



FUTURE YARD

SUSTAINABILITY ROADMAP

**A grassroots music venue's journey
to a carbon neutral future**

PREFACE

Future Yard was established to reimagine the role of a live music venue, to find new ways of bringing about profound social and cultural change in Birkenhead, utilising the power of music to bring about these changes. Through our training programmes, artist development work, community activities and inclusive programming, we've started along this road. But, if we are to achieve true change, we must tackle the great challenge of our times: the climate emergency.

Our venue is run by Future Yard CIC (Community Interest Company) – a non-profit focused on delivering Future Yard's vision. We operate on a 'triple bottom line', judging success across our social and environmental impact, as well as financial. At the outset, we committed to embracing the challenge of operating as sustainably as possible and set the long-term goal of becoming the first carbon-neutral grassroots music venue in the region and one of the first in the UK.

We have been working in partnership with Liverpool John Moores University's Low Carbon Eco-Innovatory to shape the long-term design of our building, understand our energy consumption and develop a range of policies to ensure we operate as sustainably as possible.

The live music industry has an acute sustainability problem. We are committed to ensuring that we create a place that has a net positive environmental impact, one that fundamentally takes carbon out of the atmosphere and plastic out of our oceans, not one that adds to the problem.

This roadmap sets the course for our sustainability journey. Each year we will track our progress against it and seek to improve as we go. I would like to thank Nathalie, Ariel, Simon, Nick and Cameron for their passion and dedication in bringing it to fruition.

The future is (a green) Birkenhead.

Craig G Pennington
(Future Yard Co-Founder)

WE ARE
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IMPACT

FUTURE YARD

Future Yard is a new multi-use venue space situated on Argyle Street, in the heart of Birkenhead. Opened in 2020 on the site of a former nightclub, the three-floor building comprises a 300-capacity music venue, bar/coffee shop and kitchen on the ground floor, with artist rehearsal studios in the basement. An adjoining outdoor garden space at ground floor level has a further performance area, a bar and DJ booth, with the majority given over to outdoor seating. The first floor space is due to be developed as part of a major phase of work in 2022/23, adding further artist studios, office/workshop space and facilities for the local community.

The building's location in the town and the wider Liverpool City Region is key. Future Yard is the only touring live music venue in Birkenhead, a town with a population of 90,000 that was once well served by venues and theatres. We have good public transport links – there are three train stations, two bus stations and the cross-river ferry service nearby – meaning Future Yard is accessible to people right across Wirral and also Liverpool and Chester.



LOW CARBON ECO-INNOVATORY

Low Carbon Eco-Innovatory is a unique partnership between Liverpool John Moores University, University of Liverpool and Lancaster University, and is part-funded through the European Regional Development Fund (ERDF).

LCEI creates innovative low carbon goods, processes and services, developed through collaborative partnerships between local companies in the Liverpool City Region. LCEI works with organisations to identify opportunities for low carbon development which will ultimately bring about economic and environmental benefits to businesses and the wider community.



SHIFT LIVERPOOL AND MUSIC DECLARES EMERGENCY

Future Yard has pledged its commitment to sustainability and limiting the impacts on the environment to both Shift Liverpool and Music Declares Emergency.

Shift Liverpool is a sustainability network for cultural organisations in the Liverpool City Region, that brings them together to collaboratively respond to the challenges of the changing climate and the regional and national goals of becoming carbon neutral.

Music Declares Emergency is a collective of artists, music industry professionals and organisations that stand together to declare an ecological emergency and call for immediate governmental response to protect all life on this planet. They believe in the power of music to promote the cultural change needed to create a better future.



INTRODUCTION

Welcome to Future Yard CIC's Sustainability Roadmap. Through this document we would like to share how we, as a grassroots music venue, try to limit our negative impact on the environment, and how we will implement action for positive impacts instead.

There are entire books written about the history of climate change and what exactly is happening to the planet. This couldn't possibly be summarised in an introduction, but here are a few key ideas to get us started.

Over the years, the earth has gone through different climates. The past 11,500 years have been very stable, but in the last century a lot of change has been noticed. Scientists have linked this change to the increasing use of fossil fuels and the industrial revolution. So, what is wrong with fossil fuels?

Coal, natural gas and petroleum are a few examples of fossil fuels. They are hydrocarbon-containing materials that have formed under the surface of the earth from the remains of flora and fauna. Humans extract these through ways which in themselves are harmful to the environment, such as fracking and oil drilling. After that, fossil fuels are used for many different purposes. If you burn them, they release energy, for example to heat water in a gas boiler or to make the engine of a vehicle run. The burning of fossil fuels releases carbon dioxide into the atmosphere. This then gives a greenhouse

effect – hence the term 'greenhouse gases'. This means that the atmosphere retains more heat than it should, therefore heating up the earth and causing climate change.

Some might ask: 'What's wrong with a temperature rise? I quite like warmer climates.' Well, the planet contains many ecosystems depending on location and climate. Certain plants and animals live in certain places because of their circumstances. If those are disrupted, it changes everything. Water expands when it gets warmer, which causes the sea level to rise. As certain habitats change, it's more difficult for the species living in them to survive. Think of polar bears on melting ice caps.

Another greenhouse gas is methane. It accounts for around 16% of the greenhouse gases in the atmosphere, but it is 25 times stronger than carbon dioxide. A large part of this gas being released comes from animal agriculture. This gas forms in the stomachs of cattle, sheep and deer during digestion and is released through belching... yes, burps. This is not animal agriculture's only contribution to climate change. Another big one is that we are running out of land for agriculture, due



“I WANT YOU TO
ACT AS IF THE
HOUSE IS ON FIRE”

