



onboard^oearth

Green Travel & Transport Guide for Events

Moving low carbon travel into
the heart of live events culture

Supported by

TUNED ^{IN} TRAVEL

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About this guide

This fourth-edition guide is for everyone who works in live events, and especially for those who have decision-making capacity or can influence travel and transport plans and behaviour.

The guide provides up-to-date information, best practice and inspiration to empower the live events industry to understand and take action on its greatest carbon impact, travel.



About onboard:earth

onboard:earth is a UK charity, founded in 2015 by festivals and events as a response to the climate crisis, acknowledging the COP21 climate talks in Paris, and acting on research published in The Show Must Go On Report (2015) showing that audience travel accounts for around 80% of a typical UK greenfield event's overall carbon emissions.

Our vision:

Events united in environmental restoration

onboard:earth is a growing community of events, festivals, promoters, suppliers, artists, agencies and music companies, working to create impactful change.

Our mission

is to move low-carbon travel into the heart of live events culture

We provide resources, tools, advice and inspiration to reduce travel emissions. We work with members to invest in ecosystem protection and regeneration, support for communities at the brunt of climate change, and funding for radical and local-scale clean energy.

www.onboard:earth

Get in touch at: hello@onboard.earth



160+ members - a community of live events and music industry companies



£690k raised for environmental restoration



65,880 trees planted to regenerate ecosystems & create livelihoods



14 community- benefit renewable energy projects funded



21,700 acres threatened rainforest protected to sink carbon & preserve biodiversity



620,000 event-goers engaged

“ Collectively, onboard:earth members and their audiences have invested over £690,000 in climate, nature and communities. By 2030, we aim to support events to invest £1m. ”



Acknowledgements

Huge thanks to Tuned in Travel for supporting this edition of the guide.

Tuned in Travel are an innovative and environmentally conscious events travel company offering safe, affordable, and greener travel to festivals and music events. Building on extensive experience in the travel and events industries, Tuned in Travel offer a number of different transport options that save audiences and organisers time, stress and money.

As a company, they are dedicated to reducing the carbon emissions generated by festivals. Travel is an essential component of any festival; however, it contributes significantly to the event's overall carbon footprint. As a result, beyond providing low carbon travel options, Tuned in Travel carbon offset every passenger journey through onboard:earth's verified environmental restoration programmes.

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- **The Centre for Climate Change and Social Transformations (CAST)**, for sharing research from the report, 'From Carbon Footprints to Cultural Influence: Engaging Live Music Audiences on Travel Choices,'

Case Studies:

Thanks to the festival and event industry companies that have provided case studies for this edition of the guide: Tuned in Travel, Big Green Coach, Team Love (Love Saves the Day & Forwards Festival), Boomtown Fair, Shambala, The Ticketsellers, 2000Trees, Ourea Events, The Festival of Thrift, From the Fields (Bluedot and Kendal Calling), Greenbelt, Open Air St Gallen, SNNTG festival and Fire in the Mountain.

Founding Members of onboard:earth include Shambala, Boomtown, Secret Garden Party, and Kendal Calling (From the Fields). We work closely with partners, The Ticketsellers, Isla, Vision: 2025, and The UK Festival Awards. We also gratefully acknowledge the support of our corporate partners; Cube Modular (2022), and Sunbelt Rentals (2023) and Tracsis Events (2024).

1 The Big Picture

In 2019, transport was the largest emitting sector of greenhouse gas (GHG) emissions in the UK, producing 27% of the UK's total emissions. For outdoor live events, audience travel typically represents a much higher proportion - up to 80% of total carbon footprints. Tackling travel is therefore essential if the live events industry is to play its part in preventing climate catastrophe.

Targets set by the Paris Agreement in 2015 and The Department for Transport's 'Decarbonising Britain' plan demonstrate a commitment to decarbonise roads and rail in the UK by 2050. It's clear that there is no plausible path to net zero without major transport emissions reductions. However, significant action is needed now to have any hope of staying within 1.5 degrees global warming, and the progress made to date highlights a considerable 'transition gap'. Emissions have remained the same despite more than 30 years of apparent action.

Governments enforcing more stringent regulations and subsidising new practices would hasten the change. Whilst the festival and events industry cannot take complete responsibility for how people travel to events, or for the nation's transport infrastructure, we have a responsibility to make the changes that are possible; influencing changes in the supply chain and with audiences.



“

The live events industry has its own energy, community, and creativity to innovate new practices, and we can no longer afford to wait for legislation.

”



Transport is essential for putting on live music events. Reducing transport emissions requires a shift in industry approaches, and will involve artists, production teams, travel bookers, suppliers, venues and audiences.

By taking the lead, the industry has the opportunity to influence and inspire millions of fans to step up and engage with the climate crisis - so that more people make individual changes, stay informed, and use their voices to demand that politicians make life on this planet their priority.



The Vision: 2025 Industry Green Survey 2022 on Travel Practices

Around half of the 119 festivals and events that responded reported that they have comprehensive travel services in place, such as shuttle buses, dedicated coaches, and secure cycle parking. Four out of five events are communicating with audiences about travel choices, but only 50% are doing so with crew, and less than 40% with artists or suppliers. Focusing on audiences makes sense, as audience travel makes up the largest share of carbon emissions, but we need to tackle all types of travel.

Event Organiser Priorities 2023

- Energy Use
- Travel & Transport
- Overall Carbon Emissions
- Audience Communications

2 Facing the Music: The Impact of travel

We are facing a climate crisis – a ‘code red for humanity’ as declared by United Nations Secretary-General, António Guterres, in response to the Intergovernmental Panel on Climate Change’s (IPCC) report in August 2021.¹ Due to human activity global greenhouse gas emissions (GHGs) have increased by 70% between 1970 and 2004; meaning we have quite literally changed the chemical composition of our atmosphere.² GHGs prevent the loss of energy back into space, resulting in a warming of the atmosphere, destabilisation of our climate systems, rising sea levels, ocean acidification, heatwaves, droughts and more extreme weather.

Transport emissions significantly contribute to air pollution, and poor air quality is the largest environmental risk to public health in the UK.³ Long-term exposure to air pollution can cause chronic conditions such as cardiovascular and respiratory diseases as well as lung cancer, leading to reduced life expectancy. Air pollution also contributes to thousands of hospital admissions and deaths per year: the UK Health Forum and Imperial College London, in collaboration with and funded by Public Health England (PHE), estimate that a 1 µg/m³ reduction in fine particulate air pollution in England could prevent around 50,900 cases of coronary heart disease, 16,500 strokes, 9,300 cases of asthma and 4,200 lung cancers over an 18-year period.⁴

Whilst air pollution from transport has halved since 1990 due to new technologies and emission controls, the number of vehicles on the road is rising and the corresponding rise in carbon monoxide, nitrogen oxide, benzene, black smoke and fine particle emissions continue to cause serious issues.



1. United Nations press release following The Intergovernmental Panel on Climate Change (IPCC) report in August 2021 <https://www.un.org/sg/en/content/secretary-generals-statement-the-ip-cc-working-group-1-report-the-physical-science-basis-of-the-sixth-assessment>

2. United Nations Highlights of the Fourth IPCC Assessment Report <https://www.un.org/en/chronicle/article/warming-climate-system-unequivocal-high-lights-fourth-ipcc-assessment-report>

3. Defra’s Clean Air Strategy 2018, <https://consult.defra.gov.uk/environmental-quality/clean-air-strategy-consultation/user/uploads/clean-air-strategy-2018-consultation.pdf>

4. UK Government, Health matters: air pollution, November 2018: <https://www.gov.uk/government/publications/health-matters-air-pollution/health-matters-air-pollution>

3 What's the Destination?



We need to aim for “net zero” emissions travel, and achieve at least a 50% reduction in emissions by 2030.

It's important to remember that travelling isn't the problem. It's how we choose to travel that defines our environmental impacts. We've got to kick the carbon habit. This may not be possible overnight in every situation, but there are changes we can all make to travel more responsibly.

What does net zero travel emissions actually mean?

Net zero legislation requires the Government to reduce the UK's net emissions of greenhouse gases by 100%, relative to 1990 levels, by 2050. Net zero means that the UK's total greenhouse gas (GHG) emissions would be equal to or less than the emissions the UK remove from the environment. This can be achieved by a combination of emission reduction and carbon removals.

The Government's 10-point 'green industrial revolution' plan imposes a ban on selling new petrol and diesel cars and vans from 2030. This means that from 2030, you will not be able to buy a new car with a petrol or diesel engine, with all new heavy goods vehicles in the UK needing to be zero-emission by 2040.

However, a transition to EVs alone will not be sufficient. The decarbonisation pathway cannot be all about replacing fossil-fuelled vehicles with electric ones, it also offers an important opportunity to change the way people view mobility, to advance greener technology and change behaviours.



