

Committee: Board of Governors of the Guildhall School of Music & Drama	Date: 24 February 2014
Subject: Guildhall School Carbon Reduction Strategy	Public
Report of: The Director of Operations and Buildings, Barbican / Guildhall School of Music & Drama	For Decision
<p style="text-align: center;"><u>SUMMARY</u></p> <p>The Guildhall School's original Carbon Reduction Strategy was first approved and published in February 2011 and has since been revised on an annual basis. This report and associated update of the Carbon Reduction Strategy 2011-2020 (Annex A) is the third revision. It includes:</p> <ul style="list-style-type: none"> • an update on progress achieved so far, showing that scope 1 and 2 direct greenhouse gas emissions were reduced to 31.56% below the 2005 baseline in 2011/12 , thus achieving the first interim milestone of a 31% reduction. In the 2012/13 period this reduction has reduced to 28% of baseline, this can be attributed to the colder winter conditions in this period. A degree day comparison with the 2005 baseline year shows a 31% increase in degree days for 2013. • The results of the 2013 staff travel survey show an overall increase in carbon when compared to previous surveys. However when the increase in staff numbers is accounted for there is a decrease in carbon impact. • a continuation of the reduction target of 8% by 2020 for indirect greenhouse gas emissions arising from transport, and of 30% for those arising from water and waste. <p>As required by the Higher Education Funding Council for England, Carbon Reduction Strategies and their revisions should be approved by the HE institution's governing body.</p>	

Recommendation

It is recommended that the Board of Governors approve the revised Carbon Reduction Strategy attached at Annex A.

MAIN REPORT

1. The UK Climate Change Act of 2008 created legally binding targets to reduce carbon emissions by 34% by 2020 and by 80% by 2050 against a 1990 baseline. The HE sector has resolved that it must be in the vanguard of efforts to achieve these targets and, after widespread consultation, HEFCE has facilitated the setting and adoption of sector-level carbon reduction targets for scope 1 and 2 emissions of 43% by 2020 and 83% by 2050, both against a 2005 baseline.
2. The Higher Education Funding Council for England has required that each HE institution puts in place a carbon reduction strategy, containing targets that are in the context of the overall sector targets but which are realistic for each institution. Institutions that did not have an approved Carbon Reduction Strategy in place by 31 March 2011 were at risk of 40% of their capital funding from HEFCE being withheld. HEFCE will also monitor on annual basis how well institutions are performing against their carbon reduction targets.
3. The financial incentives for the Guildhall School to reduce carbon emissions are immediate, since it is owned and governed by the City of London Corporation which falls into the scope of the Government's Carbon Reduction Commitment Energy Efficiency Scheme. This scheme requires organisations to buy allowances from Government each year to cover their carbon emissions in the previous year. With the addition of Milton Court to the estate in September 2013 the cost for the CRC is estimated to be in the region of £25,000 for the 12/13 year . The price of allowances is likely to rise each year reinforcing the incentive to reduce consumption and hence the costs of both the allowances and the energy itself.
4. The Guildhall School has analysed its historical data and, in the first version of this strategy published in February 2011, agreed to set a carbon reduction target for scope 1 and 2 emissions

arising from its existing estate of 30% by 2020. Having already achieved extremely good reductions in these emissions by 2010/11, the second revision of the strategy increased the target for these emissions to 43% by 2020. This reduction is to be measured against a 2005 baseline, i.e. the School's scope 1 and 2 emissions in 2020 must be 43% lower than the equivalent emissions were in 2005.

5. The School also set interim milestones towards achieving its 2020 target as follows:
 - 31% reduction by 2011/12, equating to a maximum of 1,412.806 tonnes
 - 38% reduction by 2015/16, equating to a maximum of 1,269.478 tonnes
 - 43% reduction by 2019/20, equating to a maximum of 1,167.101 tonnes
6. The second revision of the strategy, reported that in 2011/12, the School achieved a further reduction of 3.95% to 1,401,352 tonnes, which represented a reduction of 31.56% against the 2005 baseline. The School therefore achieved its first milestone, and will continue to strive towards the overall target of 43% by 2019/20.
7. For the first time, the second revision of the strategy also included a carbon reduction target of 8% for scope 3 emissions arising from transport and of 30% arising from water and waste. These reductions were to be measured against a 2010 baseline.
8. The second revision of the strategy included the results of the second student travel survey in October 2012, which incorporated significant changes to the way the emissions from air transport are calculated. Whilst the 8% target for reducing emissions from transport is still appropriate, it is now more realistic to measure it against the lower 2012 baseline in the future.
9. Since the first publication of this strategy emissions arising from water, waste water and waste have reduced dramatically. This is because the City of London is now sending its non-recyclable waste for incineration at an energy from waste combined heat

and power plant in South East London, instead of to landfill. Given that the School's 30% reduction target has already been achieved, it is highly likely that the School should revise it. However, as there is still only a small amount of data available, this target will be reviewed after a larger dataset has been achieved over a longer period of years.

10. The last update of the Carbon reduction strategy made some estimates from the design engineers on the annual greenhouse gas emissions for the new Milton Court site at 632,554T of CO₂. Early indications, from the energy profiles recorded since September 2013, are that there will be significant increases on this estimated figure. Cause are being attributed to system commissioning difficulties and the more intensive and extended use of the space when compared to the original model.
11. The strategy will be further revised in the future to include a target for emissions arising from procurement, once a sector-wide approach has been agreed.
12. Implementation plans have been created to achieve these targets, which include behavioural change as well as technical interventions. It is anticipated that the majority of the funding for technical interventions will come from the School's strategic capital programme – the 'capital cap'. The technical interventions forming part of our action plans will include
 - Voltage Optimisation
 - Water saving measures (water saving shower and tap controls)
 - A progressive change to low energy LED luminaires where appropriate.
 - Energy Monitoring and Targeting software

Consultees

13. The original strategy was created in close consultation with the City of London's Energy Management Team in the City Surveyor's department, to which each revision is submitted for the purposes of corporate monitoring.

Contact:

Michael Dick, Director of Operations and Buildings, Barbican / Guildhall
School of Music & Drama,
T: 020 7382 7291, michael.dick@barbican.org