

Board of Governors of the Guildhall School of Music and Drama

Date: MONDAY, 24 FEBRUARY 2014

Time: 1.45 pm

Venue: COMMITTEE ROOM - 2ND FLOOR WEST WING, GUILDHALL

Members: Alderman David Graves Paul Hughes

(Chairman)Professor Barry IfeDeputy John BennettPamela Lidiard(Deputy Chairman)Jeremy MayhewDeputy John BarkerKathryn McDowellSir Andrew BurnsAnn PembrokeDeputy John ChapmanJohn ScottChristina CokerJeremy Simons

Christina Coker Jeremy Simons

Neil Constable Angela Starling

Ieuan Davies The Rt Hon the Lord Mayor Alderman Fiona

Daniel Evans V

Marianne Fredericks

Gareth Higgins

Woolf

VVOC

Enquiries: Rakesh Hira

tel. no.: 020 7332 1408

rakesh.hira@cityoflondon.gov.uk

Lunch will be served in the Guildhall Club at 1pm

John Barradell
Town Clerk and Chief Executive

Principal's Introduction to the Agenda

At this stage in the cycle we take stock of the continuing students and new admissions that make up the 2013/14 cohort. These data are reported every year to the Higher Education Students Early Survey (HESES) after the national census date of 1 December. The annual HESES report forms the basis for the HEFCE capitation grant and at the end of every year we report completions so that data can be reconciled. A summary of this year's student population is given in the appendix to my general report (item 10). There are no issues of concern and student numbers continue to grow in line with the forecasts that underlie the long-term financial plan agreed by the City Corporation in April 2013.

We have also started our annual programme of 'reality checks' on admissions for 2014/15. Applications in drama are still open and it is too soon to come to any conclusions about next year's intake. However, offers and acceptances for undergraduate music suggest that intake targets for autumn 2014 will be met, while there are still a large number of offers for postgraduate music awaiting decision. The picture will become clearer as time progresses and applications from good students are always welcome. Applications for postgraduate music rose 14%, which is a good sign of our standing in the profession.

We are reviewing our admissions procedures following the management team's decision not to join the national admissions system CUKAS. However, data from the CUKAS annual report suggest that our systems are appreciably more effective than those of our immediate competitors (item 10). In order to maintain our visibility in the market, we have reviewed our brand values and have engaged Pentagram to advise us on visual identity (item 18). We are also reviewing our fundraising case for support with the More Partnership, since pressure on our scholarships fund remains high (item 20).

Financially, the position is tight but sustainable at present: we expect to achieve break even at the end of the current financial year and at the time of writing we aim to present a balanced budget for 2014/15 (items 21 and 22). The School has met most of its obligations under the 2012/13 Access agreement with the Office for Fair Access (OFFA) (item 19) and has improved its position in the green league tables (item 11).

A copy of the 2012/13 Annual Report will be available at the meeting.

Those items which it is proposed can be approved or noted without discussion are marked with a star (*). It is open to any Governor to request that an item be unstarred and subject to discussion. Governors may inform the Town Clerk of this request prior to the meeting, or the Chairman at the start of the meeting.

Part 1 - Public Agenda

1. APOLOGIES

2. MEMBERS' DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THE AGENDA

3. PUBLIC MINUTES

To agree the public minutes and summary of the meeting held on 18 November 2013.

For Decision

(Pages 1 - 8)

4. *PUBLIC MINUTES OF THE AUDIT & RISK MANAGEMENT COMMITTEE

To receive the public minutes of the Audit & Risk Management Committee held on 20 January 2014.

For Information (Pages 9 - 12)

5. *PUBLIC MINUTES OF THE FINANCE & RESOURCES COMMITTEE

To receive the public minutes of the Finance & Resources Committee held on 24 January 2014.

For Information (Pages 13 - 14)

6. *MINUTES OF THE SKILLS WORKING PARTY

To receive the minutes of the Skills Working Party held on 14 February 2014 (To Follow).

For Information

7. *RESOLUTION FROM THE POLICY & RESOURCES COMMITTEE

To receive the resolution from the Policy & Resources Committee relative to the Cultural Hub Working Party.

For Information (Pages 15 - 16)

8. CORPORATE GOVERNANCE - SCHEME OF DELEGATIONS AND STANDING ORDERS

Report of the Town Clerk.

For Decision (Pages 17 - 20)

9. **DECISIONS TAKEN UNDER URGENCY PROCEDURES**

Report of the Town Clerk.

For Information (Pages 21 - 22)

10. PRINCIPAL'S GENERAL REPORT

Report of the Principal.

For Information (Pages 23 - 34)

11. ANNUAL REVIEW OF CARBON REDUCTION STRATEGY

Report of the Director of Operations and Buildings.