4 Understanding Travel Emissions

Travel and transport is the most significant source of emissions from event production and touring, typically accounting for more than 80% of an outdoor event's carbon footprint in the UK.⁵

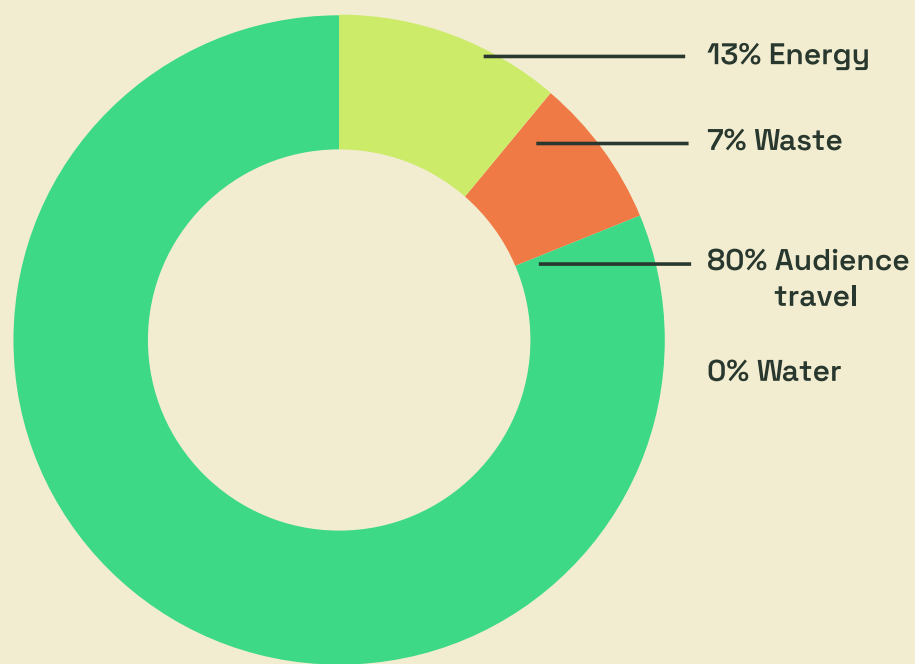
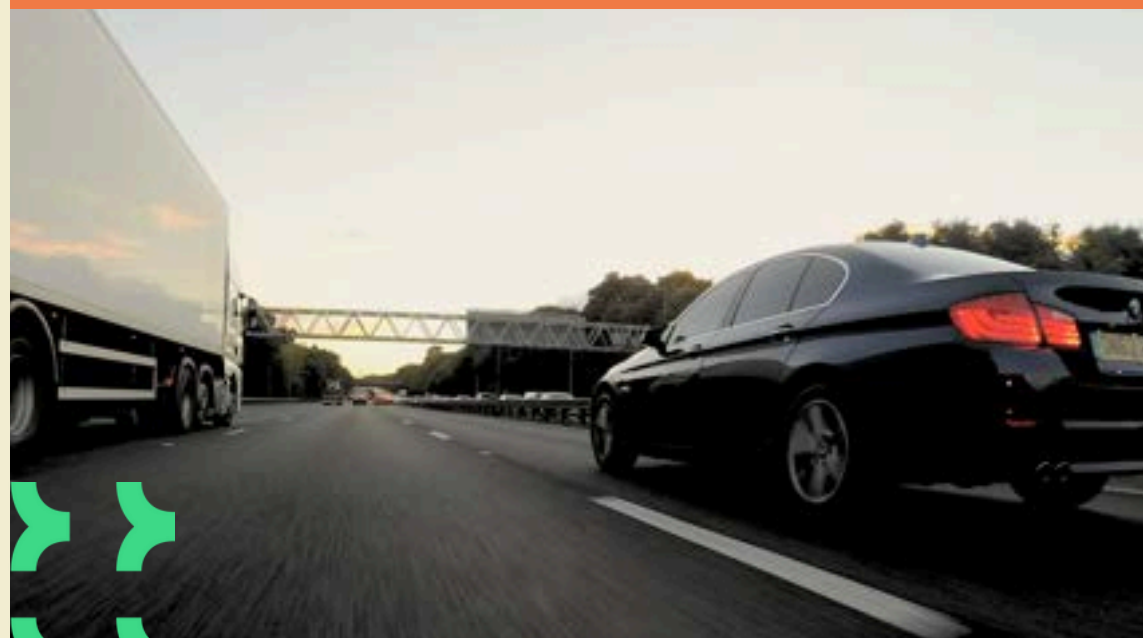


Figure 1. Average Festival Carbon Footprint Breakdown with Audience Travel

It has to be acknowledged that there are currently gaps in industry data on travel emissions. Whilst audience travel is well documented because organisers have access to travel data from sales, less information is available about artist travel, production and supplier transport.

onboard:earth is working with its event members to capture all types of travel data to start to build a more detailed picture of what percentage of a typical events footprint is non-audience travel.

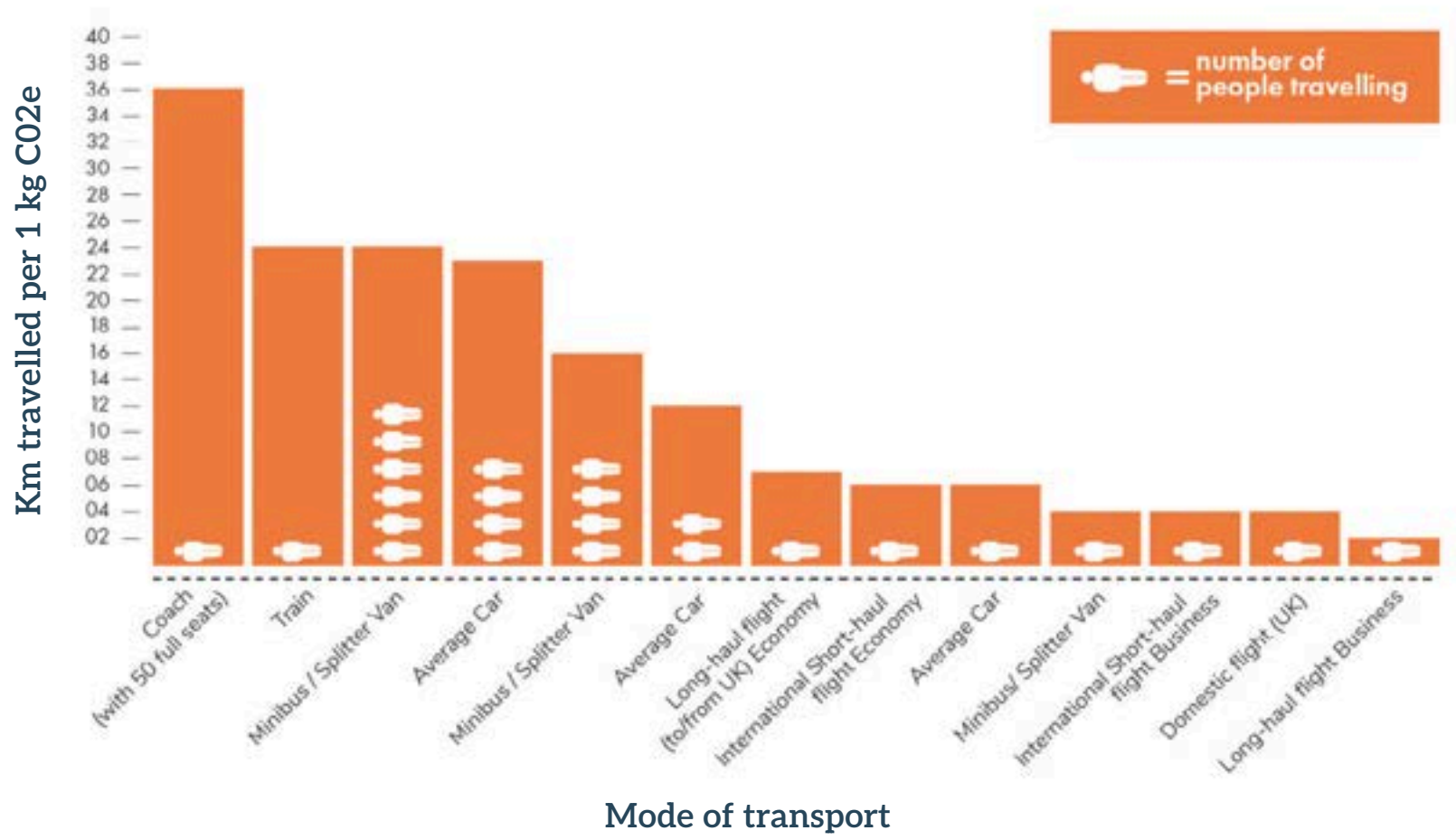


Audience travel

Different modes of transport have different emissions. The table below provides a picture of the different carbon impacts of travel choices.

