

Guildhall School of Music and Drama Environmental Sustainability Review for the period up to August 2020

The Guildhall School is owned, funded and governed by the City of London Corporation (CoL). We are a department of CoL and not a legal organisation in our own right. All staff working at the Guildhall School are employees of CoL. We therefore comply with all overarching CoL policies relating to Sustainability, share their staff and resources, and input into their developments. The Guildhall School is also situated immediately adjacent to the Barbican Centre, also owned by CoL and with which we have some shared services such as IT, Engineering, Finance and HR.

Links to Relevant CoL Policies are included throughout this document. In addition to these the Guildhall School has developed several policies and strategies of its own, where it is considered that an approach more specific to the Higher Education sector is of benefit,

This document reviews recent environmental sustainability activity across the Guildhall School and, where appropriate, explains monitoring and audit activity which has taken place to define baselines and inform targets going forward. The information from this review has been used to develop the School's action plan which defines actions that we will take to reduce our environmental impacts over the forthcoming period.

Policy and Action Plan Review

A full review of the Schools Environmental Policy has taken place with the most recent version being signed off by Senior Management in March 2020.

The former Environmental Policy covered jointly the Barbican Centre and Guildhall School of Music and Drama this was to ensure linkage across both organisations. During the consultation process senior management expressed the desirability of having a separate policy for the Barbican and the School. Whilst there are similarities in both organisations, there are differences in activity and reporting periods. Therefore a separate policy and action plan has been drawn up for each organisation under a common framework to reflect our alliance and reference to best practice.

Furthermore we are currently evaluating our activity against the City of London's [Responsible Business Strategy](#) and the new [Climate Action Strategy](#) published in the Autumn of 2020, future reviews of the School's Environmental Sustainability and related policies will be in line with the City of London's Strategy.

The School continues to support the role of Continual Improvement manager, sustainability. One of the key purposes of this role is to develop the Guildhall School's sustainability management systems ensuring alignment with the City

of London's policies and strategies and develop succession plans to ensure continual improvement.

Wherever possible the team will look to resource projects through available grant funding either through the City of London or elsewhere. Where this is not possible budget allocation for sustainability activity will depend on the level of investment required:

- Scoping, awareness and management system development activities will be resourced and financed locally.
- Higher cost capital investment will be subject to the City of London's energy efficiency loan scheme, capital works programme or other grant funding as available.

Recently significant investment has been made to ensure maintenance and efficiency of key plant and equipment.

Energy

For the past year we continue our ground up review of energy use which has highlighted the need for better monitoring and targeting and control strategies which are currently being developed.

We now have better control and understanding of the systems and reporting data, our equipment has been serviced and repaired, addressing many outstanding issues. We continue to make improvements such as enhancing awareness activity, upgrading lighting in certain areas of Milton Court to LED and introduction of Computer Aided Facilities Management System (CAFM) to ensure Planned Preventative Maintenance (PPM) Programmes.

The School continues to work with colleagues from the City of London and has undertaken a building energy management survey covering both Milton Court and Silk Street. We are currently reviewing the recommendations and will action accordingly. In addition a further general energy efficiency survey is being scheduled.

Actions to further reduce energy use are described in our action plan.

The City of London Corporation has an energy reduction target of 40% by Financial Year (April to March) 2025/26 against a 2008/09 baseline, this across the entire estate.

The table below shows energy reduction year to date financial year 2019/20 compared to 2008/09

Energy Comparison 2019/20 compared to 2008/09 (Financial Year April to March)				
	2008/09	2019/20		
	kWh	kWh	Reduction	%age reduction
Estate Non Residential Excluding Milton Court	2,733,530	1,885,212	-848,318	-31.03%
Milton Court	0	2,962,194	2,962,194	N/A
Residential Sundial Court	1,834,891	1,553,566	-281,325	-15.33%
Total Estate - Non Residential	2,733,530	4,847,406	2,113,876	77.33%
Total Estate - Residential	1,834,891	1,553,566	-281,325	-15.33%
Total Estate	4,568,421	6,400,972	1,832,551	40.11%

It is worth noting that Milton Court became operational in 2013 so was not included in the original baseline so we are not currently on track to reach the target which would be not exceeding 2,741,053 kWh per annum by 2025/26 meaning a 75% reduction against current use over the next 6 years. We realise that this is a challenge as the addition of Milton Court has significantly increased energy use across the Guildhall School's estate. However, we believe that there is scope for further reduction with a number of initiatives outlined on our action plan. We have set an ambitious stretch target of 10% reduction across the estate by 2022/23 compared to 2018/19 baseline of 7,430,848 kWh, this baseline is more appropriate than the 2019/20 figures which include a period of closures due to Covid.