For Decision (Pages 35 - 78)

12. QUESTIONS ON MATTERS RELATING TO THE WORK OF THE BOARD

13. ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT

14. EXCLUSION OF THE PUBLIC

MOTION - That under Section 100A(4) of the Local Government Act 1972, the public be excluded from the meeting for the following items of business on the grounds that they involve the likely disclosure of exempt information as defined in Part I of Schedule 12A of the Local Government Act.

Part 2 - Non Public Agenda

15. NON PUBLIC MINUTES

To agree the non-public minutes of the meeting held on 18 November 2013.

For Decision (Pages 79 - 84)

16. *NON PUBLIC MINUTES OF THE AUDIT & RISK MANAGEMENT COMMITTEE

To receive the non-public minutes of the Audit & Risk Management Committee held on 20 January 2014.

For Information (Pages 85 - 88)

17. *NON PUBLIC MINUTES OF THE FINANCE & RESOURCES COMMITTEE

To receive the non-public minutes of the Finance & Resources Committee held on 24 January 2014.

For Information

(Pages 89 - 90)

18. VISUAL IDENTITY - PROGRESS REPORT

Oral presentation by Pentagram.

For Information

19. MONITORING RETURN FOR THE 2012/13 ACCESS AGREEMENT AND INTERIM WIDENING PARTICIPATION STRATEGIC STATEMENT (IWPSS)

Report of the Principal.

For Information

(Pages 91 - 108)

20. GUILDHALL SCHOOL SCHOLARSHIPS FUND 2013/14

Report of the Principal.

For Information

(Pages 109 - 114)

21. **BUDGET UPDATE 2014/15**

Report of the Chief Operating & Financial Officer (To Follow).

For Information

22. FINANCE REVIEW

Report of the Chief Operating & Financial Officer.

For Information

(Pages 115 - 122)

23. **DECISIONS TAKEN UNDER DELEGATED AUTHORITY**

Report of the Town Clerk.

For Information (Pages 123 - 124)

24. NON PUBLIC QUESTIONS ON MATTERS RELATING TO THE WORK OF THE BOARD

25. ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT AND WHICH THE BOARD AGREE SHOULD BE CONSIDERED WHILST THE PUBLIC ARE EXCLUDED

Governors Only

26. **CONFIDENTIAL MINUTES**

To agree the confidential 'Governors Only' minutes of the meeting held on 18 November 2013.

For Decision

BOARD OF GOVERNORS OF THE GUILDHALL SCHOOL OF MUSIC AND DRAMA

Monday, 18 November 2013

Minutes of the meeting of the Board of Governors of the Guildhall School of Music and Drama held at Guildhall, EC2 on Monday, 18 November 2013 at 1.45pm

Present

Members:

Alderman David Graves (Chairman)
Deputy John Bennett (Deputy Chairman)
Deputy John Barker
Sir Andrew Burns
Deputy John Chapman
Christina Coker
Neil Constable
leuan Davies
Marianne Fredericks

Gareth Higgins
Professor Barry Ife
Pamela Lidiard
Kathryn McDowell
Ann Pembroke
John Scott
Jeremy Simons
Angela Starling

In Attendance

Nicy Roberts Peter Young

Officers:

Rakesh Hira - Town Clerk's Department
Daniel Hooper - Town Clerk's Department

Deborah Cluett - Comptroller and City Solicitor's Department

Niki Cornwell - Chamberlain's Department

Sandeep Dwesar - Guildhall School of Music & Drama
Jonathan Vaughan - Guildhall School of Music & Drama
Christian Burgess - Guildhall School of Music & Drama
Clive Russell - Guildhall School of Music & Drama
Sean Gregory - Guildhall School of Music & Drama

1. APOLOGIES

Apologies were received from Daniel Evans, Paul Hughes, Jeremy Mayhew and The Rt. Hon The Lord Mayor, Alderman Fiona Woolf.

2. MEMBERS' DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THE AGENDA

Nicy Roberts declared her personal interest as a member of the CYM Monitoring Group, editor of the CYM newsletter UPBEAT, and organiser of the LSSO Alumni database (this was a standing declaration).

3. **PUBLIC MINUTES**

The public minutes and non-public summary of the meeting held on 18 September 2013 were approved as a correct record subject to the following amendments:

- a) Listing Nicy Roberts, CYM representative, as in attendance.
- b) Under item 8, Principal's General Report, correcting the total number of snagging items to 6098 and not 6038.
- c) Under item 9, Children and Young People Safeguarding Policy, the resolution be amended to read that Christina Coker and Marianne Fredericks be appointed lead Governors for Child Safeguarding and Vulnerable Adults.