Understanding the carbon impact of travel choices

The bar chart below shows how many km can be travelled in different vehicles while creating 1kg of CO₂e



A recent report by ACT1.5 and the Tyndall Centre for Climate Change considered the emissions impact of car use at UK festivals compared to train and coach.⁶

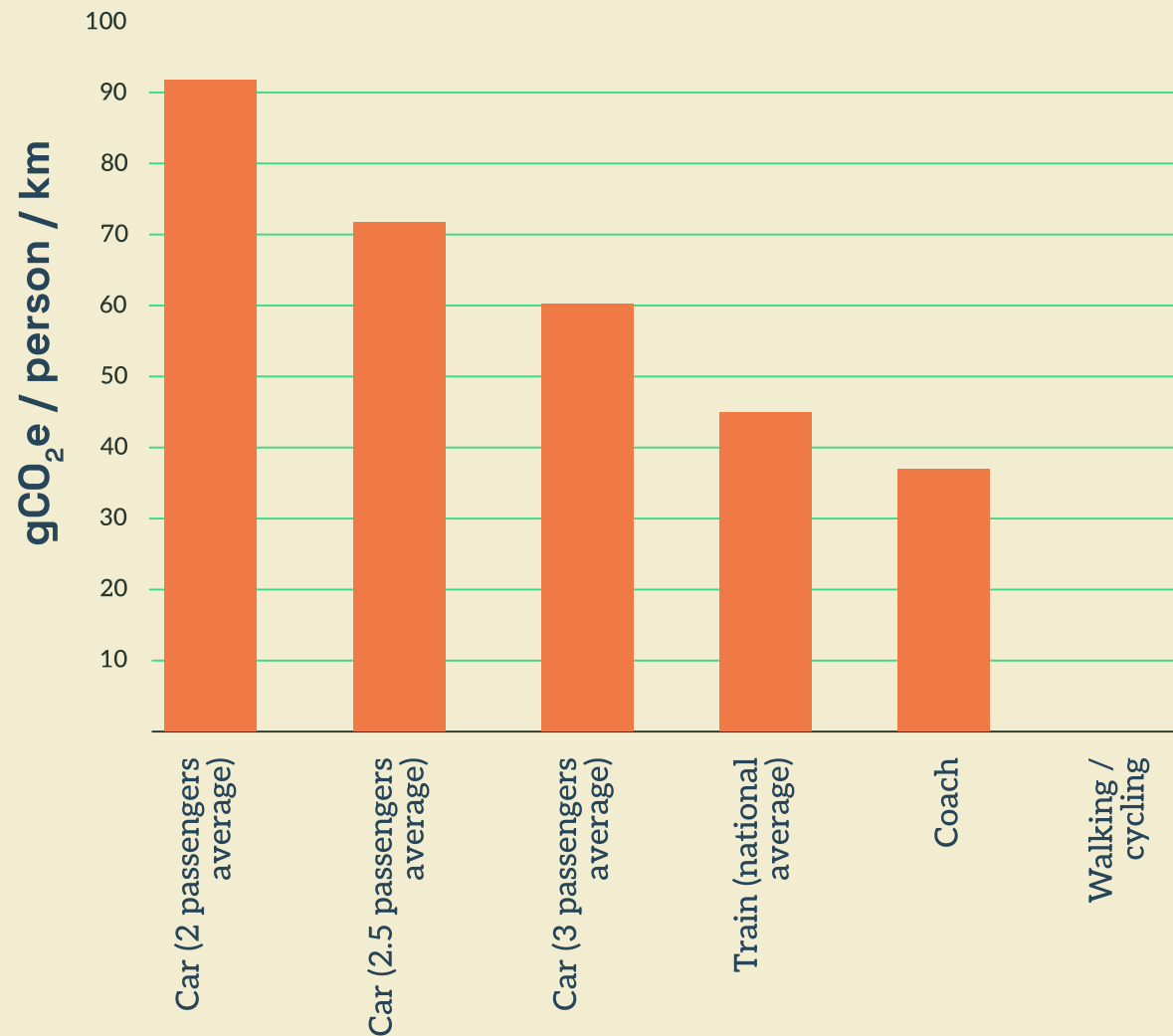


Figure 1: GHG emissions for audience travel per km by mode of travel. Based on UK Government GHG Conversion Factors for Company Reporting, (BEIS and DEFRA 2022)

Reducing car travel at festivals

The ACT1.5 x Tyndall Centre for Climate Change report proposed that reducing car parking by 20% could lower festival audience travel emissions (excluding flights) by 10%.⁷ They recommend that festivals set targets to incrementally reduce car parking use and facilitate alternatives to provide climate benefits in the next few years.

6. Jones, C., Pennington, L., & McLachlan, C. (2023, Feb 28). Car Use, Carbon and Festivals.
 7. Jones, C., Pennington, L., & McLachlan, C. (2023, Feb 28). Car Use, Carbon and Festivals

Air travel

Mile for mile travelling by plane is the most damaging way to travel for the climate, and it's not just the CO₂ pumped out from jet engines that have an impact. Other substances, including water in the form of contrails, as well as soot and nitrous oxides, all trap additional heat at flight altitude. Always look for an alternative means of transport, such as train or coach, before flying. If there is no option but to fly, choose to travel economy, fly direct and select an airline that is trying to reduce their impact on the planet. This is not an endorsement of flying or of any airline, but recognises that some flights produce less carbon than others.



The Jet Zero Council

Formed by the UK Government in 2021 to help meet the Government's 'net zero by 2050' commitment. The council is a partnership between industry and government that brings together senior leaders in aviation, aerospace, and academia to drive the development of new technologies and innovative ways to cut aviation emissions.

Its aim is to deliver zero emission transatlantic flight within a generation. The Council is considering how to:

- Develop and industrialise clean aviation and aerospace technologies
- Establish UK production facilities for SAF and commercialise the industry
- Develop a coordinated approach to the policy and regulatory framework needed to deliver net zero aviation by 2050.⁸

8. The Jet Zero Council Strategy: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1095952/jet-zero-strategy.pdf

Sustainable aviation fuels

Sustainable aviation fuels (SAF) can reduce carbon dioxide emissions by up to 80% over conventional jet fuels.

Airplanes can be fuelled by oil from plants and nuts, forestry and agricultural waste, and gases from steel mills. Already 225,000 passenger flights have flown on a blend of sustainable and conventional fuel from airports in Oslo and Bergen, Norway, Stockholm, Los Angeles, and Brisbane, Australia. In 2018, Boeing and FedEx partnered to fly the first-ever 100% sustainable aviation fuelled flight.

We know that producing sustainable aviation fuel to supply the UK's 'net zero' ambitions is a challenge. It would require around half of UK agricultural land to be used for growing crops for fuel to keep flying at today's levels. While producing sufficient green hydrogen fuel would require 2.4 - 3.4 times the UK's 2020 renewable (wind and solar) electricity generation. When looking at the 'whole interconnected system', this perhaps then isn't the best use of our scarce resources.

Offsetting?

So, what about offsetting? The newly established carbon offsetting scheme for international aviation (CORSIA) agreement reached by the UN body, the International Civil Aviation Organisation (ICAO) now requires airlines to pay to reduce CO2 emissions through qualifying offset projects around the world, capping net CO2 emissions at 2020 levels. It is expected that CORSIA will advocate that airlines maintain the use of SAF, for greater production of fuels, and for hastening the implementation of other technological developments to reduce emissions.



Contractors and suppliers

Moving goods by road consumes about 50% of all global diesel used.⁹ Light commercial vehicles and heavy goods vehicles (HGVs) make up 15% and 5% respectively of travel miles in the UK.¹⁰ Empty load HGV mileage, where a lorry has delivered goods and then returned back empty to base, is estimated at 30% of the total.¹¹ More efficient vehicles and logistics will help, but for road haulage to meet zero carbon climate targets, the future will need to involve a mixture of electric vehicle technology, hydrogen fuel cells, and advanced biofuels - none of which is ready to be deployed at scale.

We can therefore expect that contractor transport will be powered by diesel for much longer than other parts of an events' travel carbon footprint. As a result, our focus should be on reducing the number of contractor vehicle movements and transport mileage.



Sunbelt Rentals

Sunbelt Rentals are committed to lowering carbon emissions and have a target to reduce them at least 35% by 2030. In support of this strategy, they have recently had their Scope 1 & 2 emissions verified by the Carbon Trust against ISO14064-3.

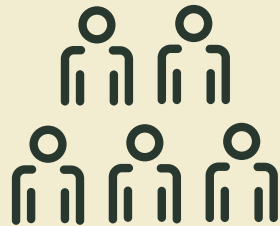
Their strategy includes operating an environmentally responsible transport and logistic fleet and they have invested £30 million into this goal over the last two years. Their current vehicle fleet comprises of 411 HGVs (92% already Euro 6 compliant) and 1,537 LCVs, (89% already Euro 6 compliant).



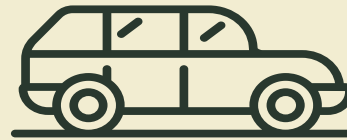
9. Department for Transport 2017
 10. Department for Transport 2018, RFS0125
 11. Research for Vision: 2025 for the Show Must Go On report 2020

5 Taking Action

Travel Impact Indicators



Higher car occupancy



Increased percentage of audiences using shared forms of transport



Reduced production and infrastructure journeys



More people walking and cycling (where possible)



Provision of dedicated coaches and shuttle buses



Fewer plane journeys

When looking at an event's travel carbon footprint, the key elements to measure are the number and type of vehicles, and distance travelled for:

- Audience travel
- Staff & crew travel
- Contractor and supplier deliveries, e.g. Infrastructure, concessions, caterers & traders
- Artists / talent travel
- Onsite vehicles (e.g. plant / hire)

Note: onboard:earth provides free-to-use tools and templates to record travel emissions.

“ 83% of festival-goers expect all of the festivals they attend to tackle their environmental impacts.¹² ”

Why and how to measure all of your travel emissions

Measuring your carbon footprint is an essential part of the journey of understanding and reducing environmental impacts, and it is yet to become the norm – less than half of live events who are actively engaged in sustainability are currently doing so.¹³

We need to measure to establish what our impacts are in the first place, and to judge whether the changes we make for the next event have reduced our emissions. Comparing data sets also helps us to model the merits of different options, ie. travel route one would result in 1tCO₂ and route two, three times that amount etc.