Greta Thunberg

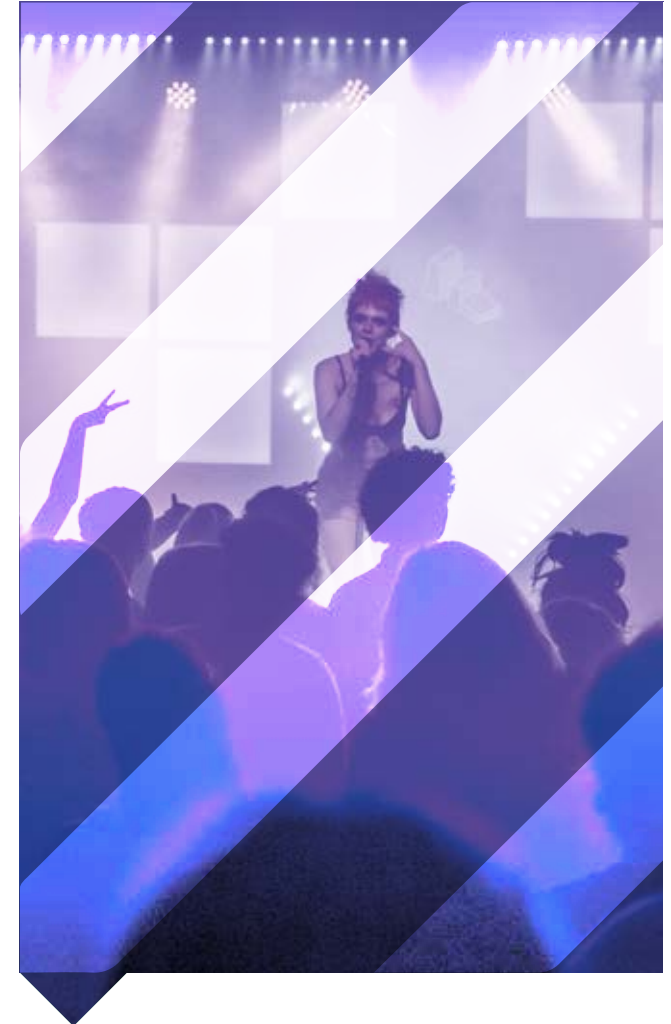
to the growth of the population and the need for more living and growing space. To make space for agriculture, forests are being cut down. This is bad, because trees actually absorb and store carbon from the atmosphere.

So, we don't want to cut down any more forests or trees to make space for agriculture; why is animal agriculture specifically being targeted? Well, to raise the animals that are used for the meat and dairy industries, you don't just need the land that the animals live on. You also need the land for growing the crops to feed the animals. And the average farm animal converts just 10% of the calories it eats into dairy and meat foods. This means that for every serving of a meat or dairy product, there could have been multiple servings of plant-based products, as the land could have been used far more efficiently.

Another factor to point out is the wellness of the oceans, which are also a big carbon sink. Carbon is filtered down from the surface and stored in the deep sea. Ocean plants like seagrass also absorb and store carbon. However, there are many factors that are disrupting the ecosystems in the oceans: the heating of the planet is causing ocean temperatures to rise, which is harming coral reefs; the extensive fishing industry is destroying ecosystems through bottom trawling, plastic pollution by discarding fishnets, and pushing both fish and mammal species to the brink of extinction through overfishing and bycatch.

What all of these problems have in common is that they are human-made. We started this, now we need to stop this. We want to stress that we are in a CLIMATE CRISIS – and like Greta Thunberg said, “I want you to act as if the house is on fire”. We are already seeing devastating effects of climate change – it is not something of the future. Look at the recent floods in the Netherlands, Belgium and Germany, the constant record breaking temperatures, epidemics linked to animal agriculture, people dying from air pollution. The list goes on. It's not something we are solving for future generations, it's something we need to solve for us, now.

Nathalie Candel
(Future Yard Sustainability Manager)



WHAT IS SUSTAINABILITY AND LIVE MUSIC'S UNIQUE CHALLENGE?

Sustainability is a broad term that can mean different things to different people depending on where you live, your sphere of influence and your own personal circumstances. Here is one useful definition: sustainability is “meeting the needs of the present without compromising the ability of future generations to meet their own needs”. This is helpful as it shows us that there is no one solution, rather that we need to be conscious of our actions today and appreciate our own individual circumstances and how this may affect future generations.

Traditionally, sustainability has been described as balancing three core pillars: economic, environmental and social. There is a tendency to focus on the environment when we discuss sustainability, but acknowledging our economic, social and cultural impact is just as important.

So, what does this mean for us at Future Yard?

Firstly, we appreciate that operating our venue has an environmental impact, from powering the lights and PA systems to serving food from our kitchen. All of these activities create carbon emissions which have a negative impact on the environment. However, as a CIC, we are generating these carbon emissions with a purpose: we are promoting the incredible life-changing power

of music; we are showcasing young and local artists; we are providing music industry training and skills to local young people; we are mentoring local artists to grow their careers; we are employing a large team of music enthusiasts, and investing in a vibrant future in Birkenhead.

At Future Yard we are doing our best to limit and reduce our carbon emissions where possible, with the long-term commitment to become the region's first carbon neutral grassroots music venue.

We have partnered with the Low Carbon Eco-Innovatory at Liverpool John Moores University (LJMU) to calculate carbon emissions from all of our activities and have developed this bespoke Sustainability Roadmap to ensure that we operate in an environmentally friendly, socially responsible and economically sustainable way.

The live music sector also brings a few unusual carbon challenges that other industries might not have to deal with on a day-to-day basis. It takes a lot of electricity to power a live show, including the sound system and lighting, and sometimes also projections or video. During a show, lots of audience members will buy drinks and food, that each are packaged in a certain way and have travelled some distance to be sold from the bar. As a music venue, both the performing artists as well as fans can travel considerable distances to get to us for a show. Please read on to find out what our carbon footprint consists of and what we are doing to reduce it.

Sustainability is

“MEETING THE NEEDS OF THE PRESENT WITHOUT COMPROMISING THE ABILITY OF FUTURE GENERATIONS TO MEET THEIR OWN NEEDS”

CARBON EMISSIONS AND SCOPE 1, 2 AND 3

At the heart of the decarbonisation effort to combat climate change is the need to efficiently measure and track greenhouse gas (GHG) and carbon emissions. Carbon emissions and greenhouse gases can be measured by recording emissions at source, by continuous emissions monitoring or by estimating the amount emitted using activity data and applying relevant conversion factors.

Carbon emissions are a core facet of managing any organisation's environmental impact and, depending on where these emissions originate from, can be grouped into three different categories or scopes:

SCOPE 1 EMISSIONS

Direct emissions from company-owned and controlled resources. In other words, emissions are released into the atmosphere as a direct result of a set of activities, at an organisational level.

