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Appendix 1

# Barbican Centre Environmental Sustainability Strategy

2021 - 2027

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### Introduction

The Barbican is an international arts and learning centre, pushing the boundaries of all major art forms including dance, film, music, theatre and visual arts. The centre houses a concert hall, theatre, cinemas, art galleries, the largest conservatory in Central London plus fully equipped conference facilities.

The City of London Corporation is the owner, founder and principle funder of the Barbican Centre and we work very closely with the City's teams both in developing strategy and in its delivery. This document should be read in conjunction with the City of London Corporation's <u>Responsible Business</u> Strategy, and Climate Action Strategy.

We recognise the impact that our operations and activities can have on the environment and we're committed to reducing these by setting and achieving clearly defined aims, objectives and targets, as well as developing frameworks to achieve continual improvement.

In order to achieve our aims we have set out our commitments under four overarching themes:

- 1. Inspiring people to live and work more sustainably.
- 2. Improving efficiencies across our estate and operations.
- 3. Investing in our infrastructure and processes.
- 4. Innovating to achieve continual improvement.

This new sustainability strategy expresses significant ambitions for the Barbican: aiming for Net Zero Carbon, ensuring all our staff and those working on our behalf understand our sustainability challenges and are empowered to make positive change and ensuring we continually monitor technological and other advancements to ensure continual improvement. It also expresses our aspirations to move to a circular economy model where we all need to start to think differently when purchasing items to consider their environmental impact, keeping them in use for as long as possible as well as their eventual disposal route.

One of the Barbican's closest neighbours is the Guildhall School of Music and Drama. We share a number of integrated services and management responsibilities with the School and as such have developed a joint approach to managing sustainability under our operational alliance.

We are ambitious in our approach and due to the nature and scale of the Barbican we recognise that we have a leadership role to play, both within our sector and beyond. We know we have a long way to go however, we are developing our systems with the ultimate aspiration of being acknowledged as exemplars of best practice in environmental management.

In February 2021, the City of London Corporation reinforced its commitment to place culture at the heart of the Square Mile's post-Covid recovery by announcing a major renewal of the Barbican Centre. The building has begun to show its age and this renewal project is an exciting opportunity to upgrade a global icon of Brutalist architecture and to reimagine the possibilities of an arts and learning centre for a new generation. Environmental sustainability is central to the project, with the ambition to make major improvements to the environmental performance of the building to meet the Barbican and City of London Corporation's targets. We're about to launch a competitive selection process to find a world-class architect-led team to take this project forward.

### **Our Targets and Baseline**

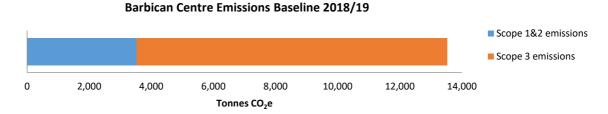
We are committed to the following targets to achieve Net Zero Carbon emissions on

- emissions from our own operations by 2027 (Scope 1 & 2)
- emissions from our full value chain by 2040 (Scope 3)

These are the same targets as the City of London Corporation which are founded on science based targets, rather than simply a "call to action".

To monitor progress and to ensure we are well placed to reach our targets we have set a milestone target of a 20% reduction in our Scope 1 & 2 emissions by 2024 against the 2018/19 baseline.

This period will see us planning to achieve our Scope 3 target where we will be setting the groundwork for substantial reductions in forthcoming years, however, to ensure we are on track and are demonstrating continual improvement we have set a modest milestone target of a 5% reduction in our Scope 3 carbon emissions by 2023 against the 2018/19 baseline.



Our baseline was built in consultation with, and using the same tools as, the City of London Corporation, with whom we will maintain close links to ensure consistent methodology across the Corporation in ongoing monitoring, measurement and implementation of solutions.

97% of our emissions from our own operations (Scope 1 & 2) consist of our use of electricity, district heating and cooling plus the use of gas with the remaining emissions generated through leakages in our air conditioning equipment.

The majority of our emissions from our value chain (Scope 3) are generated from our procurement and purchasing activities, this category includes our artistic programme and accounts for 65% of total Scope 3 emissions. The remainder is made up of emissions generated through our capital projects, waste disposal, our use of water plus staff business and commuter travel.

This Strategy sets out our aims and objectives up to 2027, at which time a full review will take place. The focus during the period of this strategy is to achieve our target of Net Zero on our own (Scope 1 & 2) emissions by 2027. It also sets out the actions we will take to put in place systems and frameworks during the period to ensure we are able to meet our 2040 target of Net Zero in our full value chain (Scope 3) emissions.

### To clarify:

Emissions from our own operations (also referred to as Scope 1 & 2 emissions) for the Barbican these consist of emissions from our use of electricity, district heating and cooling and gas for cooking plus any emission bought about by leaks from air conditioning equipment.