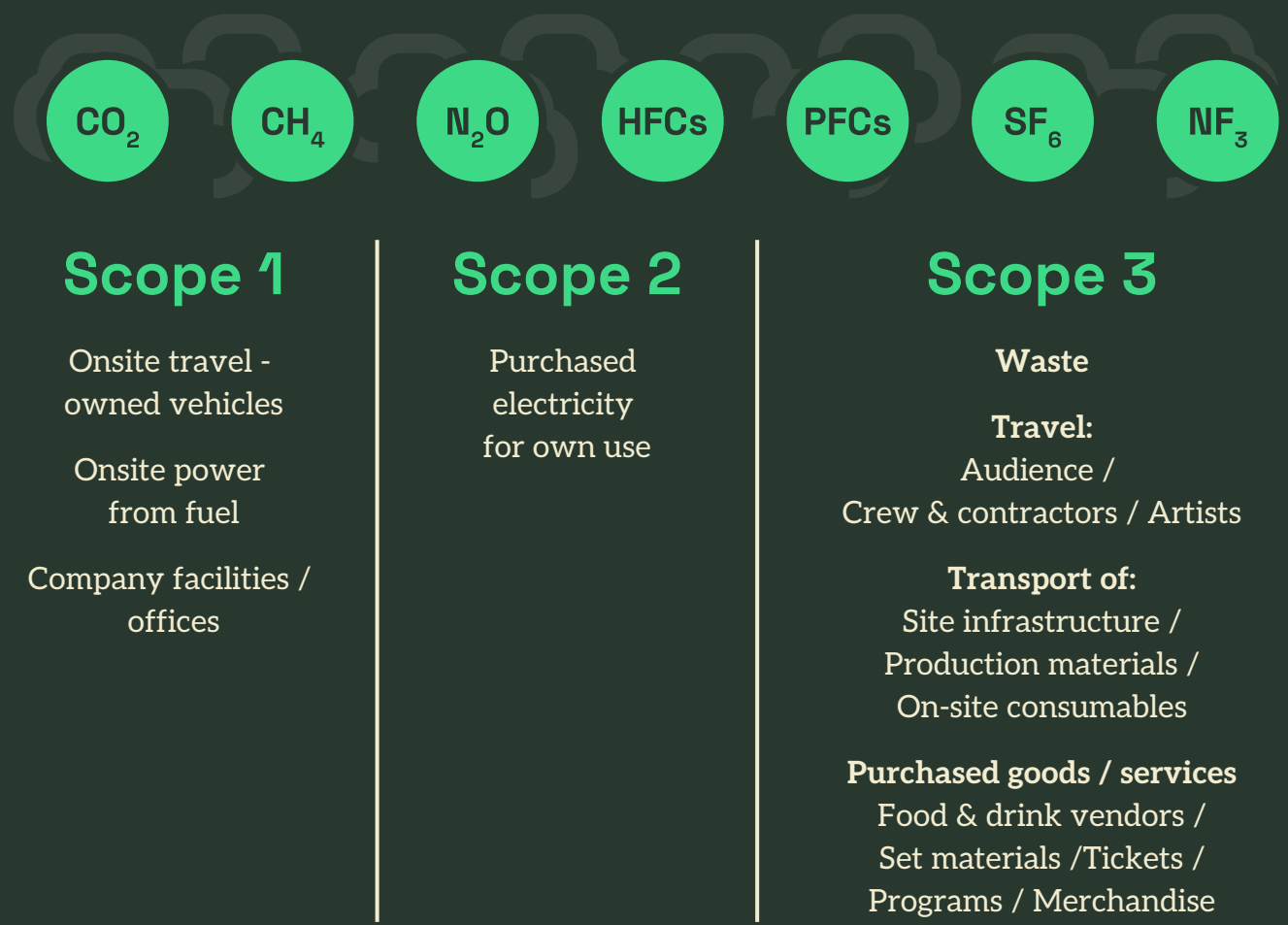
12. Festival audience attitudes to sustainability. CGA (2019) <https://www.cga.co.uk/report-tag/consumerresearch/>

13. Industry Green Survey (2022), Vision:2025: <https://www.vision2025.org.uk/vision-2025-green-industry-survey-results-2022/>

Understanding Carbon Scopes

The Greenhouse Gas (GHG) Protocol for measuring company carbon emissions categorises which carbon impacts a company is responsible for according to their 'scope'. Scope 1 and 2 describe areas of activity that a company can directly control and is responsible for. Scope 3 emissions include activities which are only indirectly influenced by the company.

The diagram below explains this:



The 'Event Industry Scopes' diagram by Vision: 2025, shows how travel impacts at events are categorised by scope according to the GHG protocol.

As a company committed to reducing the transport footprint from your own operations, you need to measure and reduce scope 1 emissions.

Although audience, artist and supplier travel are scope 3, companies have a responsibility to do everything they can to influence reductions in these areas through incentives, strategy and policy - and because audiences expect us to.



Measuring travel

onboard:earth provides tools and guidance specifically for measuring travel emissions: members have access to an offline Travel Log spreadsheet which calculates emissions per vehicle or passenger journey. The Audience Travel Data Tool helps event organisers to record and understand audience journey impacts. The onboard:earth Travel Log App provides another way to measure and record travel, and to model lower carbon routes when you are on the move. Download it from the [App Store](#) or [GooglePlay](#).

onboard:earth's tools use CO2 per vehicle miles figures based on average figures from The Department for Environment, Food & Rural Affairs (DEFRA). They supply information on CO2 per vehicle and passenger-mile/km, which can be used to work out the average emissions created per passenger, or vehicle-mile. These can also be used across Europe, although they are based on UK averages.

For company-owned or hired vehicles, you can go directly to the manufacturer to find out the vehicle's specific CO2 per mile/km emissions.



Are you measuring your overall carbon footprint?

If not, there are free tools that can help you: The Julie's Bicycle Creative Green (CG) Tools provide online, easy-to-use resources to record and understand all aspects of the impacts of your venue, office, tour, production, event or festival. The CG tools support you to measure energy use, water consumption, waste generation and recycling, travel and production materials. You can use the results to report on impacts and to inform your environmental strategy and organisational priorities.



Who should measure?

If the event team doesn't have a dedicated sustainability officer, appoint a Green Champion or team who will be responsible for gathering this data. In addition, ask contractors and partners to measure and report their travel.

What to collect?

Audience travel data:

- How people travelled, e.g. car, coach, plane, public transport type, walking or cycling
- How far they have travelled (km/miles) – including return journeys
- If they travelled in a private vehicle, e.g. car, campervan, how many passengers were there?

If you don't know the exact miles, you can use an average based on the demographic of your audience locations or from a survey of a small number of attendees.



How to collect audience travel data

- You may have postcode data from your ticket agent, which can be used to work out the total and average mileage travelled by your audience. Use [this online tool](#) to work out average travel distance from postcode data.
- Use a survey to find out how your audience travelled; either at the event or as a follow-up online.
- You can ask your crew of volunteers to count how many people arrive by foot, bicycle, train or car.
- If you charge for car parking or provide dedicated coaches, travel data will be available in ticketing information.

Contractors:

Collect information on mileage, vehicle type, and empty load mileage associated with your event from key contractors. You can add a request for this in contracts. **onboard:earth can provide you or contractors with a travel logging template to use.**

Artists:

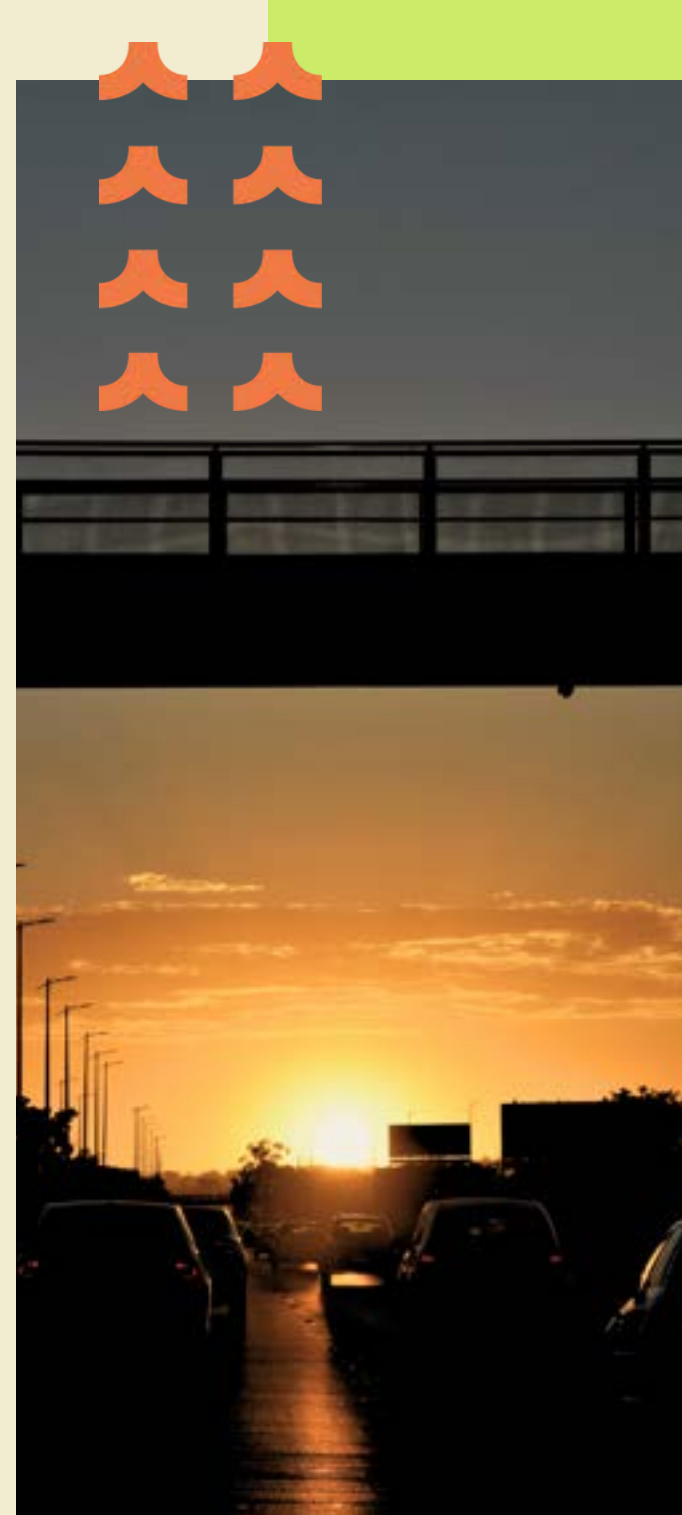
- Collect travel data from agents and artists. For artists doing multiple dates on the same continent, apportion flight impacts accordingly.
- Consider booking artists who are already on tour in your country to save them making a direct flight to your event.
- Collect data when artists arrive onsite, as part of contracts or directly from their travel agent.