SCOPE 2 EMISSIONS

Indirect emissions from the generation of purchased energy, from a utility provider. In other words, all GHG emissions released in the atmosphere, from the consumption of purchased electricity, steam, heat and cooling.

SCOPE 3 EMISSIONS

All indirect emissions that have not been included in Scope 2, that occur in the value chain of the reporting company, including both upstream (materials from suppliers to make a product) and downstream (products distributed or sold).

CO₂e, or carbon dioxide equivalent, is a standard unit for measuring carbon footprints and carbon assessments. It is a metric measure used to compare the emissions from various greenhouse gases on the basis of their global-warming potential (GWP), by converting amounts of other gases to the equivalent amount of carbon dioxide with the same global warming potential.

In a 12-month period, our

SCOPE 1 EMISSIONS

account for approximately

8.1 TONNES CO₂e

This is the

EQUIVALENT

in greenhouse gases to

900 GALLONS OF PETROL

consumed.

SCOPE 1: DIRECT EMISSIONS

The Scope 1 emissions are direct emissions from resources that we own and control.

These are emissions that are released into the atmosphere. In simple terms, the Scope 1 emissions account for all the gas that we burn directly through our gas boiler and gas kitchen appliances. In the venue, we use gas for heating our spaces, hot water in the kitchen and for cleaning, and for preparing our food menu.

In a 12-month period, our Scope 1 emissions account for approximately 8.1 tonnes CO₂e. This is the equivalent in greenhouse gases to 900 gallons of petrol consumed. This amount comes out as 3% of Future Yard's total carbon footprint. Our gas supplier offsets their gas supply, and therefore claims that it is carbon-neutral. This is preferable over a gas supplier that does not offset their supply, because this means they are removing carbon from the atmosphere elsewhere to compensate for the carbon they are putting into it.

Future Yard was advised on Scope 1 emissions reduction by simulation methodology carried out by the Low Carbon Eco-Innovatory at LJMU. This consists of modelling that explores the ways of reducing the heating loads within the venue. The building and various refurbishment options were modelled in 2021 using Integrated Environmental Solutions (IES) dynamic thermal simulation software. This thoroughly simulates heat flows in the venue throughout the seasons based on a specific location and climate, as well as the building's materials and construction, the mechanical systems

fitted, and its occupancy and operation. Different options for altering the building were then explored.

Based on recommendations by the team at LJMU, we have been reducing the emissions from Scope 1 by efficiently managing the use of gas in the venue in the following ways:

- Extensive insulation was added into the floors, walls and ceilings of the venue to better retain heat.
- A new venue front was fitted with double-glazing.
- We only use hot water when necessary.
- Only rooms that are in use are heated.

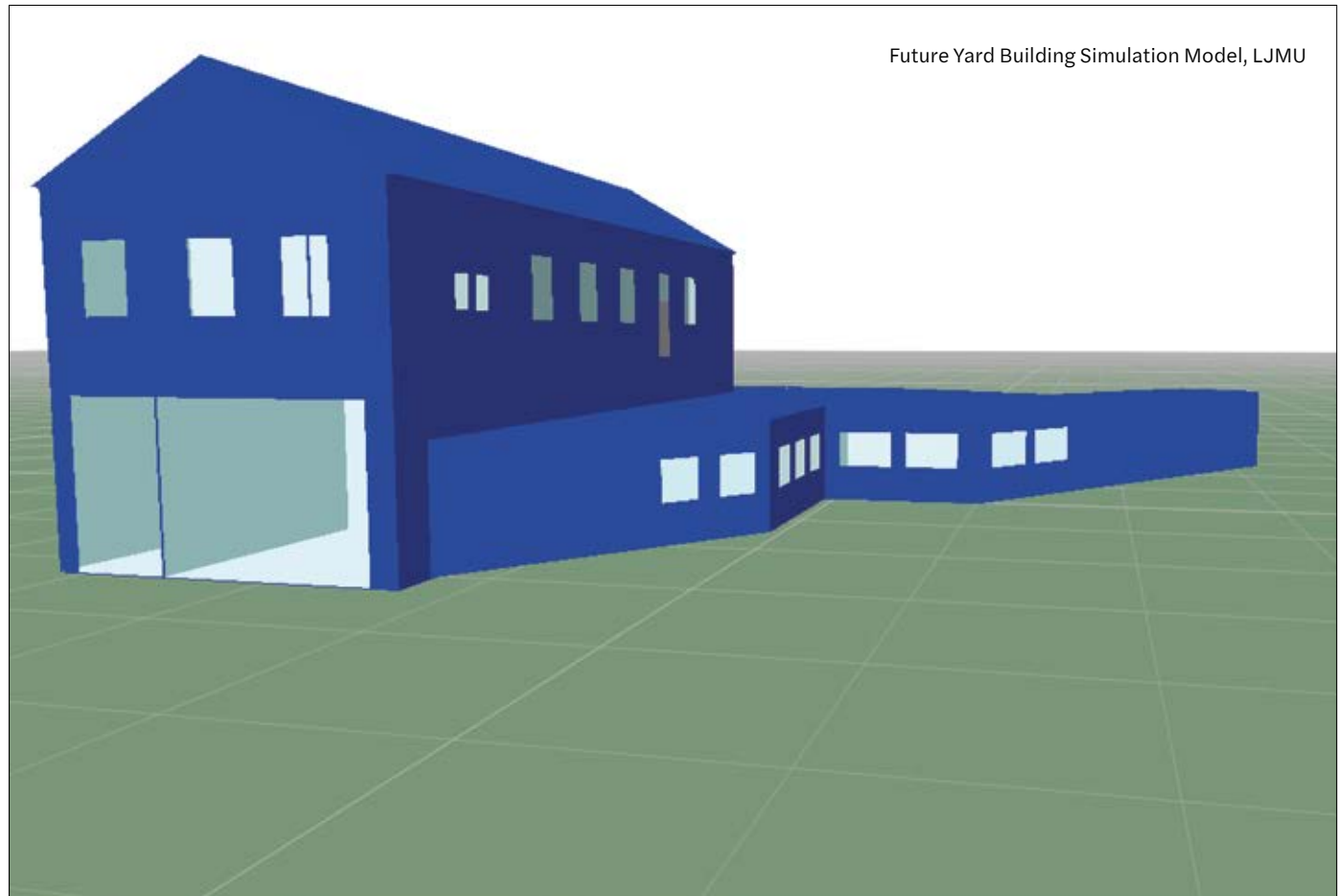
In the future, the goal is to remove gas entirely and ultimately make Scope 1 zero. There are a few ways in which we plan to achieve this:

- We are planning to build an extension on the back of the venue. The construction of this will be as efficient as possible, with appropriate insulation and double-glazing fitted.
- The new-build will also provide space to install a modern heat pump, which will be used to heat the whole building and therefore replace the gas boiler.
- The venue extension will also make room for a heat retention system. This means that the system will capture the heat of the air that is being sucked out

of the venue by the ventilation system and use this heat to warm the fresh air that is being pulled in. Our ventilation system is very important to keep the air in the live room fresh and remove any harmful particles from the space.