We will continue to monitor use and innovations in energy management.

Details of results of our Carbon Reduction Strategy are included later in this document.

Members of the School's team have in recent years actively been involved with tenders to appoint a new energy broker for electricity. Subsequently the City of London has procured 100% renewable electricity from October 2018 onwards and following on signed a power purchase agreement to buy all the energy produced by a new-build 95,000 panel solar farm in Dorset. See link for news article <https://news.cityoflondon.gov.uk/citys-pioneering-green-energy-deal-could-be-blueprint-for-local-authorities/>

Waste Management & Reduction of use of Resources

The School's staff and students continue to work together to make strides to reduce the environmental impact from waste and the use of resources.

Recycling stations are situated throughout the School and residual general waste is diverted from landfill and sent to an energy from waste facility. Food Waste from Sundial Court is sent for composting or farm slurry. A compactor and glass crusher has also been installed which will reduce the amount of waste collections thereby improving air quality and reducing our waste contractor's carbon footprint.

The School's teams have been working with the Students union to reduce waste and the use of resources. Recent initiatives have included a discount being offered for students in the café if they bring their own cup and the installation of more water coolers at the School to reduce the amount of plastic bottles purchased. Over the past few years the Students Union has arranged a give and take days where unwanted clothing and equipment from students moving out of Sundial Court at the end of the year is passed to other students at Fresher's week with anything left over being given to charity.

The City of London's [Waste and Recycling](#) web pages including [Waste Strategy and Future Plans](#) included achieving Zero to landfill by 2025 and 50% of waste recycled or composted by 2020.

In the academic year 2019/20 the school produced 84 tonnes of waste with 37 tonnes recycled and composted and the residual 47 tonnes being sent to an energy from waste facility this giving a recycling rate of 43%. When we compare this to a total waste mass of 217 tonnes for the previous academic year we can easily see the impact of downtime due to Covid. However the drop in the recycling rate which was 50% in previous years is concerning, therefore we are planning a waste audit to establish why we are experiencing a drop in our recycling rate.

As the residual waste is being sent to an energy from waste plant this means the School is effectively sending zero to Landfill.

In light of our results we have set a target to achieve 50% recycled or composted in academic year 2021/22. Actions to achieve this target are described in our action plan.

Water

We have water meters to measure use for the Silk Street building, Milton Court and Sundial Court. Prior to 2016/17 we were not gathering or reporting water use data for Milton Court due to inconsistencies surrounding metering. For the Financial year 2016/17 we estimated Milton Court water use using by estimating against the use for the Silk Street Building, we have since located

the water meter for the site and since August 2018 we have accurate readings.

We believe there is scope for water reduction across the estate. As with energy we now have better control and understanding of our systems and reporting data. Our equipment has been serviced and repaired, addressing outstanding issues

In light of this we set a target of 5% water reduction by academic year 2020/21 compared to 2017/18. In 2019/20 we achieved a 20% reduction in water use compared to 2017/18. As the baseline for Milton Court was estimated we include the figure of 8% reduction achieved against 2017/18 for the estate excluding Milton Court

As we started to take meter readings for Milton Court in August 2018, we now have a full data set covering the academic year 2018/19.

The table below shows water use for the academic years 2018/19 and 2020/21 which we will use to measure improvement against.

Water use	2018/19	2019/20		
	m3	m3	Reduction	Reduction %age
Silk St	7,460	7,030	-430	-5.76%
Milton Court	5,014	4,439	-575	-11.47%
Sundial Court	9,214	5,751	-3,463	-37.58%
Total	21,688	17,220	-4,468	-20.60%

We have set a target of 5% water use reduction by academic year 2022/23 against the baseline of 2018/19 as it is likely that closures due to Covid will have an effect on use during 2020..

We are investigating the possibility of commissioning a water efficiency survey to identify where savings may be made along with the viability of installing ½ hourly water meters in order that the team can better understand use and identify areas of waste.

Travel and Transport

The Guildhall School is situated in the City of London's Square Mile. The City of London's [Transport Strategy](#) sets out the Corporation's strategy for transport in the Square Mile,

The last measurements of travel and transport occurred in 2018 & 2019; the results of commuter travel surveys are below with %age modal travel splits.