Company travel – staff & crew

- Use a travel log to collect mileage or fuel use.
- Make it policy to record all journeys.
- Receipts for fuel can be used to calculate CO₂.
- Your crew accreditation system may allow you to collect postcode data and vehicle passes to work out travel CO₂.

Onsite vehicles / plant:

Keep a record of all vehicles hired for onsite use and the amount of fuel used by each. Consider using electric vehicles or biofuels where possible.



The route to reductions

This section suggests practical ways and tools to reduce travel impacts for event organisers and shares communications tips to engage your stakeholders in the mission.



First steps:

- 1) Measure and understand emissions (scope 1-3)
- 2) Collect audience, supplier and travel data to enable a strategy to reduce emissions. onboard:earth can help you with this



How to work out the average car distance for audience travel

It's really easy, and useful! Simply ask your ticket agent for postcode data for all car park tickets sold and import it into an, 'as the crow flies' distance calculator online, such as www.doogal.co.uk/DrivingDistances

Five easy wins

Here are a few easy wins:

1

Encourage lower carbon audience travel:

Communicate with audiences about options such as dedicated coaches, rail and public transport options (e.g. shuttle buses), car sharing on website and emailers etc.

2

Offer travel & entry packages:

Set aside a percentage of tickets for coach or rail + entry packages. Not all events will be able to do this with their audiences, but it's an easy and decisive way to cut the number of cars.

3

Cut your 'supplier travel miles':

Choose local where possible, or consider making part of your policy. Use companies with an active approach to reducing emissions, for example with an emphasis on combining loads to reduce deliveries.

4

Choose electric vehicles onsite:

Electric buggies and bikes are now widely available, and EV plant (i.e. forklifts and other machinery) is emerging on the market.

5

Provide shared volunteer staff travel options:

If your event has large numbers of volunteers or staff, is there a way to offer coaches or shuttle buses from local transport links?



Incentives and disincentives

The 'carrot and stick' approach is a proven winner for changing behaviours. Understanding how to work with people's underlying values is also a key factor in successful initiative design and communications.

For example, consider putting incentives and disincentives in place to encourage higher car occupancy, e.g. a surcharge on arrival for cars that are not full or an incentive for full cars: priority parking or early entry have both proved successful.



Provide clear information about alternative ways to travel



Provide good information about the environmental impacts of travel



Share festival goers positive experiences of car sharing



Promote fuel-efficient driving



Provide electric car charging



Reducing audience emissions

This table highlights the main goals and suggests proven ways for you to achieve them:

Reduce emissions from cars

- Charge for car and campervan passes. If ticket sales are robust enough increase parking charges to encourage people to share or leave the car at home. Make it clear that driving impacts the environment and (if possible) that the additional parking fees will be ring-fenced for green travel initiatives.
- Promote car-sharing services e.g. GoCarShare or Liftshare.
- Consider incentives or disincentives in place to encourage higher car occupancy, e.g. a surcharge on arrival for cars that are not full, or an incentive for full cars.
- Provide clear information about alternative ways to travel.
- Provide good information about the environmental impacts of travel (see Chapter 4. Understanding Travel Emissions).
- Share festival-goers' positive experiences of car sharing.
- Promote fuel-efficient driving.
- Provide electric car charging.



Dedicated coaches

- Research the best pick up points around the UK for your audience.
- Engage audiences on social media ahead of the event.
- Make the options prominent on ticketing information.*
- Ensure the fares are as cheap as possible.
- Consider ticket deals that include transport.
- Allow for decent baggage allowances.
- Programme fun activities on the coach, e.g. quizzes or music.
- Offer incentives such as free programmes or food vouchers.
- Make it easy, e.g. make the drop-off close to gates.
- Offer early arrival and/or fast-tracked entry, or other incentives.
- Provide dedicated or reserved camping areas, with good facilities for coach travellers.
- Provide barrows and assistance with luggage between drop-off and campsite.
- Communicate the environmental benefits of choosing coaches.
- Consider a service for coach arrivals to advance purchase alcohol or other items.
- Allocate 'activation spaces' onsite for coach providers so that they are easily found and can assist with any questions.

*Dedicated coach companies, Tuned in Travel and Big Green Coach both confirm that uptake of coach travel options increases if the option is provided at point of sale for ticketing.

Encourage cycling

- Provide maps of safe cycle routes on the website.
- Offer guided rides through partners e.g. Red Fox Cycling.
- Encourage people to self-organise cycle groups.
- Provide secure cycle storage at the event, and ensure people are aware of it in advance.
- Consider having a bike mechanic service onsite.
- Offer incentives for people travelling by bike e.g. a free programme or reserved camping.
- Offer a shower on arrival.



Big Green Coach

Big Green Coach are the UK's largest events travel company and official partner to some of the biggest festivals: Download, Isle of Wight, Creamfields, Reading & Leeds, Secret Garden Party and Boardmasters to name a few.

They operate carbon neutral coach services to festivals, gigs and tours, as well as sporting events; and they are the Official Partner to Tottenham Hotspur Football Stadium.

Each year they transport hundreds of thousands of people, and after 12 years of operating, that adds up to more than 1.5 million audience members who have ditched their cars and cut travel carbon by choosing to arrive by Big Green Coach.

Since 2021, Big Green Coach have worked with onboard:earth to carbon offset 100% of their coach travel emissions. They also work with Cool Earth to help preserve the Amazon Rainforest and have protected more than 2 million sq ft, as well as running their own tree planting days in the UK.

Their work with festivals like The Cambridge Club and Boundary sees all customers get a discount on their festival tickets in 2023 if they travel by coach, and at Secret Garden Party, all coach customers get discounts across the festival site as part of a sustainability initiative.

Big Green Coach staff and volunteers are all part of a car share scheme and all volunteers on site eat veggie. Big Green Coach are also actively working with their operators to reduce emissions from coaches; using Biofuels and introducing cleaner engines like Euro 6.

www.biggreencoach.co.uk/



Reducing travel emissions from other stakeholders

Contractors and suppliers

- Encourage procurement managers and bookers to consider minimising transport wherever possible, for example, by combining loads or ordering numbers of units that are transport efficient.
- Ask companies to submit their transport data (e.g. mileage) for your event, or provide them with a system to input their travel information, as part of your overall measurement strategy.
- Engage contractors and suppliers before the event to discuss how transport could be reduced, for example, by being more flexible with delivery times. Check out the **Freight Portal** for guidance on sustainable contractor transport. www.thefreightportal.org
- Choose local contractors and suppliers wherever possible.
- Recent research highlights, that for a medium festival, marquee transportation has the highest transport impact, with portacabins, power, loos and bars as other significant contributors. Prioritise discussing ways to reduce impacts in these areas with these contractors.
- Engage contractors in carbon balancing or 'offsetting' the travel carbon footprint of their services - although the focus always needs to be on reductions first. Carbon balancing could be included in contracts.

Artists

- Encourage artists to consider their travel plans and emissions.
- Work with artists to help them raise their fans awareness of transport impacts and to encourage them to use sustainable transport.
- Collect artist travel data.
- Minimise ground transport by organising shared vehicles and minibuses.
- Consider having a policy of only using EVs for artist liason transport.
- Book local hotels.
- Eliminate exclusion zones or exclusives to allow artists to plan their tours more efficiently.
- Celebrate local artists, give preference to artists able to travel by train, and consider artists travel impacts before booking.
- Request that artists don't use air-conditioning unnecessarily onsite (as it uses a lot of energy).
- Present artists with the opportunity to balance their emissions through onboard:earth's Trees+ programme.
- Consider booking artists who are already touring in your country to save them taking a direct international flight to your event.