4. REMUNERATION COMMITTEE

4.1 Public Minutes of the Remuneration Committee

The public minutes of the Remuneration Committee meeting held on 24 September 2013 were received.

RESOLVED – That Deputy John Chapman be elected to serve on the Remuneration Committee of the Board of Governors of the Guildhall School of Music and Drama.

4.2 Terms of Reference of the Remuneration Committee

Governors considered the Terms of Reference of the Remuneration Committee.

RESOLVED – That the Terms of Reference of the Remuneration Committee were approved.

5. *PUBLIC MINUTES OF THE AUDIT & RISK MANAGEMENT COMMITTEE

The public minutes of the Audit & Risk Management Committee meeting held on 4 November 2013 were received.

6. *PUBLIC MINUTES OF THE FINANCE & RESOURCES COMMITTEE

The public minutes of the Finance & Resources Committee meeting held on 4 November 2013 were received.

7. TERMS OF REFERENCE OF THE BOARD OF GOVERNORS OF THE GUILDHALL SCHOOL OF MUSIC & DRAMA AND FREQUENCY OF MEETINGS

The Committee received a report of the Town Clerk which informed Members that as part of the post-implementation review of the changes made to the governance arrangements in 2011 it was agreed that all Committees should review their terms of reference.

RESOLVED: That Members:

- a) approve the Terms of Reference for submission to the Court.
- b) did not wish to delegate any changes to the Terms of Reference or change the frequency of the Board's meetings.

8. PRINCIPAL'S GENERAL REPORT

A report of the Principal updated Governors on a number of general issues which included:

- · Awards and Prizes
- 2013/14 recruitment
- Applications for 2014
- Opening of Milton Court
- Operational priorities for 2013/14 session

The Principal reported that there had been a 6.4% increase in the student body and applications for 2014 were positively encouraging. A number of operational priorities had been identified, set out at paragraph 5 of the report, with a report being submitted to the next Board meeting on the review of the visual identity of the School.

In relation to Milton Court there were now 464 snagging items and that the two main issues related to the excessive heat in the Theatre Fly Tower and the leaks into the plant room from the pavement above Silk Street.

In response to a question from a Governor on the increase in the number of applicants, it was noted that a number of auditions had taken place in Hong Kong and the positive relationship with the LSO had played a key factor.

A discussion took place on the recruitment figures for 2013/14 and it was agreed that greater clarity should be provided in future reports on the students who were enrolled and/or temporarily enrolled.

9. TEACHING & LEARNING BOARD ANNUAL REPORT 2012//2013

The Principal introduced the Teaching & Learning Board Annual report for 2012/13. The report listed the activities of the Board during the last academic year including its consideration of data for the 2012 admissions cycle and the

2011/12 assessment cycle. The assessment outcomes and External Examiner comments from the most recent assessment cycle, 2012/13 were also included.

In response to a question by the Chairman, the Principal reported that if the TDAP process was successful there would be a change in the governance arrangements and the number of degrees validated or complaints received would be submitted to the Board.

A discussion took place and the Principal explained that the external examiners reports were sent to City University and thereafter sent on to the relevant programme boards.

10. RESEARCH AND KNOWLEDGE EXCHANGE COMMITTEE ANNUAL REPORT 2012-13

The Principal introduced the Research and Knowledge Exchange Committee's annual report for 2012/13. The Research & Knowledge Exchange Committee advises the Teaching & Learning Board on the role of research & knowledge exchange in the School's Strategic Plan and also on policy and its implementation. It advises the Teaching & Learning Board on the development of the School's research programmes and monitors the admissions and progress of research students. It commissions funds and evaluates research activity in the School and oversees the preparation of research bids to external bodies.

Governors commented that this was an impressive piece of work and thanked officers for the work being undertaken.

11. HEFCE ANNUAL ACCOUNTABILITY RETURN 2013

A report of the Chief Operating & Financial Officer noted that the School is required by statute to submit to HEFCE a series of annual accountability returns to enable HEFCE to assess Higher Education Institution's (HEI's) compliance with their requirements. The various returns covered corporate strategy, financial performance, financial sustainability, risk management, control and governance, value for money, and the management and quality assurance of data

The 2013 Annual Accountability Returns for submission to HEFCE by 1 December 2013 comprised the following documents:

- Annual Assurance Return signed by the School's accountable officer (the Principal)
- Signed audited financial statements
- Completed financial results and forecast tables
- Financial commentary
- Audit & Risk Management Committee Annual Report
- External Audit Management Letter
- Internal Audit Report

11.1 Annual Assurance Return

A report of the Chief Operating and Financial Officer was considered which confirmed that the School had met its obligations to the Higher Education Funding Council for England (HEFCE) under the Financial Memorandum thus enabling HEFCE to fulfil its responsibility as principal regulator.