<u>Emissions from our value chain</u> (also referred to as Scope 3 emissions) for the Barbican these consist of emissions from our use of water, production of waste, travel (both business and commuter), building refurbishment activities and procurement and purchasing activity which includes our visiting companies and artists.

<u>Net zero emissions</u> are achieved when emissions of greenhouse gasses caused by human activity are balanced by removals by human activity over a specified period. This means to reach our targets we should be emitting no more carbon than we are removing from the atmosphere.

<u>Carbon removal</u> is the process by which a carbon sink, such as forestry, reduces the amount of greenhouse gases in the atmosphere.

### **Our Approach**

We understand the impact that our operations and activities can have on the environment and the wider world around us and always look to reduce these impacts by developing our environmental sustainability management systems in line with best practice and by ensuring frameworks are in place for setting environmental objectives, taking into account environmental impacts plus our legal and any other obligations.

This strategy and associated action plan is overseen, developed, coordinated and communicated by our Sustainability Steering Group which, under our alliance, is made up of members of staff from both the Barbican and The Guildhall School of Music and Drama, it also includes representation from the School's student body. Over recent years it had become evident that there was an increasing appetite by staff and students to be more involved in sustainability issues, so in 2019 we set up a more informal group so all have the opportunity to realise and define our strategy.

To further develop this strategy we have undertaken extensive consultation, both formal and informal throughout our workforce to ensure we understand and reflect the concerns and aspirations of our employees. We also maintain a close relationship with the City of London Corporation to ensure strategic alignment.

Over recent years we have accelerated our activity and have been recognised by a number of awards including:

### In 2019

- Julie's Bicycle Creative Green Certification: four out of five stars. Julie's Bicycle are Arts Council England's sustainability partner with Creative Green being an international community of creative and cultural organisations recognised for their ambition and action on environmental sustainability.
- Most Sustainable Venue at London Summer Events Show.
- Best Corporate Social Responsibility Initiative at the London Venue Awards.
- Our free festival Walthamstow Garden Party which we produce in partnership with London Borough of Waltham Forest, local residents, community groups and organisations in the borough won a commended award from A Greener Festival.

And in 2020 our catering partner Searcy's was awarded a three-star Food Made Good accreditation from the sustainable restaurant association.

Although we know we have much to do it remains the case that we are not starting from scratch with many successful initiatives undertaken and awards received to date.

### Aims:

- > To achieve accreditation to an internationally recognised standard such as ISO:14001 Environmental Management Systems or ISO 20121 Sustainable Events Management by 2027.
- > To meet or exceed the requirements of all relevant legislation, regulations and other compliance obligations.
- Protect the environment and prevent pollution in our estate and operations.
- > To achieve Net Zero on our direct (Scope 1&2) emissions by 2027 and our indirect (Scope 3) emissions by 2040.

Inspire people to live and work more sustainably by:	<ul> <li>Promoting environmental awareness and information to our staff, audiences, visiting artists, contractors and others working on our behalf to encourage them to work in an environmentally responsible manner and creating opportunities for them to take ownership of initiatives that support environmental and sustainable practices.</li> <li>Ensuring that all Barbican departments understand their sustainability obligations, impacts and opportunities and that the appropriate actions are incorporated into appropriate annual business planning cycles.</li> <li>Sharing our knowledge, successes, failures and expertise to collaborate and share best practice both inside and outside our sector.</li> <li>Ensuring continued linkage between the City of London Corporation and Barbican's teams.</li> </ul>
Improve efficiencies across our estate and operations by:	<ul> <li>Using our procurement processes and purchasing power to influence our supply chain, through local and ethical procurement, where appropriate. We will work with our suppliers to encourage the highest standards of sustainability performance.</li> <li>Ensuring efficient use of materials and resources including energy, water, materials and other resources.</li> </ul>

	- Exploring methods for introducing sustainability standards for refurbishment of building infrastructure, plant and equipment.
<b>Invest</b> in our infrastructure and processes by:	<ul> <li>Monitoring technological and other advancements and, where appropriate, upgrading our infrastructure and systems to achieve an even greater reduction in environmental impact.</li> <li>Achieving accreditation to an internationally recognised environmental management standard such as ISO 14001 the international standard for environmental management systems or ISO 20121 the international standard for sustainable events management.</li> </ul>
Innovate to achieve continual improvement by:	<ul> <li>Being ambitious in our approach and reach including setting stretch targets wherever appropriate.</li> <li>To understand and comply with legal and key stakeholder requirements e.g. those set out under funding agreements.</li> <li>Exploring how to integrate climate considerations in all our decisions.</li> <li>Developing sustainability standards for productions in line with the systems currently being developed by Barbican International Enterprises team and other relevant standards such as the Theatre's Green Book.</li> </ul>

In order to achieve our ambitions and to continually improve, we will continue to develop and review our dynamic environmental sustainability action plan which sets out actions that are scheduled, in progress and completed.