Your company

- Keep a record of all staff travel throughout the year (financial administrators can record these when paying travel expenses).
- Use video/conference calling to avoid unnecessary journeys.
- Join the 'Cycle to Work Scheme' to provide tax-free bikes for employees.
- Encourage cycling and walking - consider installing safe bike racks, a shower at work or offering incentives.
- Balance your travel carbon emissions.
- Create a sustainable travel policy and a method of recording all company travel. onboard:earth can help with this when you become a company member.

onboard:earth provide a Travel Action Checklist to help event organisers to plan their approach - download free from the website here:

www.onboard.earth/onboard-earth-travel-action-check-list/

Longer-term solutions

- Consider options for EV charging (for Greenfield events)
- Put in place a longer-term strategy for travel emissions e.g. work with suppliers on longer term reduction strategy
- Work with other events in the area, train companies and local transport providers to explore options.

Communications

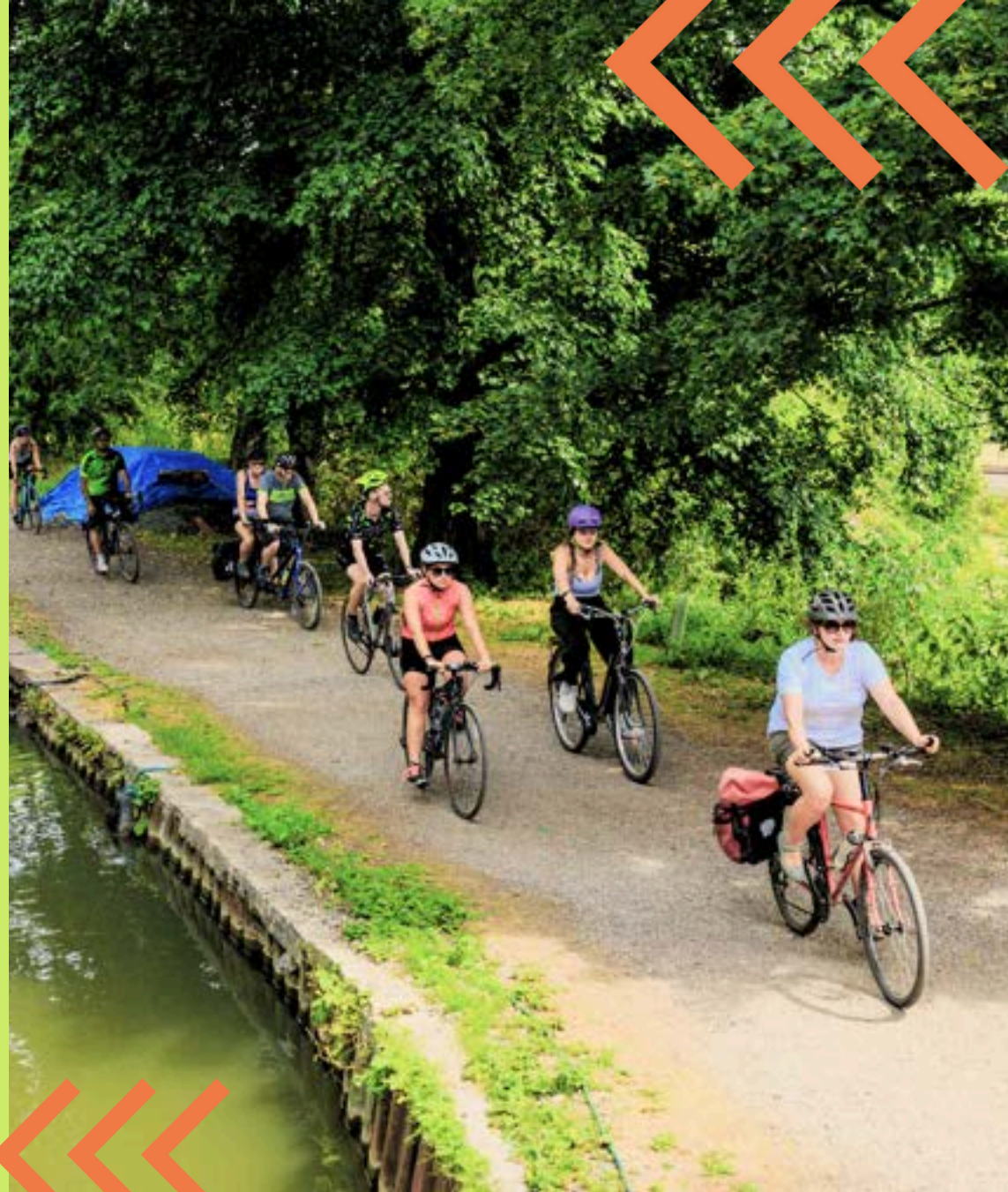
Tips for communicating about sustainable travel

- Set targets for reductions and discuss with suppliers and partners: they are an integral part of achieving your goals.
- Get involved in environmental campaigns such as **Vision: 2025**. Use these communities to engage everyone involved in the event.
- Set up communications at the outset with ticketing options: The best results for encouraging more sustainable travel is at the ticketing stage. This includes; providing options for dedicated coach travel and shuttle buses and links to public transport and car share platforms.
- Discuss the options with your ticketing partner on what can be included in the ticketing process. Catching people at point of purchase helps them to make a decision and plan their journey in advance. Later communications mean users have to go back online and think about changing or adding transport options. The simpler the process the better.
- Provide clear travel information in advance on the website, e.g. a map of the site and the locality with the nearest bus stops and other local transport links clearly marked, e.g. links to bus timetables or shuttle bus options.
- Being specific in communications really helps. Base your messaging on facts about your own event and knowledge of what your audience cares about. For example, 'Our travel carbon footprint is XX tonnes and XX% of people travel by car. We are aiming to reduce our footprint by XX, and if you do XYZ, this will help us get there.'



- Promote sustainable options in communications, e.g. social media posts about car share options and coach tickets.
- Highlight incentives that are on offer for sustainable travel, e.g. prize draws, early entry, VIP passes and priority parking.
- Discuss the issues with sponsors and look into business development options for raising money for travel initiatives such as subsidised buses and discounts for public transport.
- Engage with artists to find out who shares your concerns and would be willing to speak about environmental messages on stage or to travel sustainably as a source of inspiration. Music Declares Emergency provide great resources which support artists to speak out about climate change '**Music Declares Emergency**'.

onboard:earth provides members with suggestions, assets and content to support communications with your audience and stakeholders. We can provide the facts about your travel footprint and the impact of your carbon balancing investments, with updates about the progress of environmental restoration project partners you have supported.



Communication tips for influencing audience travel choices

Research published in 2022, by the Centre for Climate Change and Social Transformations (CAST) made recommendations about how to positively influence the travel choices of live music audiences.¹⁴

It's well worth a read, especially for those involved with communications – see the useful links section at the end of this guide to read



1) Find and amplify human stories that ‘show the change’ rather than focusing on facts and figures

Show examples of real people (audience members) modelling positive choices. What values do your audience have that you can use to frame climate communications for them? Grounding communications in shared values will be more effective than throwing around big numbers: tell a human story.

2) Focus on collective agency and impact

What ‘we’ can do: meaning the combined impact ‘we’ can have, is much more powerful and compelling than the prospect of working alone. Use solutions focused frames so that travel decisions are active/positive choices made by the audience as a like-minded group, not sacrifices or inconveniences made by individuals acting alone: don’t apologise for inviting audiences to be part of positive change. Find creative ways to visualise and communicate the collective impact of behaviour change at scale.

3) Focus on fairness and feasibility

When people perceive a climate policy or a behavioural 'ask' to be fair, they are much more likely to support it. At a time when so many people are facing cost of living challenges, ensuring conversations with audiences around sustainability are seen as fair is crucial. Organisers have a key role using 'carrots' (incentives) or 'sticks' (financial or other penalties), and putting in place infrastructure and audience journeys that make a low carbon option the most obvious and best choice.

4) Audiences can be powerful agents of change

Festivals have an opportunity to ask their audiences to create change with them; to bring about the partnerships with local authorities or public transport providers. Organisers of live music events can also work together with other local events, and through networks and trade associations to call for greater policy support, backed by the combined social, cultural and economic muscle of their collective audiences.