RESOLVED – That Governors note the contents of the report.

11.2 Audited Financial Statements

A report of the Chief Operating & Financial Officer was considered regarding the Reports and Financial Statements for the year ended 31 July 2013.

RESOLVED – That the audited financial statements be approved.

11.3 Internal Audit Update

A report of the Chamberlain which had been prepared in accordance with the HEFCE Code of Practice for Accountability and Audit was considered. It provided Governors with details of the internal audit work undertaken at the School during the academic year ended 31st July 2013, with the intention of providing an opinion on the adequacy and effectiveness of risk management, control and governance, economy, efficiency and effectiveness.

RESOLVED – That Governors note the contents of the report.

12. **QUESTIONS ON MATTERS RELATING TO THE WORK OF THE BOARD** There were no questions.

13. ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT

Cultural Hub Working Party

The Chairman explained that a report had been submitted to the Policy & Resources Committee on the establishment of a Cultural Hub Working Party and sought one representative from the Board, in addition to the Principal, to sit on the Working Party.

RESOLVED – That the Chairman, Alderman David Graves, be appointed to serve on the Cultural Hub Working Party as the representative from the Board of Governors of the Guildhall School of Music & Drama.

14. EXCLUSION OF THE PUBLIC

RESOLVED – That under Section 100A(4) of the Local Government Act 1972, the public be excluded from the meeting for the following items of business on the grounds that they involve the likely disclosure of exempt information as defined in Paragraph 3 of Part I of Schedule 12A of the Local Government Act as follows:-

Item	Paragraph		
15-21	3		
22-23	-		
24	1,4&7		
25	2&3		

15. NON PUBLIC MINUTES

The non-public minutes of the meeting held on 18 September 2013 were approved as a correct record.

16. *NON PUBLIC MINUTES OF THE REMUNERATION COMMITTEE

The non-public minutes of the Remuneration Committee held on 24 September 2013 were received.

17. *NON PUBLIC MINUTES OF THE AUDIT & RISK MANAGEMENT COMMITTEE

The non-public minutes of the Audit & Risk Management Committee held on 4 November 2013 were received.

18. *NON PUBLIC MINUTES OF THE FINANCE & RESOURCES COMMITTEE

The non-public minutes of the Finance & Resources Committee held on 4 November 2013 were received.

19. HEFCE ANNUAL ACCOUNTABILITY RETURN 2013

19.1 **Accounts Direction**

A report of the Principal was received.

19.2 **Financial Results, Forecast Tables and Financial Commentary** A report of the Chief Operating & Financial Officer was received.

7. Toport of the office operating a financial officer was received.

19.3 Audit & Risk Management Committee - Annual Report A report of the Chief Operating & Financial Officer was received.

A report of the Office Operating & Financial Officer was received

19.4 Economy, Efficiency and Effectiveness

A report of the Chief Operating & Financial Officer was received.

19.5 **Letters of Representation**

A report of the Chief Operating & Financial Officer was received.

20. GUILDHALL SCHOOL BUDGET REPORT - 2014/15

A report of the Chief Operating & Financial Officer was received.

21. FINANCE REVIEW

A report of the Chief Operating & Financial Officer was received.

22. NON PUBLIC QUESTIONS ON MATTERS RELATING TO THE WORK OF THE BOARD

There were no questions.

23. ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT AND WHICH THE BOARD AGREE SHOULD BE CONSIDERED WHILST THE PUBLIC ARE EXCLUDED

One urgent item was considered.

24. **CONFIDENTIAL MINUTES**

The confidential 'Governors Only' minutes of the meeting held on 18 September 2013 were approved as a correct record.

EXTENSION OF THE MEETING

In accordance with Standing Order 40, the Board agreed to extend the meeting beyond two hours.

25. CONFIDENTIAL REPORT

A report of the Principal was considered and approved.

The meeting ended at 4.00pm				
Chairman				

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AUDIT AND RISK MANAGEMENT COMMITTEE OF THE BOARD OF GOVERNORS OF THE GUILDHALL SCHOOL OF MUSIC & DRAMA

Monday, 20 January 2014

Minutes of the meeting of the Audit and Risk Management Committee of the Board of Governors of the Guildhall School of Music & Drama held at Guildhall, EC2 on Monday, 20 January 2014 at 1.45pm

Present

Members:

Jeremy Simons (Chairman) Christina Coker Neil Constable (Deputy Chairman) Angela Starling

In Attendance

Alderman David Graves Deputy John Bennett

Officers:

Rakesh Hira - Town Clerk's Department

Sandeep Dwesar - Guildhall School of Music & Drama
Clive Russell - Guildhall School of Music & Drama

Suzanne Jones - Chamberlain's Department
Paul Nagle - Chamberlain's Department
Niki Cornwell - Chamberlain's Department
Cirla Peall - Chamberlain's Department

1. APOLOGIES

There were no apologies.