### Communication

Communication is key to delivering all aspects of our strategy by helping staff to understand the key issues involved in a range of sustainability issues. In order to achieve success we need to have a shared understanding of what the Barbican is setting out to achieve, what actions we can take individually and collectively, as well as encouraging sustainable behaviour.

As a performing arts centre, to deliver a world class programme we work with a number of third parties. These third parties can range from facilities and catering contractors to our visiting companies and artists. These third parties have the ability to create significant environmental impacts and as such we are committed to sharing information with them on our impacts, what they can do to ensure these are reduced and also to share information with them to help them reduce their direct carbon emissions, thereby reducing our Scope 3 emissions from our supply chain too.

We recognise that we have a lot of experiences to share with, and a lot to learn from others from both inside and outside the arts, learning and events sectors. Therefore we take every opportunity to join formal networks and make informal connections. Recent activity has seen us working with organisations as diverse as London and Partners, the Mayor of London's promotional agency who are working with a number of London's tourist destinations including the Barbican to implement the Mayor of London's sustainability strategy throughout the sector and Julies Bicycle, Arts Council England's sustainability partner who work with the sector to provide information and expertise to reduce environmental impacts in the arts.

We are aware that environmental sustainability is becoming an ever higher consideration for business events clients when choosing a venue. To respond to this we are enhancing information disseminated to these clients by developing a journey map in order that our customers can easily see what we are doing to improve our environmental impact at each stage of their visit, from an initial enquiry to them leaving site. This will also include information on what they can do whilst on site to help reduce our overall impacts. And, due to increased demand for sustainable events spaces, in 2019 our annual promotion event "Fabulously Barbican" held in our conservatory was sustainability themed with the catering being entirely vegan. In November 2021 we will be hosting the Sustainable Events Show with one of our event industry partners which will showcase 80 sustainable event services, venues, suppliers and event technology companies.

We understand our obligation to enable visitors to make sustainable choices during their visit to the Barbican but also we know we have an opportunity to increase awareness of environmental issues amongst this group through our programme of events, to date we have presented many works with a sustainability theme, as described further on in this strategy.

### Aims:

- To have a highly aware staff community which is empowered to make sustainable choices.
- To ensure third parties working on our behalf are aware of the Barbican's sustainability commitments and are enabled to contribute to our aims.
- > To generate environmental efficiencies across the Barbican's operations.
- > To ensure that facilities and information are available to visitors to enable them to make sustainable choices.

Inspire people to live and work more sustainably by:	<ul> <li>Developing and running an annual programme of awareness raising initiatives to increase staff understanding of sustainability issues, both at work and at home, and to develop a culture of shared responsibility.</li> <li>Providing regular sustainability updates and communications to facilitate action at an individual and institutional level.</li> <li>Communicating our environmental and sustainability commitments and practices to all relevant third parties in order that they are aware of our policies, procedures and what action they can take to help the Barbican reduce its impact on the environment.</li> <li>Continued collaboration with organisations such as Julie's Bicycle to ensure best practice is shared throughout the sector.</li> <li>Ensuring artists and visiting companies are aware of the Barbican's environmental impacts and what they can do to help reduce these.</li> </ul>
Improve efficiencies across our estate and operations by:	- Ensuring all relevant parties are aware of action they can take to reduce the Barbican's environmental impact and generate efficiencies.
Invest in our infrastructure and processes by:	<ul> <li>Finding ways to include environmental sustainability in staff inductions to reach all staff in our diverse organisation to ensure our workforce is aware of our policies, procedures and the effect that individuals can have on the environment.</li> <li>Providing appropriate training both general and role specific to support staff to effectively contribute to achieving our environmental sustainability aspirations.</li> <li>Facilitating active networks of staff and students such as our Sustainability Steering Group and more informal sustainability group.</li> </ul>
Innovate to achieve continual improvement by:	<ul> <li>Sending out an annual employee attitudes survey to understand what is important to staff in order to shape our ongoing strategy and achieve greater ownership of sustainability issues amongst the workforce.</li> <li>Investigating how to record and measure impacts of behaviour change campaigns.</li> <li>Actively consulting with staff and other relevant stakeholders on the development and implementation of this strategy plus operational policies, plans and procedures.</li> <li>Actively seeking formal and informal partnerships and opportunities for collaboration with regional, national and international stakeholders to facilitate the sharing of best practice.</li> <li>Listening and responding to staff and other stakeholders concerns about environmental issues and supporting staff in staff led environmental activities.</li> <li>Developing a sustainability communications strategy aimed at all internal and relevant external stakeholders</li> <li>Producing guidelines for visiting artists on the Barbican's environmental impacts, strategy and what they can do whilst on site to assist the centre in reducing our environmental impact.</li> </ul>

### **Energy**

Our use of electricity, district heating and cooling plus the use of gas is the major source of our Scope 1 & 2 emissions, in 2018/19 amounting to 3,425 tonnes of CO2e. Our urgent focus until 2027 will be to ensure we reach Net Zero on these emissions by our target date.

