

## **Guildhall School of Music and Drama Environmental Sustainability Review**

### **August 2018**

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 April 2018.

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](#), future reviews of the School's Environmental Sustainability Policy will be in line with the City' of London's Strategy.

Resources allocated by the School have been increased in the last 12 months to support sustainability activity particularly in relation to the appointment of the 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 or capital works programme process.

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

## **Energy**

For the past year we have been undertaking a 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 2017/18 compared to 2008/09

| Energy Comparisons 2017/18 compared to 2008/09 (Financial Year April to March) |           |           |           |               |
|--------------------------------------------------------------------------------|-----------|-----------|-----------|---------------|
|                                                                                | 2008/09   | 2017/18   | Reduction | %age reductio |
|                                                                                | kWh       | kWh       |           |               |
| Estate Non Residential Excluding Milton Court                                  | 2,733,530 | 2,194,030 | -539,500  | -19.74%       |
| Milton Court                                                                   | 0         | 3,476,049 | 3,476,049 | N/A           |
| Residential - Sundial Court                                                    | 1,834,891 | 1,533,986 | -300,905  | -16.40%       |
|                                                                                |           |           |           |               |
| Total Estate Residential                                                       | 2,733,530 | 5,670,079 | 2,936,549 | 107.43%       |
| Total Estate non residential                                                   | 1,834,891 | 1,533,986 | -300,905  | -16.40%       |
|                                                                                |           |           |           |               |
| Total Estate                                                                   | 4,568,421 | 7,204,065 | 2,635,644 | 57.69%        |

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 274,1053 kWh per annum by 2025/26 meaning a 75% reduction against current use over the next 7 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 2019/20 compared to 2017/18. 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 actively been involved with the recent tender to appoint a new energy broker for electricity. Subsequently the City of London has agreed plans to source 100% renewable electricity from October 2018 onwards. See link for news article <https://news.cityoflondon.gov.uk/city-corporation-goes-100-renewable/>

### **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 two years the Students Union has arranged a give and take day 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 Management Strategy](#) objectives include achieving Zero to landfill by 2025 and 50% of waste recycled or composted by 2020.

In the academic year 2016/17 the school produced 539 tonnes of waste with 257 tonnes recycled and composted and the residual 282 tonnes being sent to an energy from waste facility this giving a recycling rate of 48%.

As the residual waste is being sent to an energy from waste plant this means the School is effectively sending zero to Landfill. We are currently auditing our waste figures for 2017/18 and an update will be provided once these figures are verified.

In light of our results we have set a target to achieve 50% recycled or composted in academic year 2018/19. 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 have estimated the use for Milton Court against the reading taken at the end of August 2018 split over 5 years. As we get more data we believe we will be able to make a more accurate assessment of use.

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

As we started to take meter readings in August 2018, we will have a full data set covering the academic year by August 2019. In light of this we have set a target of 5% water reduction by academic year 2020/21 compared to 2017/18. The table below shows water use for the academic year 2017/18 which we will use to measure improvement against.

| Water use m3 for Academic Year 2017/18 |       |
|----------------------------------------|-------|
| Silk Street                            | 9,704 |
| Milton Court (estimated)               | 7,729 |
| Sundial court                          | 8,417 |

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 last measurements of travel and transport occurred in 2014 & 2015; the results of commuter travel surveys are below with %age modal travel splits.

| STUDENT TRAVEL SURVEY 2014 |         |            |     |           |                  |             |                  |         |           |
|----------------------------|---------|------------|-----|-----------|------------------|-------------|------------------|---------|-----------|
|                            | Bicycle | London Bus | Car | Motorbike | Train (u/ground) | Train (DLR) | Train (o/ground) | Walk    | Total     |
| Distance travelled km      | 247,644 | 137,258    | 0   | 143,059   | 741,312          | 63,766      | 1,174,476        | 181,361 | 2,688,877 |
| %age of total              | 9%      | 5%         | 0%  | 5%        | 28%              | 2%          | 44%              | 7%      | 100%      |

| Staff Travel Survey 2015 |         |            |               |         |           |                  |             |                  |        |       |            |
|--------------------------|---------|------------|---------------|---------|-----------|------------------|-------------|------------------|--------|-------|------------|
|                          | Bicycle | London Bus | National Rail | Car     | Motorbike | Train (u/ground) | Train (DLR) | Train (o/ground) | Walk   | Plane | Total      |
| Distance travelled km    | 110,654 | 151,296    | 0             | 376,791 | 136,257   | 704,909          | 27,922      | 12,041,146       | 27,536 | 2,380 | 13,578,891 |
| %age of total            | 1%      | 1%         | 0%            | 3%      | 1%        | 5%               | 0%          | 89%              | 0%     | 0%    |            |