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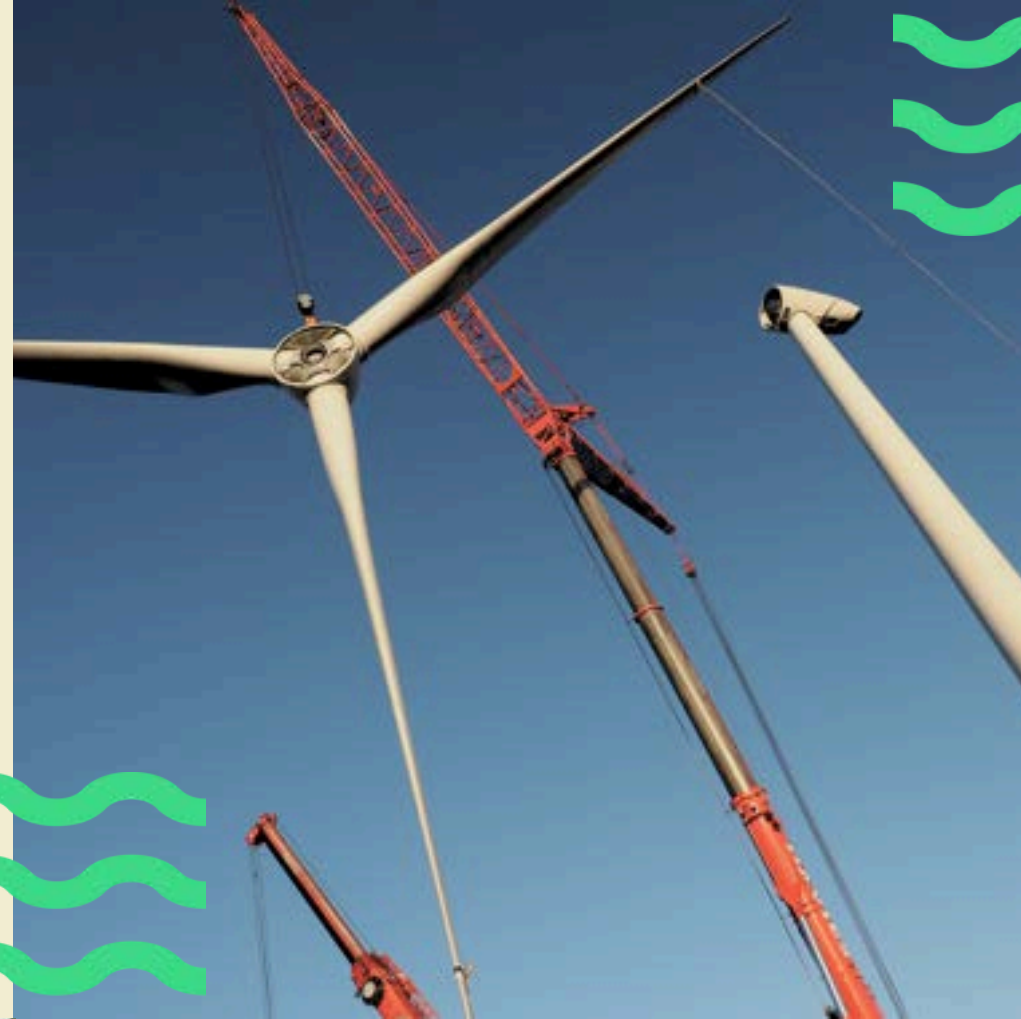
Audience research revealed that there's an appetite for bolder, more ambitious conversations around their travel choices, if approached and framed in the right way.

”

Investing in a regenerative future

onboard:earth supports members to calculate and understand travel-related carbon emissions and take action to reduce these impacts. We offer the option to also invest in climate through environmental restoration programmes to balance unavoidable emissions. We currently have two programmes

- 1) Trees+ invests in forest protection, ecosystem regeneration and support for communities on the frontline of climate change. Through Trees+ we work with three project partners to cover the fundamental pillars of environmental conservation; protection, restoration, and people.
- 2) Energy Revolution invests in community-scale, community-benefit renewable energy generation projects. Our project partners focus on empowering communities to take control of their energy consumption, creating healthier neighbourhoods and on education and reducing reliance on fossil fuels to minimise pollution



Why work with onboard:earth?

onboard:earth are a registered UK Charity with excellent governance standards and industry leaders as trustees. We work with established and inspirational partners, and we undertake in-depth due diligence on behalf of our members and report back on the impact of our investments annually.

We believe that a lack of understanding, or concerns about how offsetting has been done badly, should not prevent anyone from investing in a sustainable future, we are here to support members to take responsible and effective action. For more detail on our approach please see the FAQs section of the [onboard:earth website](#).





Investment case study: Tuned in Travel invest in the future

Tuned In Travel balanced 100% of the carbon emissions from festival-goer travel to and from Shambala Festival in 2022, equating to 76 coaches carrying 3047 people, 576,436 passenger miles and 29,227 vehicle miles!

When creating a passenger transport package. Tuned in Travel used transport operators who are local to the event's location, and used bio-fuel, electric and euro6 compliant vehicles wherever possible. By offering a coach and private hire service and using locally sourced operators, events working in partnership with Tuned in Travel are able to significantly reduce their carbon footprint whilst offering their customers simple, stress free transport options.

6 Inspiration

Boomtown Fair

Boomtown have developed a Green Transport Citizen ticket which allows audiences to arrive by dedicated coach from over 80 locations around the UK. This is incentivised by a discounted entry ticket and free Wednesday entry upgrade. Over the last 6 years they have increased the number of people arriving by coach by 100%.

[Full case study](#)



Team Love

In 2022, Team Love reduced travel emissions by promoting audience shuttle buses to and from their Bristol, inner city festivals: Love Saves the Day and FORWARDS (both capacity, 30,000). In total, they carried 16,055 people from the main train station to the festival sites and balanced 21.69 tonnes of carbon emissions from the shuttles with onboard:earth.

[Full case study](#)

Shambala Festival

In 2022, Shambala, UK (capacity 25,000) took several steps to further its long-term sustainable travel strategy which helped reduce their total carbon footprint by over 80%. They subsidised public transport travel tickets to encourage sales, added a carbon balancing levy to car parking passes and ran 95% of buggies, telehandlers and other plant on sustainable HVO fuel.

Full case study



The Festival of Thrift

In 2021, The Festival of Thrift, UK (capacity 50,000) recorded transport data for all staff, artists, suppliers and contractors to assess their travel carbon footprint and plan reductions. To cut emissions they encouraged cycling with a supervised bike park and free onsite bike repairs; used only electric buggies onsite; introduced a 'green rider' for artists; to help balance audience travel they added a donation to onboard:earth's environmental restoration projects to car parking passes.

Full case study

SNNTG Festival

SNNTG Festival, Germany (capacity 3,000) promotes and incentivises arrival by bus and train and bike. Cyclists are offered safe routes, a luggage shuttle and a bicycle arrival as a celebrated event. There detailed information about public transport and a free shuttle bus from the local train station. To discourage cars they have increased the car parking prices.

Full case study



OpenAir St. Gallen

OpenAir St. Gallen (capacity 27,500) in Switzerland recognises that cost is a barrier to audiences using public transport so subsidise train travel by 50%, through a collaboration with the Swiss national railway company, to make it more affordable.



Fire in the Mountain

Fire in the Mountain (capacity 2,000) have a five-year Sustainable Travel Initiative to reduce travel carbon and they aim to offset unavoidable emissions. The plan includes increased parking charges, free parking and charging for electric vehicles, free minibuses for the crew, and promoting car sharing, cycling and coach travel - with an innovative Coach Ambassador Scheme.

[Full case study](#)

The Ticketsellers

Since 2016, ticket agent, The Ticketsellers has worked with onboard:earth to embed our travel carbon calculator into their ticket-buying process for event clients; allowing events to offer travel carbon balancing to audiences at point of ticketsale. They've helped audiences balance the CO2 from over approximately 3.4 million average car miles through investment in clean renewable energy with onboard:earth.

[Full case study](#)



2000 Trees

2000trees, UK (capacity 10,000) promote public transport arrivals by working with Great Western Railway to offer low cost tickets, and with Big Green Coach to run a shuttle bus from the main train station and a dedicated coach service from key cities. They add £3 donation to car parking passes, 100% of which go to supporting community-benefit renewable energy generation projects with onboard:earth.

[Full case study](#)



Ourea Events

Ourea Events organise five mountain running events across the UK. They calculate employee, participant and contractor travel mileage and record in their annual carbon audit. They actively promote and incentivise lift-sharing and the use of public transport; they provide buses to races where possible, and to return participants to vehicles after races. In 2022, they worked with online entries system provider SiEntries to build a carbon calculator to support participants to offset their travel with onboard:earth.

Full case study



Greenbelt Festival

Greenbelt have a policy of inviting artists with tour dates around the time of the festival to prevent artists flying directly for the event where possible. In 2022, they made shuttle buses from the train station free to encourage public transport use; and they provide a carry service from public transport arrival points to campsites. As a result, public transport users doubled in 2022 to 9%; this, combined with artist transport reductions resulted in a 6% reduction in overall travel CO2.

Full case study

7 Tools and Resources

Here are some of onboard:earth's free tools to help with the process of measuring and reducing emissions, our members can access more resources and event-specific advice.



Travel Carbon Calculator

Anyone can use the calculator to work out their carbon emissions from a single journey or multiple journeys.

[Use the Travel Carbon Calculator](#)

Travel Carbon Calculator App

The onboard:earth app enables you to calculate and analyse emissions from different travel journeys, record journeys and choose to acknowledge unavoidable emissions through onboard:earth's environmental restoration programmes



Offline Tools

onboard:earth has developing tools to support you to measure and report travel emissions. The Audience Travel Reporting Tool, Artists and Supplier Log are found in one spreadsheet through which you can collate all travel data (scopes 1-3), and generate analysis.

email: hello@onboard.earth for more details.

Guiding people to festivals the smart way

Reduce CO2e emissions, enhance community relations, improve visitor experience, increase revenues.



'You. Smart. Thing.' is working with independent festivals, festival owning groups and sustainability experts to ensure the environmental impact of audience travel is effectively monitored and minimised.

Travel is the single largest source of carbon emissions from festivals. On average, over 75% of emissions generated by festivals are a direct result of audience travel.

Carbon balancing schemes can go some way to mitigating the environmental impact of audience travel but offering smarter routing is the key to incentivising behavior change.

'You. Smart. Thing.' gives festivals an integrated travel planning service that they have complete control of. Personal travel plans and tailored low-carbon routes, to cycle hubs, charge points, shuttle bus options or a lift share to drop-off and pick-up points, minimise an event's carbon footprint whilst maximising visitor experience.