A minor source, accounting for 3%, of our Scope 1 & 2 emissions is refrigerant leakage in our air-conditioning systems. We will continue to ensure these systems are maintained to ameliorate the chance of leaks from this equipment and will take every effort when refurbishing systems to ensure the most environmentaly sound solution is implemented.

Heating and cooling is supplied through the Citigen district heating network. Gas is used for cooking in our catering areas, although we have converted many appliances to an electric format ensuring a pathway to decarbonisation exists.

Over the years we have made great strides in reducing our Scope 1&2 emissions, having undertaken many successful initiatives from behaviour change interventions to engineering and technical solutions including upgrading our infrastructure by: installing a Building Energy Management System (BEMS) that manages the building heating, cooling and ventilation systems; Introduction of low energy and LED lamps and installation of proximity activated and timed lighting controls to ensure lights automatically switch off when areas aren't in use; replacing our compressors; installing motor inverters and controls allowing variable loads for motors and fans and installed voltage optimisation technology to reduce our incoming electrical current to reduce consumption and emissions. We have also developed our management systems by reviewing run hours on heating and ventilation systems in consultation with relevant staff. This has enabled the Barbican to operate systems more precisely at times that suit operational requirement, ensuring services aren't supplied to areas not in use. Plus continued planned preventative maintenance to ensure equipment is working as efficiently as possible.

And we procure 100% renewable electricity

Although we have achieved much over the years we now have to step up our approach not only by upgrading our infrastructure but also by examining our processes and ensuring our teams and other relevant third parties have the right information in order to be able to make efficiencies and avoid the waste of energy.

### Aims:

- To achieve Net Zero Carbon in our own operations by 2027. These being our Scope 1&2 emissions
- > To conserve energy
- To conserve natural resources

Inspire people to live and work more sustainably by:	<ul> <li>Developing awareness campaigns to include practical methods staff can use to conserve energy both at home and at work. We will include information on carbon emissions and their effects in a variety of formats to grab attention.</li> </ul>
Improve efficiencies across our estate and operations by:	<ul> <li>Improving the control of all building infrastructure and energy use and enhance data gathering through our Building Energy Management system and energy management software.</li> <li>Ensuring energy use is continually monitored through our Building Energy Management system and energy management software and by conducting out of hours physical "on the ground" energy audits to identify areas of waste.</li> </ul>
Invest in our infrastructure and processes by:	<ul> <li>Continuing to procure 100% renewable electricity.</li> <li>Working with City of London Corporation to ensure decarbonisation of the district heat network which supplies space heating and cooling.</li> <li>Upgrading our infrastructure to be less energy intensive including delivering £3.4 million works under the Public Sector Decarbonisation Scheme to upgrade our lighting and heating and ventilation systems.</li> <li>Ensuring sustainability criteria remain high on the agenda for the Barbican Renewal project.</li> </ul>

## **Innovate** to achieve continual improvement by:

- Investigating opportunities for installation of renewable energy at the Barbican.
- Improving the control of all building infrastructure and energy use and enhance data gathering through our Building Energy Management system and energy management software.
- Working with artistic teams to explore ways to implement more energy efficient stage lighting.
- Monitoring technological and other advancements to identify opportunities for greater energy reduction and to ensure the use of best available techniques.
- Ensuring we have explored methods of carbon removal for any remaining carbon come 2027.
- Explore ways to enhance energy and district heating and cooling metering to enable us to better identify areas of waste.

### **Circular Economy**

Our ambition is to move to a circular economy model. WRAP (Waste and Resources Action Programme) defines a circular economy as: "A circular economy is an alternative to a traditional linear economy (make, use, dispose) in which we keep resources in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life".

This means we all need to change the way we buy products and materials by considering if items need to be purchased in the first place, looking at items with high recycled content as well as exploring alternative purchasing methods such as leasing. We should consider the whole life cycle of products wherever possible considering if items can be reused and we need to keep in mind the eventual disposal method at the end of their useful life at the Barbican. We need to ensure that products and materials are kept in use for as long as possible and will have minimal environmental impact when in use and when and if they are eventually disposed of.

### **Waste**

We have a zero to landfill policy where all our operational waste is reused, recycled or composted where possible and everything else goes to energy recovery. We have recycling stations throughout the Barbican in both staff and customer areas and have removed bins entirely from our restaurants in order eliminate human error and improve customer behaviour.