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 are planning a survey in 2018/2019 academic year. This survey, as well as measuring scope 3 carbon emissions and modal travel split will also include 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.

Highlights in 2018 included the Students Union running a Safety City Cycling workshop with City of London Police. Additionally this year the facilities team have refurbished the bicycle store to improve capacity and security.

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 earlier this year we have exceeded this target having achieved a 47% reduction in 2016/17.

The 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. We have yet to achieve this aspiration for Milton Court which in 2016/17 carbon emissions were 52% above the original estimate.

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 information the Display Energy Certificate for Milton Court produced in 2017 is a C73, a typical rating for a building with comparable operations is D100. This means that Milton Court is, in fact, operating more efficiently than "typical".

We are auditing our figures for academic year 2017/18 prior to submitting to EMR – however early indications calculated using DEFRA conversion factors for 2018 show that we have continued to make carbon reductions.

### 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. This target will be closely monitored during the next reporting period. We are planning surveys and analysis of staff, student commuter and business travel for 2018/19. Results from this activity will inform reviews of our related policies and strategies.

### Waste and Water

Our Carbon Reduction Strategy states a reduction of 30% combined scope 3 emissions from waste, water and waste water by 2019/20 against a 2010/11 baseline. You will see

from the table below that we have achieved beyond what was originally expected achieving a 75% reduction. This due to DEFRA conversion factors being significantly lower for waste going to an energy from waste plant compared to landfill, which was the case in 2011. We will review our targets in the next review of our carbon reduction strategy.

| Comparison of Scope 3 Carbon Emissions from<br>waste water and waste water |             |         |
|----------------------------------------------------------------------------|-------------|---------|
|                                                                            | Tonnes Co2e |         |
|                                                                            | 2010/11     | 2016/17 |
| Water and Waste water                                                      | 8.615       | 19.08   |
| Waste                                                                      | 114.411     | 11.76   |
| Total                                                                      | 123.026     | 30.84   |

## **Biodiversity**

The City of London's [Biodiversity Action Plan](#) sets 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 Strategy](#) and [Procurement Policy to Support the City of London Air Quality Strategy](#).

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.

## **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 on the City of London's [Sustainable City](#) webpages.

We are also working with the City of London and other partners including the Royal Shakespeare Company and 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 pollution in the Beech Street Tunnel and 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.

We are also working with the City of London Corporation and the Barbican Centre to design a new Centre for Music which will form part of the Culture Mile. This new venue will be designed to include community space, education space and will be designed so as to meet appropriate environmental standards. For information on planning and construction please see link to the City of London's [Environment and 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.

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 and biodiversity and procurement as described throughout this document.

A recent and regular topic of discussion at Sustainability Steering Group meeting is how we can involve more members of staff in the group; we are currently evaluating how we might achieve this without the Sustainability Steering Group becoming unwieldy. Current thinking is that we develop a more informal "Environmental Champion" team which reports into and works closely with members of the Sustainability Steering Group.

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 2019/20, 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.

In 2018 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 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 recently 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 has committed to decentralised sourcing with the majority of fresh ingredients being sourced from within 60 miles. In addition they have 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

Once the contract has been embedded an audit will be carried out in consultation with the city of London to ascertain how the contractor is meeting its commitments.

Our current contractor, 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.

## **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. We will also be working particularly closely with the City of London over the forthcoming period to ensure that their responsible business strategy is firmly embedded at the School.

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 Project Manager to Director of Buildings and Operations, Barbican Centre and Guildhall School of Music and Drama  
August 2018**