- We use some gas appliances in the kitchen to prepare our food offer. Once these are at the end of their lifespan, we would like to replace them with electric appliances, so that no gas needs to be used to prepare food. We would be keen to look into an industrial air fryer, so that we also have no cooking oil waste.

When we shift our energy source away from gas towards electric alternatives, the Scope 1 emissions will become zero, but the Scope 2 electricity use will be higher. We will explain in the next section how this increased power use will be accounted for.



SCOPE 2: INDIRECT EMISSIONS

The Scope 2 emissions are indirect emissions from the generation of purchased energy. In other words, all GHG emissions released into the atmosphere from the electricity we use at the venue through our electricity provider.

If our electricity was provided by a fossil fuel-based energy contract, in a year's time our Scope 2 emissions would amount to 12.1 tonnes CO₂e. This can be compared to the greenhouse gases released by a passenger car driving for 30,158 miles. However, our electricity is provided by a 100% renewable energy contract, meaning that the CO₂ emissions per kWh are zero.

Renewable energy can be generated through wind power, solar power, bioenergy, hydroelectric and other sources. Not only does subscribing to a renewable energy provider mean that our electricity ultimately comes from clean sources, it is also important to us that the money from our bills is then utilised to build more renewable energy generators. In this way, we are actively divesting away from fossil fuels.

Notwithstanding the embodied carbon emissions that come from producing solar panels and wind turbines, our Scope 2 emissions are essentially zero. However, we recognise that the strain on renewable energy resources is palpable and to manage usage it is still a good idea to take steps towards reducing electricity use. We have been reducing our power use by efficiently managing the use of electricity throughout the building in the following ways:

- All lighting in the venue is energy-efficient LED-lighting, including all but two lighting fixtures on stage.
- Any appliances that are not in use are switched off, including bar and backstage refrigerators without perishables.
- Every aspect of our live shows that requires electricity, including the outdoor stage and DJ booth, is powered by grid power and never by diesel generators.

In the future, we have further plans to be more efficient and greener with our electricity sources. Our new-build extension will allow us to add solar panels to the building, which means we will be generating electricity on site that is directly used to power our operations and live shows. This will be an effective way to deal with our increased power-use once we have moved away from using gas on the premises.

If our electricity was provided by a **FOSSIL FUEL-BASED**

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SCOPE 3: INDIRECT EMISSIONS

In theory, you could say that the Scope 3 emissions are 'everything else'.

In order to find out what 'everything else' means for Future Yard, we would need to employ a full-time researcher with great attention to detail, which is impractical at this point in time. Instead, in this chapter we would like to list some of the Scope 3 emissions that we feel have the most impact, and what steps we have taken and are planning to take to reduce these emissions.

Travel

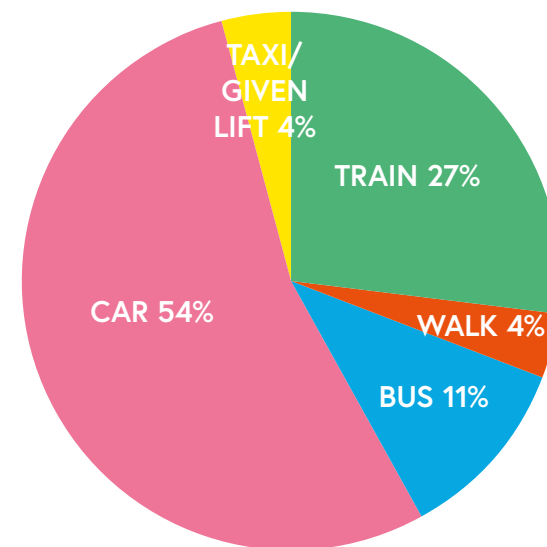
For any organisation that depends on in-person customers, audience travel has to be the biggest emitter. Since October 2021 we have been monitoring audience travel by asking our gig-goers the following two questions at the box office: Where did you travel from and How did you get here? Based on this, we have been able to estimate our yearly audience travel emissions.

According to our survey results, this (audience travel) accounts for about 95% of our total emissions, coming out with an estimated 271.2 tonnes CO₂e. This is a very large percentage, but it is normal for Scope 3 emissions to be 80-97% of the total carbon footprint. We also need to give the disclaimer here that we currently do not have calculations for many other aspects of the Scope 3 emissions, which means that the audience travel takes up a high percentage because we actually have data registered for this element.

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Audience travel to Future Yard, October 2021 - January 2022.

We have also undertaken a **staff travel** survey, asking all our staff how they travel to and from work and what might inspire them to change their modes of transport. Based on a survey we gave to our staff members, this results in **6.0 tonnes CO₂e** per year, which is 2% of the total emissions. Some indicated that they would change their travel habits to reduce carbon emissions if there were later train or bus connections and if there were carpooling initiatives.

Overall, we have found that more than half of our audience travels by car, which is a very high-carbon mode of transport. Following the collected data, we can say that, on average, visitors travelled 10 miles generating approximately 6.5 kg CO₂e. We would like to lower this average by influencing our customers, and inspiring them to increase their use of active travel (walking and cycling) and public transport (train, bus and ferry).

To address this, we have installed 25 bicycle racks in our garden, to be presented as part of the launch of this Sustainability Roadmap. We are also offering cyclists 10% off food and drink when they ride to Future Yard. We hope that informing our customers, promoting the bicycle storage and offering incentives will inspire more people to cycle to our venue.