2. MEMBERS' DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THE AGENDA

There were no declarations.

3. PUBLIC MINUTES

The public minutes of the meeting held on 4 November 2013 were approved.

Matters Arising

Audit & Risk Management Committee – Vacancy

The vacancy which currently existed on this Committee would be filled at the May Board meeting.

4. INTERNAL AUDIT UPDATE

A report of the Chamberlain which provided Governors with an update of the progress of the Internal Audit reviews undertaken within the Guildhall School since the last report made in July 2013 was considered.

The Head of Audit & Risk Management explained that the original review in April 2012 had identified 17 recommendations, of which fifteen had been fully implemented and two had been partially implemented which related to the network and system security and un-patched software.

A discussion took place on the draft internal audit plan 2014/19 and it was noted that whilst the Milton Court income audit was scheduled for approximately 20 days in 2014/15 this may be extended to undertake an audit on the commercial side and potentially on the enterprise and music hub areas too.

In response to a question it was noted that the Value for Money Initiatives audit may be undertaken sooner than the planned audit in 2017/18 if useful audit projects were identified in liaison with the School's management team.

In response to a question by the Chairman, in relation to the fraud awareness training, the Chief Operating & Financial Officer reported that once 49 members of staff had completed the manual training the overall number of employees who would have completed the e-learning and manual training would be at 90%.

RESOLVED – That the report be noted and an amended internal audit plan for 2014/19 be submitted to the July 2014 meeting.

5. QUESTIONS ON MATTERS RELATING TO THE WORK OF THE AUDIT & RISK MANAGEMENT COMMITTEE

There were no questions.

6. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT** There were no urgent items.

7. EXCLUSION OF THE PUBLIC

RESOLVED – That under Section 100A(4) of the Local Government Act 1972, the public be excluded from the meeting for the following items of business on the grounds that they involve the likely disclosure of exempt information as defined in Paragraph 3 of Part I of Schedule 12A of the Local Government Act as follows:-

Item	Paragraph		
8-11	3		
12-13	-		

8. NON PUBLIC MINUTES

The non-public minutes of the meeting held on 4 November 2013 were approved.

9. ANNUAL TRANSPARENT APPROACH TO COSTING (TRAC) RETURN REPORTING FOR ACADEMIC YEAR 2012/13

A report of the Principal was considered and agreed.

10. GUILDHALL SCHOOL OF MUSIC & DRAMA - RISK UPDATE

A report of the Chief Operating & Financial Officer was received.

11. FINANCE REVIEW

A report of the Chief Operating & Financial Officer was received.

12. NON PUBLIC QUESTIONS ON MATTERS RELATING TO THE WORK OF THE AUDIT & RISK MANAGEMENT COMMITTEE

There were no questions.

13. ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT AND WHICH THE SUB COMMITTEE AGREE SHOULD BE CONSIDERED WHILST THE PUBLIC ARE EXCLUDED

There were no urgent items.

The meeting ended at 2.41pm				
Chairman				

Contact Officer: Rakesh Hira

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FINANCE AND RESOURCES COMMITTEE OF THE BOARD OF GOVERNORS OF THE GUILDHALL SCHOOL OF MUSIC & DRAMA

Friday, 24 January 2014

Minutes of the meeting of the Finance and Resources Committee of the Board of Governors of the Guildhall School of Music & Drama held at Committee Rooms, 2nd Floor, West Wing, Guildhall on Friday, 24 January 2014 at 1.45pm

Present

Members:

Alderman David Graves (Chairman)

Deputy John Bennett (Deputy Chairman)

Deputy John Chapman

Marianne Fredericks

Jeremy Mayhew

John Scott

Officers:

Rakesh Hira - Town Clerk's Department
Katie Odling - Town Clerk's Department
Niki Cornwell - Chamberlain's Department

Sandeep Dwesar - Guildhall School of Music & Drama

1. APOLOGIES

Apologies were received from Sir Andrew Burns and Barry Ife.

2. MEMBERS' DECLARATIONS UNDER THE CODE OF CONDUCT IN RESPECT OF ITEMS ON THE AGENDA

There were no declarations.

3. PUBLIC MINUTES

The public minutes of the meeting held on 4 November 2013 were approved as a correct record.