We have also taken a proactive approach to reducing single use plastics including withdrawing plastic straws, with paper straws now only available on request, we have replaced plastic disposable cutlery with lightweight wooden biodegradable alternatives, replaced single use plastic cups at water fountains and coolers with lightweight paper cups and cones and introduced reusable polycarbonate glassware in our performance bars which eliminates the single use plastic disposable glassware previously used.

Actions to reduce plastic packaging include us no longer selling water in plastic bottles, instead we have recently started to sell water in glass bottles and in aluminium flasks which are designed to be reused and are manufactured from 100% recycled aluminium, we have introduced Vegware packaging for our sandwiches which uses a combination of compostable wrap and cardboard, our in house sweets and treats are now sold in cardboard packaging and we have removed packaged salads from sale as we have been unable to date to find a practical alternative for the previously used plastic packaging. We have also signed up to the City of London Corporation's Plastic Free City initiative.

Our Barbican Projects team, as part of their drive to embed sustainable practices into their way of working, are developing a new approach to items that are redundant or no longer required. During recent clear out activity we have donated over 200 old and unwanted auditoria seating for repurposing by third parties and have salvaged a number of items such as chairs, desks, tables and units for reuse elsewhere. We also retrieved over 15 tonnes of aluminum plus other metals for recycling. And, where new carpet has been installed in our foyers, only the worst of the existing carpet has been recycled with the remainder saved to be used elsewhere in the Centre.

We have supplied our staff with reusable hot drinks cups and apply a surcharge for those still using a disposable cup, plus we sell Barbican branded hot drinks cups and offer a discount to those bringing their own cup to encourage our visitors to avoid using a disposable cup.

### Aims:

- To achieve Net-Zero Carbon in emissions from our value chain (Scope 3) by 2040.
- Maximise the length or use made of resources, ensuring products and materials are kept in use for as long as possible to minimise waste generation.
- To minimise and actively manage waste through elimination, reduction, reuse and recycling.
- > To encourage the re-use of materials and products and use of recycled products
- Reduce total waste tonnages.
- Avoiding waste where possible and increasing reuse and recycling rates.
- Ensure the prevention of pollution.
- > Ensure compliance with legal and other requirements.
- Ensure we are single use plastic free in our operations.
- > Ensuring minimal environmental impact from construction, maintenance and refurbishment activity.

### To achieve our aims we will:

Inspire people to live and work more sustainably by:	<ul> <li>Delivering a waste awareness campaign across the organisation to ensure the adoption of the waste hierarchy and ensure any waste is correctly sorted, stored and disposed of.</li> <li>Promoting circular economy principles where resources are kept in use for as long as possible before being recycled or disposed of.</li> <li>Working with our contractors and visiting artists to minimise waste.</li> <li>Ensuring appropriate recycling information is available to ensure everyone knows which items can go into each bin.</li> </ul>
<b>Improve</b> efficiencies across our estate and operations by:	- Reviewing & monitoring all waste streams and work to minimise waste generation to maximise recycling and minimise unnecessary consumption.
<b>Invest</b> in our infrastructure and processes by:	<ul> <li>Continuing to send zero to landfill.</li> <li>Evaluating our current recycling &amp; waste disposal facilities and upgrading as appropriate to ensure the adequate provision of disposal facilities for all who might need to use them including staff, visitors and other third parties such as visiting artists.</li> </ul>
Innovate to achieve continual improvement by:	<ul> <li>Prioritising the use of reusable, non-toxic and renewable materials and substances.</li> <li>Explore the possibility of developing an internal resource sharing site.</li> <li>Evaluate opportunities to use external resource sharing initiatives.</li> <li>Producing guidelines for visiting artists on the Barbican's environmental impacts, strategy and what they can do whilst on site to assist the centre in reducing our environmental impact.</li> </ul>

### **Procurement & Purchasing**

This section should be read with reference to City of London Corporation's Responsible Procurement Policy

Our purchases of goods and services account for 65% of our indirect scope 3 emissions. This could be anything we buy for the organisation from stationery to a theatrical performance.

To date we have undertaken many initiatives to ensure sustainability considerations are incorporated into many of our contracts, such as those with our catering contractors. We have also made many individual purchasing decisions with environmental sustainability in mind including installing hand dryers in toilet areas to cut down on the use of hand towels, our cleaning consumables are stipulated on the grounds that they are environmentally friendly and our gardening team, where practical source sundries and plants from London and Home Counties to reduce the need for transportation, however, wherever possible, we grow our own plants thus avoiding the need for transportation in the first place. Our Business Events team ensures our conference consumables, such as pens and conference pads are recycled or made from recycled materials and our conference furniture is constructed from FSC certified materials.