With the installation of the bike racks, we are also starting an active travel incentive in the venue. After consulting with us, LJMU have developed a mobile application, Smart Green Journey, where a cyclist can track a journey and measure the amount of carbon saved by opting for active travel. Any customer arriving at Future Yard on a bicycle will receive a 10% discount on their first order. **If we can inspire 5% of our customers to cycle to Future Yard, we can save 13.56 tonnes CO₂e, which is more than our total Scope 1 emissions!**

We intend to open dialogue with the Metro Mayor of the Liverpool City Region Combined Authority, Steve Rotheram, and transport providers about how to make Birkenhead and Wirral more accessible to those from other parts of the Liverpool City Region, especially late at night. Future Yard's accessibility to transport links is a great strength, but it does come

with limitations: bus and train services are limited after 11pm and stop completely by midnight; and the cross-river ferry service only operates sparingly outside of weekday commuting hours. **We will be collaborating with other late-night venues to reinstate night buses between the Wirral and Liverpool.** Together, we can work with the Combined Authority to achieve progress and allow both customers and staff to choose public transport over car rides, with true connectivity between our region's boroughs.

Another important part of our travel carbon footprint is **artist travel**. Touring artists will often travel for a much longer distance to get to the venue than the average audience member. This could be significant if an international artist is flying into the UK just to play a show. These Scope 3 emissions would be difficult to change, but in the future we would like to conduct an artist survey to find out the carbon footprint of artist travel. We would also like to see if we can influence the travel of local artists. A first step that we've taken is that we provide an in-house backline, consisting of a choice of several drumkits, guitar amplifiers and bass amplifiers. This means that especially local bands can travel lighter, without the need to travel in a diesel van. In some cases they could even take the train to play their show at our venue.

Finally, the emissions for **business travel** include when members of the Future Yard team have to travel for business-related activities, for example when the management team attended Venue Day by the Music Venue Trust in London. The team travelled by train to get there, which is a low-carbon option to travel such a distance, and we plan to continue to use this mode of transport for business purposes.

We are also offering

CYCLISTS

10% OFF

FOOD & DRINK



when they ride to Future Yard

On average

VISITORS TRAVELLED

10 MILES

generating approximately

6.5 KG CO₂E

Food and Drink

Food and land-related emissions account for 23% of the global total carbon footprint. These emissions are caused by various factors: deforestation (less trees to take carbon out of the air) to make space for agriculture, water use, electricity use, transport and gases like methane being released into the atmosphere through animal agriculture.

Generally, animal-derived foods such as meat, fish and dairy have a larger carbon footprint than most plant-based foods. Food and drinks that are locally produced also have less emissions due to having to travel for a shorter distance to get to the venue. For these reasons, Future Yard has implemented the following practices:

- Our food menu is completely vegetarian with many vegan options.
- All alcoholic beverages that we serve are vegetarian.
- All beers are sourced from local independent breweries.
- Our house lager – Yard Pilsner – is brewed only half a mile from the venue at Glen Affric brewery.
- The dairy milk that is used in the café is from a local farm in Cheshire and comes in reusable glass bottles that go back to the farm after every delivery.
- Our dairy-free milk is not charged at an extra cost to the customer, but is the same price as dairy milk.
- Some of our products, such as Karma and Punchy drinks, have their own sustainability plans and donate a percentage of their profits to green charities.
- A selection of our wines are organic.

Currently we are not tracking emissions on our food and drink offer, but as explained above we carefully select our products and offer, taking into account

location, ingredients and green credentials. We can also draw some comparisons from publicly available data and research. Our most popular menu item is our Dub Mac Burger, with a patty by Beyond Meat. **A study conducted by the Center for Sustainable Systems at the University of Michigan found that this burger uses 99% less water, 93% less land, 46% less energy and results in 90% less greenhouse gas emissions compared to beef.** This means that one beef burger has the same carbon footprint as 10(!) vegan burgers. We can therefore say that our menu choices mean that we have a lower carbon footprint than if we were also serving meat and fish options.

When artists play live, they request a ‘hospitality rider’ from the venues they perform at. This is a list of foods and drinks they would like to find in their dressing room – this often includes lunch, dinner and snacks. At Future Yard we have a ‘green venue rider’, which means that we adjust the hospitality riders that get sent to us. We will explain to the touring party that we will mostly provide food and drinks that are part of our food and drink offer in our bar and kitchen, meaning that they are mostly local and always vegetarian (and often vegan). We won’t serve artists any meat or fish, even if they have asked for it – a meat-free day can be part of a healthy and sustainable diet, and most people don’t mind! Almost all of the artists we have presented this to have been very happy with our offer, and in many circumstances it has instigated a conversation about responsible and sustainable practices in the live music industry.

Finally, we also do our best to avoid food waste as much as we can. When food ends up in landfill, it releases methane into the atmosphere when it rots. This greenhouse gas is 25 times stronger than CO₂. In our kitchen, lots of the products are frozen so that they do not go off quickly. For the hospitality riders, the tour manager will be asked in advance of the show to fill out a questionnaire about preferred foods and drinks, so that the touring party will receive exactly what is needed to



**1 BEEF BURGER
HAS THE SAME CARBON
FOOTPRINT AS**

TEN

VEGAN BURGERS

avoid unnecessary waste. Any unopened cans, bottles, or packets will be reused for future shows.

When waste does occur, composting is a much favourable alternative over landfill, as it has a significantly lower carbon footprint. Currently we do not have the facilities for composting or any need for compost; however, we do hope to grow some of our own greens in the future, so this is in our ongoing plans. Instead of composting, we currently treat our food waste with another low-carbon practice. Our waste service provider collects our food waste separately and processes it through anaerobic digestion. This process speeds up the natural breakdown of food inside a sealed tank and releases a methane-rich gas which is captured and used to generate electricity. This alternative to composting actually has a similar carbon footprint to composting.



Waste

At Future Yard we are conscious of the impact our waste can have on the environment. As a first step, we limit the amount of goods we purchase (reduce) and ensure that anything we do purchase is used and loved to its full potential. Secondly, where waste does occur, we try to redistribute (reuse) any goods or material that is still useful or wanted. An example of this is when we have additional promotional posters after a show, we offer these to our gig attendees for free as a memento. As a final step in our waste management approach, we recycle any materials that cannot be reused.