Enhanced Wayfinding

We enable festivals to offer the lowest carbon transport options from anywhere in the world. With online site plans including navigable access points we deliver bespoke last-mile routing & enhanced on-site wayfinding, ensuring equality, diversity, and inclusion, with interactive content and sponsorship options alongside highly personalised travel planning for every visitor.



Audience Analytics

We reveal when, where, and how people travel, and what route they are taking - key data for targeted marketing. We forecast audience travel impact supporting environmental and commercial targets. For example, tailoring park & ride and micro-mobility options to alleviate stress on access routes and car park capacity generates revenue whilst improving air quality and visitor flow.



Multi-Modal Travel Plans

With 'You. Smart. Thing.' festivals can easily configure and augment walking, cycling, public transport, multi-modal, drop off/pick up, shuttle bus, dedicated or nearby parking and micromobility options. Organizers can even offer door-to-door travel plans with integrated flight or ferry options for international visitors, and timed AAA routing for artists, stage crews, and suppliers.

Nothing to Download or Install

Easily embedded within web, mobile, ticket booking and customer relationship management systems, 'You. Smart. Thing.' adds tailored routes and an additional tailored personalisation layer to the festival experience. This enables festival organisers to capture and maintain the visitor relationship, at the point of consideration, booking confirmation, and en-route, rather than handing audiences over to third-party services which aren't configured to optimise last-mile routes, low-carbon options, and event specific travel information.

Book an
online demo



8 The Road Ahead: Trends and Policy Landscape



The transition to electric vehicles is underway

The UK Government's 10-point 'green industrial revolution' plan imposes a ban on selling new petrol and diesel cars and vans from 2030. This means that from 2030, you will not be able to buy a new car with a petrol or diesel engine, with all new heavy goods vehicles in the UK needed to set zero-emission by 2040.

The transition to EVs, is still very much dependent on significant improvements in charging infrastructure. There are currently around 14,000 residential charge points and 9,000 in business car parks across the UK, but we will need significantly more to give users and businesses confidence.

The government has pledged significant grants for homeowners, businesses, local authorities and across motorways to install ultrafast charging nationwide.

Prepare for increased road charging

The Treasury anticipates a £35 billion hole in the budget as a result of lower fuel duty and vehicle excise duty (VED) due to an electrified road fleet. It is likely this is the nudge to national road charging.

Improved rail freight and transport is coming

Plans to overhaul the UK railways under a new overarching public body offer a real opportunity for improved infrastructure, digital transformation, better passenger services and environmental performance. Great British Rail (GBR), currently being established and expected to be in delivery in 2024 is the biggest shake up in the railway for decades. Priority areas for GBR include an end to complex and confusing array of overpriced tickets and capturing the opportunity of rail freight.



Road freight will transition to new technologies

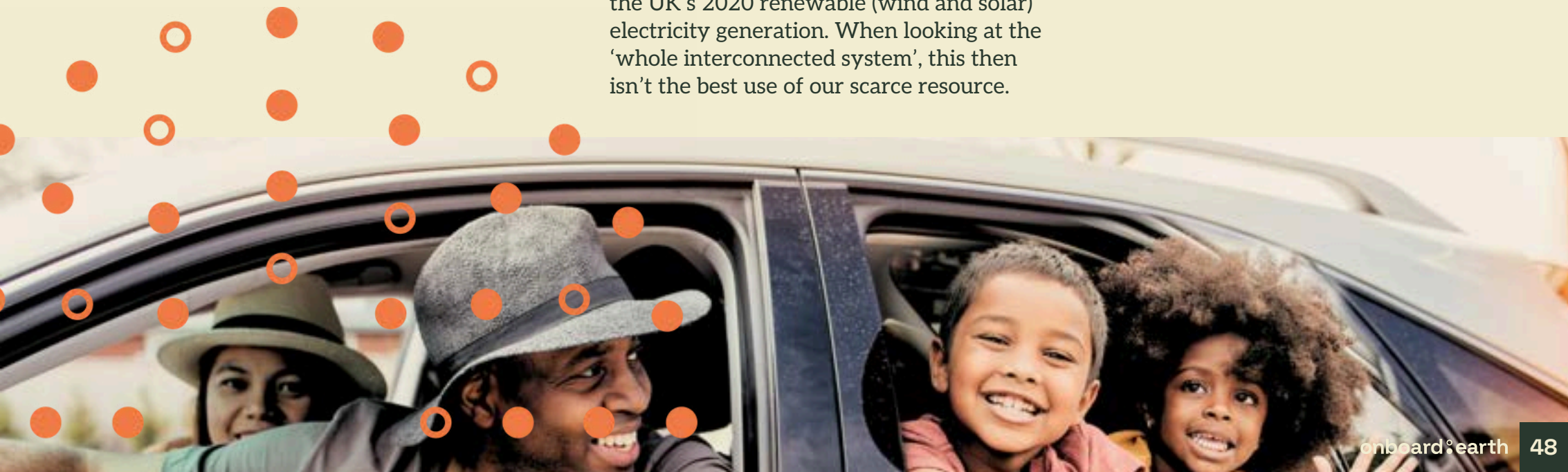
Technological advances are expected to continue to play a significant role. The solutions include immediate action through the increased use of existing technology, such as battery-electric technology for the shorter-range, lighter vehicles used in cities. Also in the short term, the solutions include greater adoption of lowercarbon fuels such as biofuels, liquefied natural gas (LNG) and bio-LNG. Longer term, they include hydrogen as a fuel for heavier trucks that travel further with greater loads.

The aviation industry is facing a real challenge of reducing its carbon emissions

Sustainable aviation fuels (SAF) can reduce carbon dioxide emissions by up to 80% over conventional jet fuels. Airplanes can be fuelled by oil from plants and nuts, forestry and agricultural waste, and gases from steel mills. Already 225,000 passenger flights have flown on a blend of sustainable and conventional fuel globally. However, we know that producing sustainable aviation fuel at scale globally, and to support the UK's 'net zero' ambitions is a challenge. It would require around half of UK agricultural land to keep flying at today's levels. While producing sufficient green hydrogen fuel would require 2.4 - 3.4 times the UK's 2020 renewable (wind and solar) electricity generation. When looking at the 'whole interconnected system', this then isn't the best use of our scarce resource.

Younger people are driving less

The general trend is for lower car use by people in the 17-29 years old demographic block. In the latest comprehensive study of driving trends (in 2018) only 29% of 17-20-year-olds and 63% of 21-29-year-olds held driving licences, down from 48% and 75% respectively for these age groups in the 1990s. The benefits of embracing new models of audience access to live music may therefore extend beyond climate change and air quality.





So, what does all this mean for the events industry?

Change is coming in the transport sector; it will take time, and in many areas the pace of change does not meet the urgent need to reduce emissions to meet 1.5 degree target. There are a number of changes that have relevance to our planning and operations:

- There are signs of an increasing willingness from UK rail companies to work with festivals on travel options to events, which for some events may provide new options for travel and packages.
- The increase in EVs leads to a need/good case to provide EV charging at events.
- As Sustainable Aviation Fuels become more common, events can make a choice to only take flights that use SAF.
- Tools are now available to help plan lower carbon European journeys, such as You.Smart. Thing (see feature on page 46 of this guide).
- Some festivals may be able to do more to integrate travel with ticket purchase to change behaviour.

With new technologies emerging we can be more aware of what questions to ask suppliers about their transport strategy for the future i.e. are they planning for EVs or actively reducing miles travelled for lower emissions deliveries.

9 Join the onboard:earth community

It's free to become an event member with onboard:earth. You'll take your place in a community of over **150 festival and event** organisers, suppliers, artists and music companies, all taking action to reduce and mitigate the environmental impacts of the event industry, safeguarding the future of live events, and having a positive impact on event-goers and the planet. Join us to:

- Demonstrate that your company is climate responsible and that you are addressing your most significant impact – travel.
- Engage your audience in a positive narrative and action on climate change.
- Be part of an industry-wide community that's making real positive change by investing in climate change solutions.
- Feature in our campaigns alongside some of the live event industry's pioneers.



As a member onboard:earth supports you to:

- Measure and understand the total carbon emissions from your audiences' travel.
- Make a plan to engage audiences and stakeholders in initiatives to reduce travel emissions year on year.
- Offer carbon balancing options to audiences with a donation to raise funds for our trusted environmental restoration partners.

10 Useful links

Learning Resources

Future Festival Tools eLearning course:

<https://www.futurefestivaltools.eu>

Climate EQ - Carbon Literacy Training courses:

<https://climate-eq.co.uk>

Reports

[From carbon footprints to cultural influence: Engaging live music audiences on travel choices](#)
(Centre for Social Transformation)

[Super Low Carbon Music report](#)
(Massive Attack x Tyndall Centre for Climate Change)

[Car Use, Carbon and Festivals](#)
(ACT1.5 x Tyndall Centre for Climate Change)

You can find all of these reports (and more) on the [Vision: 2025 Resources Hub](#).

Tools

Carbon Footprint Tool: Julie's Bicycle's Creative Green Tools:
<https://juliesbicycle.com/our-work/creative-green/creative-greentools/>

onboard:earth online Travel Carbon Calculator:
<https://onboard:earth/travel-carboncalculator/>

You.Smart.Thing Travel demand management platform for destinations, venues, and events:
<https://yousmarththing.com>

Online tool to work out average travel distance from postcode data:
<https://www.doogal.co.uk/DrivingDistances>