Our catering contractor uses local suppliers for fresh goods (meat, fish and vegetables) and working with our contractor we actively promote seasonal fruit and vegetables, free range fresh eggs and egg based products and we have vegan and vegetarian options available in our café's, restaurants as well as in our staff and events catering.

We realise we have a long way to go to reach our targets for procurement, so this period will see us working closely with City of London Corporation and Suppliers to put in place frameworks for continual improvement.

### Aims:

- To achieve Net-Zero Carbon in emissions from our value chain (Scope 3) by 2040.
- Maximise the use made of resources, ensuring products and materials are kept in use for as long as possible to minimise waste generation.
- To encourage the use of recycled products where appropriate.
- > To become single use plastic free in our operations.
- Ensuring minimal environmental impact from construction, maintenance and refurbishment activity.
- Improve efficiencies in our use of resources.
- Eliminate where possible the use of hazardous substances and materials.

### To achieve our aims we will:

Inspire people to live and work more sustainably by:	<ul> <li>Promoting sustainable procurement and efficient use of materials and resources.</li> <li>Providing appropriate guidance and training for staff who are involved in purchasing decisions.</li> </ul>
<b>Improve</b> efficiencies across our estate and operations by:	<ul> <li>Prioritising sea freight over land freight for all transportation of goods including those related to our artistic productions and exhibitions.</li> </ul>
Innovate to achieve continual improvement by:	<ul> <li>Ensuring sustainability, social value and supply chain transparency considerations are included at each stage of the procurement process in line with the City of London Corporation's Responsible Procurement Policy.</li> <li>Continually improving our understanding of sustainability and social value to ensure that we take opportunities to reduce the negative impacts of procurement activities.</li> <li>Developing and implementing a targeted supplier engagement programme to promote continual improvement, drive net zero and strengthen our requirements and supplier engagement to drive performance in delivering sustainable products and solution.</li> <li>Specifying sustainable and environmentally friendly products where possible.</li> <li>Ensuring where appropriate sustainable environmental criteria are used in the award of contracts and that suppliers environmental credentials are, as far as reasonably practicable considered when making purchasing decisions.</li> <li>Continual evaluation of hazardous substances to monitor for less environmentally harmful alternatives.</li> </ul>

### Water

We are installing water fountains in key public locations to enable visitors to fill their own water bottles and have ensured that free tap water refills are available in all catering outlets where running water is available. We have also installed a number of filtration systems in the staff, public and catering areas, which includes providing our own sparkling and still water for events.

To help reduce the use and waste of water we have a number of waterless urinals in the Centre.

### Aims:

- > To achieve Net-Zero Carbon in emissions from our value chain (Scope 3) by 2040
- > To decrease our water use
- To conserve natural resources

Inspire people to live and work more sustainably by:	- Promoting water efficiency to staff and all relevant third parties.
Improve efficiencies across our estate and operations by:	<ul> <li>Ongoing monitoring of water consumption data to assist in identifying potential savings.</li> <li>Improving monitoring and targeting by establishing driving factors to establish benchmarks.</li> </ul>
Invest in our infrastructure and processes by:	<ul> <li>Undertaking a water efficiency audit to see where further efficiencies can be made.</li> </ul>
Innovate to achieve continual improvement by:	<ul> <li>Ongoing monitoring of water consumption data to assist in identifying areas of potential savings.</li> </ul>

<ul> <li>Evaluate opportunities for installing water management measures such as rainwater harvesting and sustainable urban drainage systems.</li> <li>Carry out investigations into installing half hourly water meters to enhance monitoring and targeting activity.</li> <li>Improve water efficiency through the adoption of new technologies and best available techniques.</li> </ul>
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### **Travel**

The use of fossil fuels in travel is a significant contributor to carbon emissions worldwide, not only this it can have detrimental effects on air quality. We all need to make travel and transportation choices with this in mind.

This section covers commuter travel, how people travel to and from the Barbican to work and business travel, these being trips undertaken for the purposes of work.

We undertook a commuter travel survey in 2020 the results showed 79% of respondents using public transport with 12% commuting by bicycle, 5% walking to work, 2% single use car journeys, and 1% each taxi and motorcycle. The high take up of use of public transport is not surprising as the majority of respondents live over 5 miles from the Barbican. For those living within 5 miles 36% either walked or cycled so our opportunity to encourage staff to make the switch to more sustainable travel will be to encourage and promote cycling and walking. Active travel choices not only enable us to reduce our emissions, there are also well documented health benefits contributing to long term wellbeing.

We have already installed 6 free to use electric car charging points in our car park for use by our visitors and recently installed additional covered secure cycle storage to enhance our existing facilities plus we have toolkits available to staff wanting to undertake basic cycle maintenance.