At Future Yard, we have the following waste management procedures in place:

- We separate and recycle cardboard and glass.
- We separate food waste.
- We have a backstage battery collection and recycling scheme.
- All beverages are in aluminium cans, glass bottles, or on draft.
- In the live room, we serve draft beverages and mixers in reusable hard-plastic cups that are washed on site.
- Our milk is delivered in reusable glass bottles that are returned after every delivery.
- We offer a 10% discount on hot drinks when the customer brings their own cup.
- We encourage artists and visitors to use water stations to refill their water bottles.
- Our general waste is sent to an MRF for separation and energy recovery.
- Our contracted waste service is a carbon neutral company.

We will continue to strive to reduce the amount of waste we generate via education, training and reviewing our waste processes as well as openly discussing alternative methods of packaging and delivery with our suppliers. One example is that we are looking into a guitar string recycling scheme.

Water and facilities

We recognise the environmental impact from the supply and use of water at our venue. We are not a large consumer of water when compared to other organisations, however we do require water services for our bar, washroom and catering facilities.

In an average year we estimate that our water use equates to 91kg CO2 being released. When upgrading our building and services we intend to implement water efficiency measures as well as educating our staff and visitors about the importance of limiting wastewater. Water's carbon footprint comes from wastewater facilities, transport and energy.

All cleaning products and hand soaps are carefully chosen to be eco-friendly versions that do not contain harsh chemicals. Our hand soap dispensers and spray bottles are re-filled by large containers that are returned to the distributor. In our gender-neutral and accessible bar toilet, we stock free sanitary products that are plastic-free and made from organic cotton.

Merchandise and uniforms

Our bar staff wear Future Yard aprons while on shift. These are made from recycled materials and have been handmade locally.

We also sell our own Future Yard merchandise in the venue and online. Both the T-shirts and the tote bags are PETA-approved vegan, Fair Wear verified and are made of 100% organic cotton. Organic cotton utilises less chemicals, which means the ground on which it is grown and the nearby bodies of water are less polluted, as these chemicals will wash away with the rain. Less harmful pesticides are used, which often harm nearby animals unintentionally, as well as the humans that work on the fields. Organic cotton farming also results in healthier soil which is better at retaining CO2.

Dressing Rooms and Furniture

The dressing rooms themselves have been decorated with mostly vintage and second-hand furniture, so that only few new materials were used for this infrastructure. We also stock the dressing rooms with reusable cutlery, plates, mugs and glasses instead of disposables – which unfortunately is often the case at live events.

The furniture in and around the building is made from reclaimed wood. The outdoor stage and bleachers in the beer garden are made from recycled pallets. The outdoor DJ booth is a refurbished shipping container.

Green Programme

Starting with **POP26** on 3rd March 2022, we will commit to a regular 'green programme'. These will be shows that raise awareness of the climate emergency and sustainable practice. Once a year, we will do an 'off-grid' event with a pedal-powered PA system in our garden, Wax & Gears. We will also organise group bike rides within our regular show programming. The group will ride from a starting location with a pedal-powered sound system on a cargo-bike, to end at Future Yard to enjoy a gig!



T-SHIRTS and
TOTE BAGS are
PETA-APPROVED
VEGAN, FAIR
WEAR VERIFIED

and are made of

100%
ORGANIC
COTTON

CONCLUSION AND COMMITMENTS

There are many challenges to reducing the carbon footprint of a live music venue that relies on energy use to power stage sound and lighting, and on thousands of customers travelling to shows throughout the year.

Our total carbon footprint is **285.6 tonnes CO2e**. Scope 1 emissions are 3% of this total; Scope 2 emissions are 0% due to the electricity being generated by renewable resources; and Scope 3 emissions are 97% of the total.

The claim to be a carbon-neutral organisation is usually applied to Scopes 1 and 2, because Scope 3 can be vast and complicated to calculate. We will...

Continue to reduce and calculate our Scope 1 and 2 emissions and commit to offsetting these through planting trees via carbon credits at the end of every year, so that our operations are officially carbon neutral. In year one, we will be offsetting 9 tonnes CO2e through Forest Carbon, certified by the Woodland Carbon Code.

On top of this, we will continue to lower our Scope 3 emissions and look for sustainable alternatives to our practices. As mentioned above, if we inspire 5% of our customers to cycle, this is a saving of 13.56 tonnes CO2e each year, which is more than our total Scope 1 emissions. Sustainability is a journey, and we plan to keep on track.

Conventionally, the term 'offsetting' refers to buying carbon credits from offsetting organisations. In the main this involves planting trees that draw carbon from

the atmosphere, and there are also carbon-removal companies that extract and store carbon in other ways. Instead of offsetting our Scope 3 emissions, we want to commit to spending the money that offsetting would have cost, to improve our practices which will result in lowering our total carbon footprint.

Our long-term ambition is to calculate a full carbon footprint including Scope 3 emissions. Before we get there, we will continue to reduce as much as we can and inspire and **encourage our customers, staff and artists to help us by making small changes to their travel and diet when they visit Future Yard.**

Ultimately, the most important thing is that we look at every aspect of our organisation and ask the question: Can we do this better, greener, more efficiently, and in a more sustainable way? Sometimes the answer is: we currently cannot, but we can keep the option open for the future.

We think it is so important to share our findings and experiences with other organisations, and with our neighbours, community, customers and artists. Our green successes should not be best-kept secrets. With this Sustainability Roadmap, we have openly shared what we do and how we see our sustainability journey, and we want you to join the conversation.



**THE CLIMATE
IS CHANGING –
ARE YOU?**

GLOSSARY

The environmental and climate emergency

The UK government declared an environmental and climate emergency on 1st May 2019 in response to the increasing impacts of climate change in the UK. The declaration signalled the UK's intent to decarbonise the economy and make significant efforts to reduce its impacts on the environment. As a response, public and private organisations spanning all UK business sectors are setting ambitious targets to reduce the carbon emissions associated with their organisations and improving their wider environmental performance. Declaring an environmental and climate emergency is a commitment to prioritise climate contributing factors within an entity, be that a country or council. This is a positive step that underlines the urgency to address climate change.