4. QUESTIONS ON MATTERS RELATING TO THE WORK OF THE FINANCE & RESOURCES COMMITTEE

There were no questions.

5. **ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT**There were no urgent items.

6. EXCLUSION OF THE PUBLIC

RESOLVED – That under Section 100A(4) of the Local Government Act 1972, the public be excluded from the meeting for the following items of business on the grounds that they involve the likely disclosure of exempt information as defined in Paragraph 3 of Part I of Schedule 12A of the Local Government Act as follows:-

Item	Paragraph		
7-8	3		
9-10	-		

7. NON PUBLIC MINUTES

The non-public minutes of the meeting held on 4 November 2013 were approved as a correct record.

8. FINANCE REVIEW AND UPDATE ON 2014/15 BUDGET

A report of the Chief Operating & Financial Officer was received.

9. NON PUBLIC QUESTIONS ON MATTERS RELATING TO THE WORK OF THE FINANCE & RESOURCES COMMITTEE

There were no questions.

10. ANY OTHER BUSINESS THAT THE CHAIRMAN CONSIDERS URGENT AND WHICH THE SUB COMMITTEE AGREE SHOULD BE CONSIDERED WHILST THE PUBLIC ARE EXCLUDED

There were no urgent items.

The meeting ended at 2.55pm				
Chairman				

Contact Officer: Katie Odling

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Agenda Item 7

TO: BARICAN CENTRE BOARD Wednesday, 27 November 2013

BOARD OF GOVERNORS OF THE Wednesday, 4 December 2013

MUSEUM OF LONDON

CULTURE HERITAGE AND LIBRARIES Wednesday, 4 December 2013

COMMITTEE

BOARD OF GOVERNORS OF THE
GUILDHALL SCHOOL OF MUSIC AND
Monday, 24 February 2014

DRAMA

FROM: POLICY AND RESOURCES COMMITTEE

CULTURAL HUB WORKING PARTY

The Committee considered a report of the Town Clerk concerning the creation of a Cultural Hub Working Party to oversee the strategy for developing a cultural hub in the City.

A Deputy Chairman referred to the composition of the Working Party and suggested that given the significance of the creation of a cultural hub, one of the Committee's places on it should be allocated to the Chairman of the Policy and Resources Committee or to one of the Deputy Chairmen. Further discussion ensued and it was agreed that given the importance of this project, in addition to the appointment of two representatives, the Working Party should be chaired by the Chairman of this Committee.

The Committee also agreed to the Principal of the Guildhall School Music and Drama and the Director of Culture, Heritage and Libraries serving on the Working Party.

RESOLVED – That:-

- a working party be established to oversee the development of a cultural hub based on the Barbican area to coordinate improvements to the street scene, links to future transport infrastructure developments, and increased collaboration between the cultural institutions in and around that area;
- 2. the working party be constituted for 12 months initially and that its membership be as follows:-
 - The Chairman of the Policy and Resources Committee who should also chair the working party;

- Two additional representatives from the Policy & Resources Committee
- One representative from:
 - o the Board of the Museum of London
 - the Barbican Centre Board
 - o the Board of Governors of the Guildhall School of Music and Drama
 - o the Culture, Heritage and Libraries Committee
 - the Planning and Transportation Committee
- the Managing Director of the Barbican Centre
- The Principal of the Guildhall School of Music and Drama
- The Director of Culture Heritage and Libraries
- the Director of the Museum of London
- the Director of the Built Environment
- 3. the Policy and Resources Committee be kept updated on the activities of the working party.

Committee: Board of Governors of the Guildhall School of Music and Drama	Date: 24 February 2014
Subject: Corporate Governance – Scheme of Delegations and Standing Orders	Public
Report of: Town Clerk	For Decision

Summary

As part of the City Corporation's arrangements for ensuring good governance the Scheme of Delegation to Chief Officers has been reviewed and a number of changes have been proposed. The changes, which principally reflect changes to legislation and previously agreed City Corporation's policies, has been considered and agreed by Policy and Resources Committee on 23 January 2014 and will be submitted to the Court of Common Council.

The Policy and Resources Committee is responsible for the review and for the coordination of the City Corporation's governance arrangements. The Committee will therefore be considering the Scheme in its entirety including the general framework and conditions of the delegations and an amendment to Standing Orders which relate to the declaration of operation property assets which are surplus to requirements.

All service Committees/Boards are required to consider those elements for which they have responsibility. A copy of the section applicable to this Board is attached as an appendix to this report for your consideration.

Recommendations

- 1. That the delegation relating to the Principal of the Guildhall School of Music and Drama as set out in the appendix to this report be approved.
- 2. note the proposed amendment to Standing Orders relating to the declaration of operation property assets which are surplus to requirements.