With reference to business travel, we have already proved during the Covid shut-down that it is possible in many instances to make use of videoconferencing instead of travelling. Therefore we are asking all staff undertaking business travel to consider whether journeys are necessary in the first place and if they are to apply a hierarchy, with preference in this order to walking or cycling, public transport, car share, single occupancy car, with the last resort being aeroplane.

### Aims:

- > To achieve Net-Zero Carbon in emissions from our value chain (Scope 3) by 2040
- Improve air quality

Inspire people to live and work more sustainably by:	<ul> <li>Developing an awareness campaign aimed at staff to encourage active travel and the use of sustainable forms of travel. To include a travel hierarchy and ensuring staff are aware of the benefits available to them and the health benefits of walking and cycling.</li> <li>Providing clear information on cycling, walking and public transport routes.</li> <li>Continued engagement with the City of London Corporation to ensure collaboration on transport solutions.</li> </ul>
Improve efficiencies across our estate and operations by:	<ul> <li>Encouraging business travel to be made as mindfully as possible, also encouraging staff to make the most of trips by fitting in as much activity as possible, especially if air travel is involved.</li> </ul>
Innovate to achieve continual improvement by:	<ul> <li>Evaluating opportunities for improving facilities for cyclists and walkers e.g. further cycle racks, showers and clothes drying facilities.</li> <li>Exploring opportunities for provision of additional electric car charging points.</li> </ul>

### **Biodiversity**

Our open spaces offer an "oasis" in the heart of the City of London where our staff and visitors can relax away from a busy urban environment. They are a place where people can "wind down" thereby improving their mental wellbeing. They also provide us with the opportunity to generate positive environmental impact by encouraging biodiversity in these spaces.

Our open spaces open out to a lakeside that provides a habitat for a variety of flora and fauna including fish, coots, mallards, herons and moorhens. Over recent years with the local community, students and staff from the Guildhall School (under our alliance) and the City of London Corporation Open Spaces team, we have worked to create a suitable outdoor environment in the lakes and lakeside encouraging the use by students, residents and the public whilst also supporting and encouraging biodiversity in and around our estate. Significant investment has taken place to date including repairs and replacement of pumps, pipes and associated aerating equipment, plus over 600 maintenance jobs to the surrounding brickwork as well as working on reed beds and planters so as to encourage wildlife and breeding. Results have not only included lots of positive feedback but also enhanced the environment for the wildlife. We will continue to work with residents, City of London Corporation and staff and students from the Guildhall School to further enhance the environment.

Our conservatory, the largest in central London is home to 1,500 species of sub-tropical plants and trees (some of which are endangered in their native habitat). Not only is the conservatory a backdrop for numerous events, it is also open to the public at weekends and also serves educational purposes.

We take every opportunity to incorporate sustainability into the management of our conservatory and open spaces, with many initiatives underway including: IPM (integrated Pest Management), introducing natural pest enemies in the conservatory to reduce overall use of pesticides to a bare minimum, we have introduced a greater diversity of plants across our open spaces, especially pollinator friendly ones to attract bees and we have eliminated the use of peat based compost and replaced it with a loam based alternative to help to preserve the natural environment across the world and we use natural fertilisers (bone meal, or fish, bone and blood) wherever possible in our open spaces.

We also have an in house bee colony to help increase numbers in the declining bee population and two bug hotels to provide a home for other insects, including pollinators such as solitary bees and ladybirds.

We recognise we have work to do to better measure biodiversity in our open spaces and we will work over the period of this strategy to ensure better measurement of biodiversity as well as identifying ways to increase biodiversity in the Barbican's Estate with particular regard to target species outlined in the City of London Corporation's <u>Biodiversity Action Plan</u>.

### Aims:

- Protecting our shared natural resources.
- Maintain the established habitats within our open spaces.
- > Increase the biodiversity on our estate especially target species under City of London Corporation's Biodiversity Action Plan.

Inspire people to live and work more sustainably by:	<ul> <li>Developing an awareness campaign to highlight our living estate and the biodiversity it contains, aimed at staff and relevant third parties.</li> <li>Working with City of London Corporation, as well as the local community to play our part in wider initiatives.</li> </ul>
<b>Invest</b> in our infrastructure and processes by:	- Continuing to maintain the established habitats within our open spaces to ensure a safe environment for the flora and fauna in the area.
Innovate to achieve continual improvement by:	<ul> <li>Exploring ways to measure and increase biodiversity across our estate.</li> <li>Keeping up to date with advancements in sustainable horticulture to ensure best available techniques are used at all times.</li> </ul>

### Spotlight on the Arts

We are aware that we have an opportunity, through our artistic programming and creative learning activity to highlight environmental issues to the wider general public, thus raising awareness. There are many examples across all our art forms, below are just a few examples of recent activity.