The UK's GHG emissions (2018)

The transportation sector is currently the most significant contributor to the UK's emissions, closely followed by the energy supply sector. Greenhouse gas emissions in 2018 were estimated to be 43.1% lower than they were in 1990. Actions to reduce the UK's emissions are driven by international policy and legally binding national carbon reduction targets, set out within the 2008 Climate Change Act.

2008 Climate Change Act

UK flagship legislation on climate change brought in as a result of the Kyoto Protocol. It is a framework to develop an economically credible emissions reduction

path. The Act passed with the support of all major political parties. The Act had previously committed the UK to reducing emissions by "at least 80% below 1990 levels by 2050". This was subsequently updated in 2019 to commit the UK to reducing emissions "at least 100% below 1990 levels by 2050" (Net Zero).

Carbon budget plans

A carbon budget is a cap on the amount of GHGs emitted in the UK over a five-year period. The budget plans were designed to help ensure a cost-effective carbon reduction trajectory towards the long term 2050 target. The intent is that the UK's GHG emissions are lowered by becoming more energy efficient and by switching to low-carbon fuels.

Carbon footprint

A carbon footprint measures the total greenhouse gas emissions caused directly and indirectly by a person, organisation, event or product. A carbon footprint is measured in tonnes/kg of carbon dioxide equivalent (tCO₂e) or (kgCO₂e). The carbon dioxide equivalent (CO₂e) allows the different greenhouse gases to be compared on a like-for-like basis relative to one unit of CO₂. CO₂e is calculated by multiplying the emissions of each of the six greenhouse gases by its 100-year global warming potential (GWP). A carbon footprint must have a clearly defined scope to enable comparison with other carbon calculations. Carbon footprints can be calculated for a person, an organisation (or specific processes) and defined products or services. The key variables are organisational factors, data availability and the supply chain.

Greenhouse Gas Protocol

Published in 2001 by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). Greenhouse Gas Protocol (<http://www.ghgprotocol.org/>). It sets the global standard for how to measure, manage and report GHG emissions and it is the most widely used international accounting tool for managing GHG emissions. Corporate users are businesses using the GHG Protocol directly for their own purposes or as participants of voluntary climate initiatives. Non-corporate users are governments, NGOs and others with initiatives or programmes based on or informed by the GHG Protocol initiative.

UK government conversion factors for greenhouse gases

Managed by the Department for Business, Energy & Industrial Strategy (BEIS), factors are available in two sets. The Condensed Set of conversions is the most frequently requested and the Full Set which contains all available conversion factors.

Net zero carbon

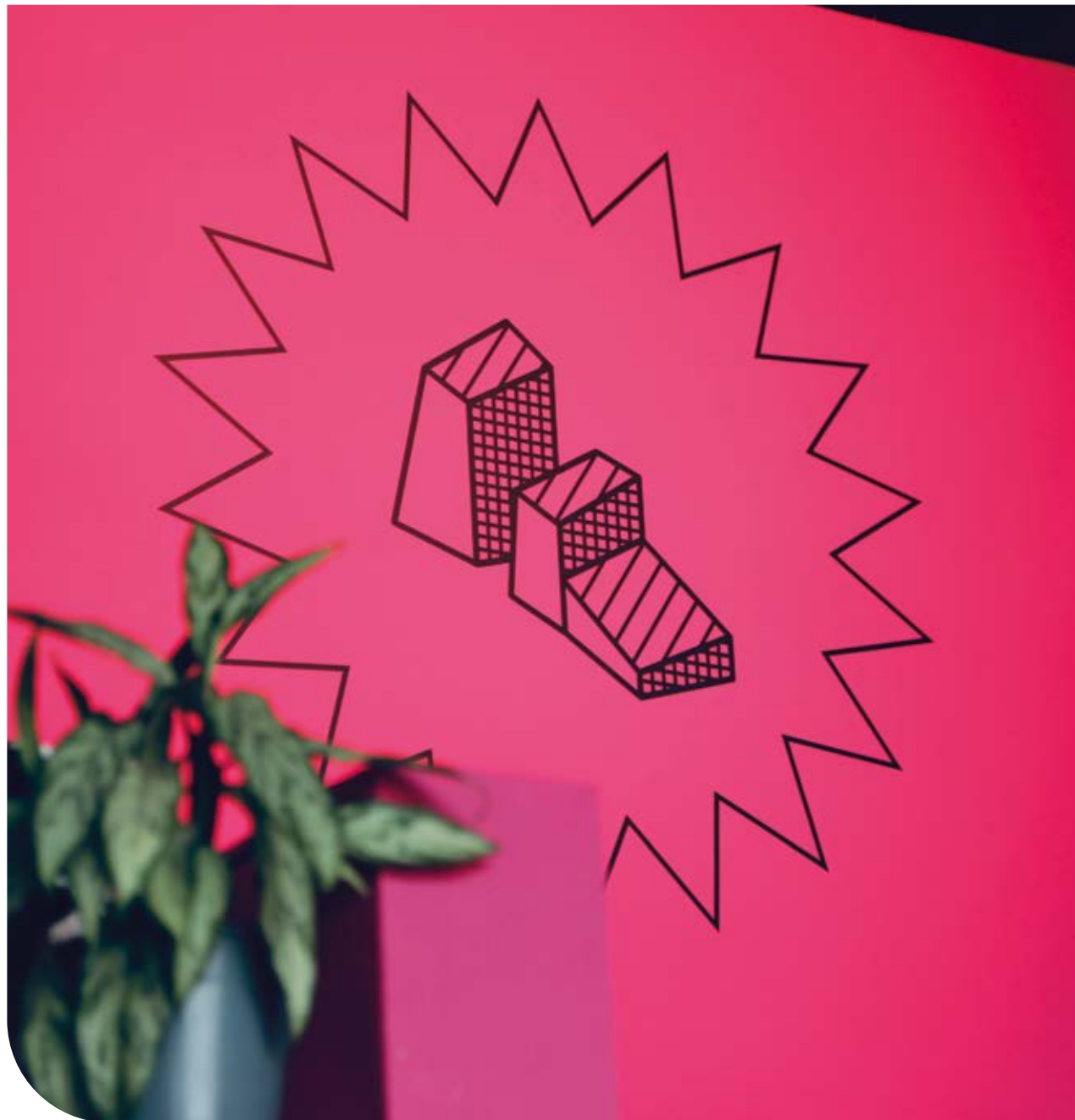
The declaration of an environmental and climate emergency signals the UK's intent to decarbonise the economy and make significant efforts to reduce its impacts on the environment. As a response, public and private organisations spanning all UK business sectors are setting ambitious targets to reduce the carbon emissions associated with their organisation and improving their wider environmental

GLOSSARY

performance. Net zero carbon is defined as where an organisation or country is required to reduce GHG emissions as close to zero as possible and then offset/sequester residual GHG emissions. In order to deliver on the UK's national net zero carbon target, all industry sectors will have to significantly reduce their contribution to wider UK emissions. As a result, there is mounting pressure from regulatory bodies and consumers to reduce GHG emissions and deliver a more sustainable approach to business operations.