Main Report

Background

1. As a corporate body all decisions are vested in the Court of Common Council. To facilitate the administration of the City Corporation's many and complex functions, the Court delegates the majority of its functions to its Committees/Boards and officers. The Board's terms of reference set out the functions delegated to Committee/Boards whilst the Scheme of Delegations sets out those functions which have been delegated to officers.

Scheme of Delegations

- 2. The Scheme of Delegations has recently been reviewed and a number of changes are proposed which on the whole reflect changing legislation, amendments to corporate policy and operational needs. A copy of the revised Chief Officer delegations relevant to this Board is attached as an appendix to this report.
- 3. A full copy of the Scheme is available for Members/Governors to view in the Members' Reading Room and is also available on request.
- 4. The previous Scheme of Delegation did not reflect the fact that the Principal was granted delegated powers by the Court of Common Council in 2005 or the changes made when the School's governance arrangements were realigned with the Instrument and Articles of Government approved by the Privy Council in 2006. These now need to be incorporated in the Scheme and are attached for your consideration.
- 5. The Policy and Resources Committee is responsible for the review and coordination of the City Corporation's governance arrangements which includes amongst other things, committees and Standing Orders.

Standing Orders - Declaring Assets Surplus

- 6. The drive for efficiency savings including the Corporate Asset Realisation Programme and the more recent Service Based Reviews have highlighted the need for the City to more effectively identify those assets which are surplus to departmental need so they can be considered for alternative uses or disposal.
- 7. Whilst there are a number of officer groups considering the efficient and effective use of assets and resources it is felt that their work would be assisted by a change to Standing Orders which would formalise the process for Chief Officers and Committees/Boards identifying assets as surplus. It should be noted that prior to the approval of the Court, the Policy and Resources Committee has agreed adding the following with regard to this.

Standing Order No 55 - Identification of Property Assets Surplus to Departmental Requirements

- (1) Committees are required to consider the effective and efficient use of all operational property assets. This will be monitored by the Corporate Asset Sub Committee
- (2) Where assets are no longer required, in whole or in part, for the provision of operational services for which they are currently held, a report on the circumstances must be made to the Corporate Asset Sub Committee. This does not apply where letting are an integral part of the service e.g. market or housing tenancies

Corporate & Strategic Implications

8. The proposed changes to the Scheme of Delegations and Standing Orders are intended to support the effective governance of the City of London and ensure that decision making is effective and transparent.

Appendices

• Appendix 1 –Scheme of Delegation for the Principal of the Guildhall School

Angela Roach

Committee and Members Services Manager Town Clerks Department

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PRINCIPAL - THE GUILDHALL SCHOOL OF MUSIC & DRAMA

Consistent with the resolution of the Court of Common Council in December 2005, the Principal has all the powers necessary to execute the Financial Memorandum with the Higher Education Funding Council for England (HEFCE) delegated to him.

Further, under the terms of the Guildhall School of Music & Drama Instrument and Articles of Government, the following powers are delegated to the Principal:

- 1. To make such decisions and to initiate such action as he/she deems necessary in the interests of the efficient running of the Institution and the services provided by the Institution
- 2. To make proposals to the Board of Governors about the education character and mission of the Institution and to implement the decisions of the Board of Governors
- 3. The appointment, assignment, appraisal and dismissal of staff
- 4. The maintenance of student discipline and the suspension or expulsion of students on disciplinary grounds in accordance with the procedures relating thereto in force from time to time and the implementation of decisions to expel students for academic reasons
- 5. To incur revenue and capital expenditure and enter into commitments of behalf of the City of London Corporation where appropriate provision has been included in either the revenue or capital estimates, subject to compliance with Standing Orders
- 6. To act as Chief Accounting Officer for HEFCE purposes

Committee:	Date:
Board of Governors of the Guildhall School of Music & Drama	24 February 2014
Subject: Decisions taken under Urgency Procedures	Public
Report of: Town Clerk	For Information

Summary

1. This report advises Governors of action taken by the Town Clerk in consultation with the Chairman and Deputy Chairman since the last meeting of the Board, in accordance with Standing Order No. 41(a).

Recommendation

2. To note the action taken since the last meeting of the Committee.

Main Report

3. The following action has been taken under **urgency procedures**, Standing Order No. 41(a), since the last meeting of the Board:-

Skills Working Party of the Board of Governors of the Guildhall School of Music and Drama

Approval was given to the establishment of a Skills Working Party comprising of the following Governors:

Chairman of the Board of Governors of the Guildhall School of Music and Drama

Deputy Chairman of the Board of Governors of the Guildhall School of Music and Drama

Sir Andrew Burns

Christina Coker

Helena Gaunt

Barry Ife

Peter Lisley

The reason for the urgency was because the Skills Working Party should meet as soon possible to look at the skill set of the Board and prior to the Board meeting on 24 February 2014.