Modal Travel Spilt Student Survey 2018, Staff Survey 2019

	Walk	Bicycle	Public Transport	Car	Other	Total
No Staff Responses	11	27	177	5	2	222
Staff %age of total	5%	12%	80%	2%	1%	100%
No Student Responses	44	15	74	0	0	133
Student %age of total	33%	11%	56%	0%	0%	100%

Due to the School's location at the heart of the City of London, the data collected shows that the vast majority of travel to and from the School, both by staff and students was by public transport, cycling or walking. A fractional amount of travel is by car or taxi, and the School has no car-parking facilities of its own.

In light of the above we will focus activity to encourage an increase in walking and cycling. We have set a short term target to increase the number of students and staff cycling or walking by 5% by academic year 2022/23

These surveys, as well as measuring modal travel split also included an attitudes survey to gather information from student and staff as to the barriers to them choosing more sustainable travel options. Information from this activity will inform our action plan going forward. We will continue with awareness activity and will evaluate the need for infrastructure change following results from the surveys and will update our policies and action plans as appropriate.

Recent highlights included the Students Union running a Safety City Cycling workshop with City of London Police. Additionally this facilities team have refurbished the bicycle store to improve capacity and security and installed new cycling racks in Sundial court as well as installing a toolkit in order that staff and students can carry out basic maintenance.

The School has one diesel van which is used for local deliveries and pick-ups using less than 200 litres of diesel each year for the past 3 years. The School is currently working with the City of London to assess the viability of replacing this with an electric or hybrid vehicle.

Carbon Reduction Strategy

Scope 1 & 2

Scope 1 refers to direct emissions that occur from sources that are owned or controlled by the organisation, e.g. boilers, furnaces and vehicles

Scope 2 accounts for emissions from the generation of purchased electricity

The Carbon Reduction target set out in the School's Carbon Reduction Strategy requires a reduction of Scope 1 & 2 Carbon Emissions of 43% by academic year 2020/21 against a baseline year of 2005/06. This target is for the estate excluding Milton Court which was added to the estate after the baseline year. As reported to the Board of Governors in November 2019 we have exceeded this target in 2018/19 having achieved a 54% reduction.

The original targets relating to Milton Court as incorporated into the School's Carbon Reduction strategy were drawn from building design estimates made prior to opening which set out expected energy use.

The data shows the actual emissions for Milton Court in 2013/14 were 998.851 Tonnes an increase of 366.297, 57% over the design estimate and in 2017/18 830.411 Tonnes, 31% over the design estimate. There is an actual decrease in 2017/18 compared to 2013/14 of 16.86% representing an annual decrease of 4.22%. If we continue with this trajectory we will see the annual emissions for Milton Court in 2019/20 being 761.909 we have therefore revised the 2019/20 target for Milton Court and the enlarged estate to this figure.

The original design estimates for Milton Court would have made some assumptions regarding the use of the building. The use of the building (including utilisation and type of event) has evolved. The assumptions were, we understand from our research, based on the design estimates, and the targets were set accordingly and would not have taken into account the increased and diverse activity.

For the enlarged estate excluding Milton Court in 2019/20 we achieved a 64% reduction against our new baseline.

Scope 3

Scope 3 is all other indirect emissions that are a consequence of the activities of the company, but occur from sources not owned or controlled by the organisation. In our case this relates to commuter travel, water use and waste generation.

Travel

The data collected in 2014 and 2015 showed that the Guildhall School's total indirect greenhouse gas emissions (scope 3) in academic year 2014 arising from student transport activity amounted to 990.812 tonnes. When adding staff commuter travel and staff and student business travel from the 2014 survey, a grand total of 1751.819 tonnes is reached for total emissions arising from travel. This was an increase on previous years

The data also showed that 57% of the above greenhouse gas emissions are generated as a result of students travelling to and from their home addresses at the beginning and end of term. Given that more than a third of the School's

students are currently from outside the UK, representing over 40 nationalities, this is not a surprising statistic.

Consequently it is not considered feasible to expect a large reduction in greenhouse gas emissions from travel to be achievable.

The School nonetheless set a modest target for the reduction of total scope 3 indirect greenhouse gas emissions arising from transport of 8% by the academic year 2019/20 against the 2010 baseline. Given the change in methodology for the calculation of air transport, it was considered to be more realistic to set this target against the lower 2012 baseline of 958.918 tonnes, meaning that total indirect greenhouse gas emissions arising from transport should not exceed 882.205 tonnes in 2019/20. We are currently working with our colleagues at CoL to verify our 2019/20 figures.