Carbon reduction target setting

Setting carbon reduction targets is imperative to deliver on high level targets, such as net zero carbon. Carbon reduction targets establish clear goals for an organisation to meet, define its future direction, concentrate the minds of senior management and provide a benchmark against which the success of their progress towards a high-level target can be judged. Carbon reduction targets can be set for different elements within an organisation, often varying depending on the operations of the organisation. Carbon reduction targets can be set for emissions Scopes (1, 2, or 3), for a service or process, or for a particular project or product.



GLOSSARY

Books

A Life On Our Planet, David Attenborough (Witness Books, 2020)

All We Can Save: Truth, Courage, and Solutions for the Climate Crisis, Edited by Ayana Elizabeth Johnson & Katherine K Wilkinson (One World, 2020)

Consumed: The Need for Collective Change: Colonialism, Climate Change & Consumerism, Aja Barber (Brazen, 2021)

Decomposed: The Political Ecology of Music, Kyle Devine (The MIT Press, 2019)

Drawdown: The Most Comprehensive Plan Ever Proposed To Reverse Global Warming, Edited by Paul Hawken (Penguin, 2017)

Our Biggest Experiment: A History of the Climate Crisis, Alice Bell (Bloomsbury Sigma, 2021)

Sustainable Event Management (Third Edition), Meegan Jones (Routledge, 2018)

There Is No Planet B (Updated Edition), Mike Berners-Lee (Cambridge University Press, 2021)

Organisations

A Greener Festival, agreenerfestival.com

Ecotricity, ecotricity.co.uk

Julie's Bicycle, juliesbicycle.com

Low Carbon Eco-Innovatory, ljmu.ac.uk/microsites/ecoinnovatory

Music Declares Emergency, musicdeclares.net

Shift Liverpool, shiftliverpool.com

Tour Production Group, tourproductiongroup.co.uk

Vision 2025, vision2025.org.uk

APPENDIX

Future Yard Total Carbon Footprint - Total tonnes CO₂e - 2021

Gas	Scope 1	Electricity	Scope 2	Water	Waste	Staff Commuting	Audience Travel	Scope 3	Total CO ₂ (Kg)
8.1	8.1	12.1	12.1	0.3	0.0	6.0	271.2	277.5	297.7

Natural Gas used on site - 2021

Factor kg CO ₂ e	Insert kWh of gas used	Total CO ₂ e per year (kg)	Total CO ₂ e per year (tonnes)
0.203	40,137	8,146.61	8.15

Electricity use on site - 2021

Factor kg CO ₂ e	Insert kWh of electricity used/annum	Total CO ₂ e per year (kg)	Total CO ₂ e per year (tonnes)
0.212	56,941	12,090	12.1

Waste water treatment - 2021

Factor kg CO ₂ e	Insert m ³ of waste water/ annum	Total CO ₂ e per year (kg)	Total CO ₂ e per year (tonnes)
0.272	611.0	166	0.17

Water Supply - 2021

Factor kg CO ₂ e	Insert m ³ of water used/ annum	Total CO ₂ e per year (kg)	Total CO ₂ e per year (tonnes)
0.149	611.0	91	0.09

2021 Future Yard Calculation, LJMU

Staff commuting - 2021			
Method	Factor kg CO ₂ e	Insert distance in miles/annum	Total CO ₂ e per year (kg)
Walk	0.000	2064.0	0.00
Bus	0.118	2932.8	555.72
Train	0.035	14284.8	815.89
Car - diesel	0.271	6729.6	1,824.26
Car - petrol	0.281	6086.4	1,707.42
Taxi	0.208	3201.6	1,073.05
Total			5,976.34

Audience Travel - 2021			
Method	Factor kg CO ₂ e	Insert distance in miles	Total CO ₂ e per gig (kg)
Bus	0.189	141.4	43.15
Car	0.276	2001.4	552.31
Cycle	0.000	3.0	0.00
E-scooter	0.000	0.0	0.00
Ferry	0.000	0.0	0.00
Motorbike/moped	0.183	0.0	0.00
Taxi/Given Lift	0.239	44.5	10.65
Train	0.045	551.0	40.15
Walk	0.000	9.5	0.00
Total			646.26

Responses	181
Average distance	17.05 miles
Average emissions (one way)	3.26 kg CO ₂ e
Average emissions (round trip)	6.52 kg CO ₂ e
Expected yearly attendance (200 gig goers, 4 gigs per week, 52 weeks per year):	41,600
Total CO₂e per year (kg)	27,1232

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Robin Clewley and Gary Lambert (Photography)

Mark McKellier (Design)





CURRENTLY POURING

1 - HARD PUNCH	46 24 32 48	ESPRESSO	29
2 - GREEN AFFOGATO & F4 COLLAB	46 30 40 58	MACCHIATO	29
3 - TOP DOGS COLD STONE	46 30 40 58	FLAT WHITE	29
4 - CREAM JUSTIN VEGAN	40 25 34 50	CAPPUCCINO	30
5 - MILKSHAKE IPA	38 29 39 58	LATTE	28
6 - BEATNIK REPUBLIC	53 28 38 56	AMERICANO	35
7 - TROPIC PISTA	43 27 35 53	MOCHA	30
8 - BLACK LODE - KARATE	25 20 30 40	HOT CHOCOLATE	20/25
9 - RASPBERRY WESSIE		TEA	25
10 - PINE WHITE IPA			35/55
11 - EVER PALE			
12 - PRACTICABLE AND USEFUL			
13 - SCHAFFERHOFER GRAPEFRUIT			





FUTURE YARD