their festivals.

Travel initiatives reducing emissions

- A significant number of festivals are proactive in environmental initiatives and campaigns concerning audience travel, but these initiatives are mainly done on an ad hoc basis; they are not part of a systematic audience travel plan and are not given the prominence needed for high uptake.

- Current incentives that reduce both emissions and congestion include:
  a. combined coach & entrance ticket (with, in some cases, committing a percentage of tickets be sold this way)
  b. car parking charges
  c. no car parking charge for fully occupied cars
  d. shuttle services between festival sites and train stations
  e. promotion of travel options on the websites of festivals and transport operators

f. opportunities to rent camping equipment
g. opportunities to buy beer cases on-site
h. the option to purchase carbon offsets for travel

Barriers to changing audience travel behaviour

- The main barriers festival organisers foresee in getting festival goers to use public transport are:
  a. the comparatively lower cost in many cases of travelling to the festival by car
  b. the perceived lack of convenience, reliability and comfort compared to coming by car
  c. the logistics of bringing camping equipment on public transport
  d. limited ability to make requirements on festival goers because there is no obvious commercial rationale

- Public transport options are often communicated to audiences when they purchase their festival tickets which can be months in advance of when they typically plan their journeys. In addition, people often try to co-ordinate travel with friends so need travel options which allow some flexibility

Suggested effective measures by organisers for reducing travel emissions

- Festival organisers thought the most effective measures for increasing the uptake of public transport to festivals were:
  a. offering a free or subsidised public transport service
  b. promoting more urban based festivals
  c. allocating a proportion of entrance tickets to be combined with public transport tickets
  d. car parking charges and reductions for full cars
  e. offering camping rentals
  f. selling supplies on-site

- Festival organisers also identified the critical issue of who should bear the commercial cost of providing these incentives and how costs can be jointly shared.

Conclusions

The car is likely to continue to remain the predominant mode for audience festival travel due to its perceived convenience and relatively low cost compared to public transport options.

Many festival goers using public transport have positive experiences and are likely to use it again in subsequent years. However, the provision of a high quality public transport service must be maintained in terms of reliability, flexibility, punctuality, organisation (at bus station and festival site) and friendliness of staff to ensure future use and recommendation to friends.

Festival goers are reasonably aware of public transport options available and that these options have a lower emissions profile. However, awareness of public transport options and transports' environmental impacts is not sufficient motivation to change travel behaviour without incentives and disincentives.

Festivals will need to customise travel emissions reduction strategies to fit their audience and locality. Promoters' knowledge of their audience is an essential basis from which to devise and communicate effective travel campaigns.

Promoters are beginning to develop transport strategies to reduce audience travel emissions. But their ability to act will be limited without wider support, in particular from travel operators and local authorities.

Recommendations

1. **Build Partnerships**

- Build focused partnerships between event organisers, travel operators, local authorities and other relevant actors to reduce travel emissions.

2. **Develop Information Resources**

- Better non-commercial travel information and advice presented in an accessible and relevant format, specifically:

i. A web-based information and application tool for festival goers providing clear communication messages about travel choices, carbon impacts and the solutions and support available for reducing emissions.

ii. A web-based information portal for music event organisers and other relevant stakeholders (i.e. travel operators, local authorities, and travel campaign organisations) to provide resources and support to the festival sector, which could extend to other cultural event organisers. The portal should:

- gather existing schemes and indicate the impacts in terms of take up and carbon reduction
- identify audience members to target for further take up
- share good practice with an emphasis on effective ways of shifting audience travel towards low carbon behaviours.

3. **Support Leisure Travel Innovations**

- Extend and develop incentive and disincentive schemes to increase the uptake of public transport services to music events and communicate carbon impact findings to relevant stakeholders.

- Extend and develop existing coach schemes and increase incentives for coach ticket purchasing.

- Support market adoption of innovative low carbon car technology by generating partnerships, for example, with car hire services/manufacturers to provide cars for rental to music and cultural events.

4. **Monitor Audience Travel Emissions**

- Music events should undertake regular audits of audience travel. The Carbon Sink, an energy measurement and benchmarking tool developed by Julie's Bicycle[9], is available to event organisers. It provides a standardised means for calculating audience travel emissions from events.