Waste and Water

Prior to 2013 water use was mainly estimated against Barbican use, the Guildhall School Silk St Supply coming from the main Barbican supply. From 2013 we have metered data for Silk St and from 2018 for Milton Court, where we had previously been estimating on a consumption per m2 basis against the Silk St supply. Due to the more accurate and increased data, we have revised the baseline year to be 2013/14 with a 15% reduction target in emissions from water and waste water by 2019/20.

The table below shows a 45% reduction in emissions from use of water and waste water. This vastly exceeds our target, however these higher than expected efficiencies can be attributed to Covid closures. When we compare the periods August to January for 2019/20 against the same period of the baseline year we had already achieved a 14% reduction.

TOTAL TONNES CO2e WATER & WASTE WATER BY ACADEMIC YEAR				
	Tonnes CO2e			
	2013-14	2019/20	Reduction	Reduction %age
Water	10.96	6.01	-4.95	-45.20%
Waste Water	18.27	10.04	-8.23	-45.04%
Total	29.23	16.05	-13.18	-45.10%

We have over the years substantially exceeded our target for reduction of emissions from waste, this being due to waste previously sent to landfill now going to energy recovery, we therefore revised our target to be a 90% reduction in 2019/20 against the 2010/11 baseline of 69.427 tonnes – we achieved in 2019/20 a 99% reduction in emissions from waste compared to the baseline year, we understand that some of the efficiencies will be from reduced operations due to Covid, we therefore include the 2018/19 figure reduction of 96% compared to the baseline.

The current climate action strategy ran until 2020/21. New targets and milestones will be developed in line with the strategy of CoL and best practice.

Biodiversity

The City of London's [Biodiversity](#) web pages including [Biodiversity Action Plan](#) and [Biodiversity Public Consultation](#) set out our commitment to promoting biodiversity.

The School has open spaces which open out to a lakeside that provides a habitat for a variety of flora and fauna. In addition the rooftop allotment spaces utilised by students and staff have a number of flowering plants which attract bees from the adjacent Barbican Centre's colony.

Recently the students, the School and the local community worked with the City of London Corporation's Open Spaces team to create a suitable outdoor environment in the lakes and lakeside so encouraging the use by students, residents and the public whilst also supporting the biodiversity in and around the lakes. Investment to date has included repairs and replacements of pumps pipes and associate aerating equipment, the completion of over 600 maintenance jobs to the surrounding brickwork to UN standards and working on reed beds and planters so as to encourage wildlife and breeding. Results have included not only lots of positive feedback but also enhanced environment for the wildlife including fish, coots, mallards, herons, moorhens and a red squirrel has also been spotted. We are continuing to work with resident and student groups to further enhance this environment.

It is recognised that the School has an opportunity to better measure biodiversity in its open spaces and to work with the Barbican Centre and wider City of London Corporation's teams to achieve this as well as identifying ways to increase biodiversity on the School's estates.

Sustainable Procurement

As a department of the City of London Corporation the School works to the City's procurement policies and strategies including the [Responsible Procurement Policy](#) and [Single Use Plastics Policy](#)

The School's teams actively work with the city and have recently been involved with tenders to appoint Energy Broker for Electricity and Catering provision as well as having input into an ongoing waste contractor procurement process.

For the first time we have measured our emissions from procurement using the same methodology as the City of London the result being 2,321 tonnes CO₂e in 2018/19. Targets will be described in our new carbon management plan.

Construction and Refurbishment

We continue to work with the City to review our capital plans, all activity being in line with the City of London Corporation's strategies, details of which are detailed throughout the [City of London Corporation's](#) webpages.

We are also working with the City of London and other partners including the Barbican Centre to re-invigorate and transform inner city space through the introduction of our culture mile. This includes working with the City of London on LEN (Low Emissions Neighbourhoods) and others with the aim of reducing improving the environment in surrounding areas. This project includes the proposed refurbishment of the Barbican's Exhibition Halls for mixed use including education and community engagement projects. The Guildhall School is partnering with the Barbican in leading this project forward on behalf of the City of London Corporation.

For information on planning and construction please see link to the City of London's [Planning](#) webpages.

Student and Staff Engagement, Community Involvement & Student and Staff Engagement

The Sustainability Steering Group is made up of representatives from Both the Guildhall School and Barbican's teams and includes representation from the Student's Union and the School's Senior Management. The group, where appropriate and when local action cannot be taken will recommend actions to the School's Operations Board and/or Senior Management.