Our Communities and Neighbourhoods team have since 2014 been working with London Borough of Waltham Forest to deliver Walthamstow Garden Party, a free two day community led arts festival which has been described as "East London's biggest community powered festival". In 2019 we worked with A Greener Festival to undertake "a Greener Festival" assessment and for our work on the Walthamstow Garden Party we received a "commended award" and were shortlisted by the UK Festival Awards for our commitment to sustainability alongside large international festivals such as Glastonbury and Boomtown. As well as this we've recently joined the highly regarded Accelerator Programme, run by Arts Council England and Julie's Bicycle to develop new and innovative ways for cultural organisations to collaborate with local communities to take local action against the climate emergency.

Our Barbican International Enterprises team are also collaborating on a pilot study with Julie's Bicycle to develop a set of guidelines for sustainable touring exhibitions. The team have, alongside this work, developed a sustainability manifesto to ensure all involved in delivery of the exhibition are working to the highest possible environmental standards. We plan to develop this practice in collaboration with other departments to ensure continually evolving sector defining standards.

In 2021 we presented *Dido's Ghost*, a new opera composed by Errollyn Wallen incorporating Purcell's Dido and Aeneas. The work was co-commissioned by the Barbican Centre, Buxton International Festival, Dunedin Consort, Philharmonia Baroque Orchestra and Chorale (San Francisco) and Mahogany Opera. From the outset we sought to produce this semi-staged work in a sustainable way. Working hand in hand with our commissioning partners, director and designer interrogated the sustainability of each step of the production. As an example of our approach the design of the set itself makes extensive use of fishing nets to evoke the island setting. Realising that new fishing nets use synthetic materials we researched collectives which buy and sell used fishing vessels and contacted them to see if we could obtain old fishing nets which would otherwise be thrown out, eventually we found a couple of fishermen who were happy to give us their used nets. Before use these were washed and dyed, using natural dies and after the production we actively sought artists and theatre producers wanting to make use of the nets once we have finished with them in order that they have a life beyond our production and were not disposed of as waste.

Our Creative Learning Team are always eager, through all their projects to encourage young people to be curious about big environmental issues and to explore how they might play their part in facing the future challenges presented by climate change. A recent project is the Audio Trail aimed at supporting the positive wellbeing of participants, by encouraging their connection to nature, and making connections through plants and animals found in our conservatory to the rest of the natural world. This activity felt especially important following the Covid period where many have been confined to their homes with little to no access to green space.

In 2021, we presented *The Yanomami Struggle*, an exhibition devoted to the life and work of Claudia Andujar and her collaboration with the Yanomami, one of Brazil's largest indigenous peoples, who she has spent her life documenting and defending. Over 200 photographs, an audio-visual installation, a film and a series of drawings by the Yanomami have been brought together in the Curve, the Pit and the Barbican's foyers to document how the climate emergency and the impact of Covid-19 continues to threaten the Yanomami and the Amazon basin.

Our cinema programme regularly includes films and documentaries exploring our relationship with nature and our changing world due to climate change. Examples include Joe Gantz's 2021 documentary *The Race to Save the World* which offers an intimate portrait of the lives of these individuals as they push to create a more sustainable world; David Attenborough: *A Life on Our Planet,* a powerful documentary about humanity's impact on nature; and Radu Ciorniciuc's Acasa, My Home, a heartfelt documentary which follows the Enache children, who live at one with nature.

In 2021 Complicite in association with the Barbican are presenting *Can I Live?*. Inspired by Fehinti Balogun's experiences in environmental activism, this piece of work is a specially filmed performance prompting an urgent conversation about the lack of diversity at the heart of the British climate movement. The film was shot in the Barbican Theatre with the Barbican giving the space and additional resource as 'in kind' support to this work. Following it's premiere at the Barbican the film will embark on a digital tour, being hosted on various venues websites and will be screened in Glasgow during COP 26 Complicite have worked closely with Julie's Bicycle to monitor and reduce the environmental impact of this project

We will continue to ensure we showcase sustainability issues in our programme in order to engage artists and audiences with environmental issues.

Apart from the positive impact we can have in showcasing environmental issues to our audiences we recognise the environmental impacts caused by our artistic activity. Carbon emissions from this area are generated from visiting artist and our activity including the use of energy and water, the production of waste, and travel as well as the transportation of show and exhibition sets and other items including equipment, props, instruments and exhibits. The impacts identified arising from our programme are covered under the relevant sections of this strategy.

### Monitoring, Review and Governance

Environmental impacts will be assessed and monitored continually by the Sustainability Steering Group which will inform the review process for this strategy and our action plan.

This strategy and associated action plan will be reviewed on a regular basis by the Sustainability Steering Group who will produce an annual repost and report at least annually to management and then on to Barbican Board or any delegated sub committees.