- Use industry benchmarks to determine performance for audience travel emissions

- Continued research of audience travel to music events. Extend the research of audience travel patterns and attitudes to venue-based music events. In addition, undertake research of the incentives and disincentives that could motivate changes in leisure travel behaviour as well as the best means of communicating low carbon travel options.

5. **Travel Strategies & Communication**

- The development of targeted and context specific strategies to reduce emissions, especially from travel to greenfield sites.

- Low carbon travel options should be set out with the priorities, concerns and interests of festival audiences in mind so as to inspire people to take them up.

- Work with existing public transport providers (National Rail, National Express/Coach Services, Liftshare, and cycling organisations etc.) to create festival and outdoor event specific campaigns, which will appeal to audiences.

6. **Bi-Annual High Level Roundtable for Leisure Travel**

- A bi-annual high level Leisure Travel Roundtable of key event organisers in the cultural sector (e.g. music, sport, National Trust etc.), travel operators, and government (e.g. representative from DCLG, DCMS, DECC, and DfT[10]) to develop joint vision and strategies for transforming to low carbon leisure travel. The roundtable would be the planning forum for the Summit setting the agenda and identifying realistic targets and commitments.

7. **A Bi-Annual Leisure Travel Summit**

- For cultural organisations, travel operators, local authorities, applicable government departments, audience/membership representatives and other stakeholders. The Summit would be one of the means along with the web information portal by which knowledge gets disseminated. The Leisure Travel Roundtable and Summit would be cross-cultural sectors – and the Julie's Bicycle travel working group would be focusing on the specific travel issues of the music industry and feeding into the cross industry travel initiatives.

[9] www.juliesbicycle.com/resources

[10] UK Government Departments of Communities and Local Government; Culture Media and Sport; Energy and Climate Change; and Transport respectively

About the Authors

Catherine Bottrill was the principle researcher of Julie's Bicycle First Step report and contributed to Julie's Bicycle CD Packaging report. She is an expert in music industry carbon management, personal carbon allowances, calculators and labelling. Catherine is currently a post graduate researcher with the RESOLVE group at University of Surrey, which is investigating lifestyles, values and environment.

Stavros Papageorgiou has a Masters in Environmental Management from Oxford University. He now works on the development of carbon markets for Conservation International in Washington DC.

Meegan Jones works seasonally for Festival Republic as Sustainability Co-ordinator for the company's events including Latitude, Reading, Leeds and Glastonbury Festivals. She has just completed a book 'Sustainable Event Management: A Practical Guide' which will be published through Earthscan, released December 2009.

About Julie's Bicycle

Julie's Bicycle is a not-for-profit company helping the music industry cut its greenhouse gas emissions and create a low carbon future. Julie's Bicycle has brought together a broad consensus of support from the music industry to make a difference on climate change.

Research

Bottrill, C., Lye, G., Boycoff, M., and Liverman, D. (2008). First Step: UK Music Industry Greenhouse Gas Emissions 2007. Environmental Change Institute, Oxford University, Oxford

Julie's Bicycle, Arup, Environmental Change Institute and Purchasing for Profit (2009). Impacts and Opportunities: Reducing the Emissions of CD Packaging. Julie's Bicycle, London

Bottrill C., Papageorgiou S., and Jones M. (2009). Jam Packed – Part 1: Audience Travel Emissions from Festivals 2008. Julie's Bicycle, London

Resources

Greater London Authority, Julie's Bicycle (2009). Green Music: Taking Action on Climate Change, Greater London Authority, London.

Industry Green Standards Framework

A set of standards designed to engage, measure, reduce and disclose carbon impacts. Standards are available in CD Packaging, Venues, Festivals & Outdoor Events and Offices.

Successful completion of an Industry Green Standard entitles use of the IG mark.

Carbon Sink Benchmarks

Online energy management measurement tools to benchmark performance against other, similar, operations. Carbon Sink benchmarks are available in Venues, Festivals and Outdoor Events, Touring and Offices. www.juliesbicycle.com/resources