The group meets twice termly and is responsible for developing and maintaining policies and action plans to reduce the School's environmental impact. Another primary objective of the group is to raise awareness of sustainability issues amongst students and staff as well as providing a channel for ideas from others. The regular agenda items for meetings cover:

- Strategy which includes policy and action plan development and review, defining communications and awareness strategy plus monitoring data e.g. water and energy use, waste statistics and carbon reduction strategy amongst others.
- Innovation which includes proposed and ongoing activity to reduce environmental impact.

Recently it has become evident that there is an increasing appetite by staff and students to be more involved so we have set up in 2019 a new informal group so all staff and students have the opportunity to realise and define our strategy.

The School and the Barbican share many services therefore the alliance approach means that issues identified by one organisation can be shared

across both. Additionally this provides a conduit for sharing of best practice for example dissemination of ideas and information from Julie's Bicycle, Arts Council England's Sustainability partner.

Members of the Group also work closely with the City of London's teams particularly in the areas of energy and carbon management, waste management, refurbishment, biodiversity and procurement as described throughout this document.

Orientation for new students includes information about sustainable travel, recycling and general "green behaviour". A review of this material will be undertaken in the next period.

The Students Union have an active Environmental Society. Recent activity has included printing and distributing signs above recycling bins so that students are informed about what refuse goes into what bins, information is passed to students on switching lights off as well as refilling water bottles is passed to students as well as having organised a competition based around sustainability with fair trade Easter eggs given as prizes. Communications to students are sent by the Student Union President every Friday, these include environmental information and updates, as appropriate, plus the organiser of "Welfare Wednesday" also promotes environmental issues.

Additional areas where the student and staff body have been involved are described throughout this document.

On review of engagement activity, we currently undertake between 1 & 2 focussed awareness activities per annum, with many more ad-hoc activities taking place throughout the year. We have described the steps we will take to further develop our engagement activities with students, staff and stakeholders in our action plan and are aiming to achieve 3 targeted awareness activities per year by 2022/23, progress towards this targets will be monitored and tracked by the Sustainability Steering Group and will be reported to the School's Operations Board and Members of the Senior Team.

Sustainable Food

The School's rooftop allotments continue to be used by students and staff and are mainly used for growing produce. This is a vibrant space containing fruit, vegetables and flowers grown by the Students and staff. The School has provided the space and maintains this whilst the students have raised money which was invested in small equipment, plant food and compost for the allotment holders.

Over the last 2 years the School's facilities team have been working, in consultation with the students, to refurbish the area to improve walkways and access to the area. Later in the year we are looking into the potential for creating additional low level allotment plots by using recycled pallets to increase the opportunity for students to become involved.

In relation to our catering services we have been involved with the City of London tender to appoint a new catering contractor to the School. Tender specification documents featured questions on how standards on sustainability and assurance would be met including asking how Bronze level commitments of the Food for Life Served Here, or a similar scheme would be met. For additional information on procurement, please refer to the City of London's [Responsible Procurement Strategy](#).

The winning contractor, Baxter Storey committed to decentralised sourcing with the majority of fresh ingredients being sourced from within 60 miles. In addition they committed to achieving the Food for Life Bronze standard as a minimum within year 1 of the contract. Other pledges include

- 79% of suppliers being SME
- All eggs free range
- Milk and Meat is Red Tractor
- All meat UK reared and sourced
- All tuna pole and line caught
- All oil is UK rapeseed
- Fish is MSC certified
- Coffee 100% triple certified

Baxter Storey is [MSC certified](#).

Drinking water is available free to all students, staff and visitors at the café with Water Coolers and Water fountains situated throughout all the School's buildings.

From August 2020 Baxter Storey have tendered their notice, so we have as an interim measure Benugo who manage Cafés at the Barbican have taken on the role at short notice.

Community Engagement

For details of community partnerships please visit our [Knowledge Exchange](#) web pages.

Conclusions

This report highlights the recent and significant improvements made to the School's environmental sustainability management systems, communications and activity.

Significant investment has been made with the appointment of the Continual Improvement Manager for Sustainability along with significant financial allocation to maintain equipment and improve infrastructure.

The School continues to work with the City of London Corporation teams in various areas related to environmental sustainability including energy efficiency & carbon reduction, construction, maintenance and refurbishment, open spaces, procurement, waste management, health and safety and travel and transport.

In conclusion a lot has already been achieved and many areas where further improvements can be made have been identified in our Action Plan. We will continue to audit, monitor and measure progress and report as appropriate.

**Report from Continual Improvement Manager - Sustainability to Director of Buildings and Operations, Barbican Centre and Guildhall School of Music and Drama
September 2020**