Contact:

Rakesh Hira

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Committee:	Date:		
Board of Governors of the Guildhall School of Music & Drama	24 February 2014		
Subject: Principal's General Report			
Report of: Principal	Public		
	For Information		

Summary

This report updates the Board on a number of current issues:

- Awards and Prizes
- Milton Court
- Taught Degree-Awarding Powers (TDAP)
- 2013 Admissions
- 2014 Admissions
- Brand Review, Visual Identity and Fundraising Case for Support
- Programme Developments
- Regional and International Developments
- Enterprise

Recommendation:

That the Board receives the report and notes its contents.

Main report

1 Awards and Prizes

Jennie Witton (MMus, student of Sarah Pring)

➤ Winner of the Dvorak song prize at the Emmy Destinn Foundation Young Singers Competition

Alex Duggan (BMus, student of David Corkhill, Adrian Spillett and Michael Skinner)

➤ Played with the RSC Richard III at the Barbican December 2013

Emma King (BMus, student of David Corkhill, Adrian Spillett and Michael Skinner)

Recently been asked to start training with STOMP

Oscar Alabau (Artist Diploma, Cello, student of Louise Hopkins) & Jean-Selim Abdelmoula (Artist Diploma, piano, student of Ronan O'Hora)

> 2nd Prize at the 'El Primer Palau Competition 2013 at the Palace of Catalan Music

Alasdair Garrett (BMus, student of Claire Taylor-Jay)

➤ Winner of the Rose Lawrence Horners' Award for academic work with the essay: Music, Emotion and Evolution

Josep-Ramon Olivé Soler (PVT, Baritone, student of Rudolf Piernay) & Lana Bode (Guildhall Artists, student of Andrew West and Rolf Hind)

➤ Winners of the Paul Hamburger Prize for Voice and Piano Duo

Joshua Owen Mills (2nd year Opera Course, student of Adrian Thompson and Yvonne Kenny)

- ➤ 1st Prize in the MOCSA Young Welsh Singer of the Year
- ➤ Winner of the Guildhall School Wigmore Recital Prize

Anna Starushkevych (Artist Diploma, student of Laura Sarti)

➤ Winner of the Bampton Classical Opera Young Singer's Competition 2013

Penka Petkova (BMus, student of Stefan Popov)

➤ 3rd Prize at the III M. Elsky International Contest of String Bow Instruments Performers

Lauren Fagan (Guildhall Artist Masters, student of Susan Waters) & James Platt (Guildhall Artist Masters, student of Janice Chapman)

➤ Accepted onto the Jette Parker Young Artists Programme at the Royal Opera House

Kristiina Rokashevitch (piano AIS, student of Joan Havill)

➤ 3rd Prize in the Beethoven Intercollegiate Piano Competition

Josep-Olivè Soler (Baritone, student of Rudolf Piernay)

> 2nd prize and most promising young talent at the 20ème Concours International d'Air d'Opéra et de Mèlodie Française de Mâcon

Yolanda Bruno (Artist Diploma)

➤ Winner of the Grand Prize at OSM Standard Life Competition in Montreal, Canada

Jean-Selim Abdelmoula (Artist Diploma, student of Ronan O'Hora)

➤ 3rd Prize in the Concourse International de Piano Claude Bonneton

Anna Patalong (Postgraduate Opera Course, student of John Evans)

➤ Winner of the Francisco Vinas International singing competition Barcelona

Antonina Suhanova (BMus, student of Ronan O'Hora)

➤ 2nd Prize and Vitols Prize in the 6th Jazeps Vitols International Piano Competition Riga

Ana Gogava (BMus, student of Philip Jenkins)

> 5th Prize and Alfred Cortot Award in the 5th Tbilisi International Piano Competition

Alumni and Staff

Alumni

Eliza McCarthy (Piano, 2003 – 2009, student of Ronan O'Hora and Rolf Hind)

➤ Winner of the 2013 British Contemporary Piano Competition

Four Guildhall Alumni are nominated for What's On Stage Awards:

Hayley Atwell for Best Actress in a play

Charles Edwards for Best Supporting Actor in a play

Tim Lutkin for Best Lighting Designer

Daniel Evans' production of 'My Fair Lady' for Best Regional Production

Thomas Ades 'The Tempest' won Best Opera Recording at the Grammy Awards

Staff

Eric Crees – winner of the 2014 Neill Humfeld Award. The Neill Humfeld Award for Excellence in Trombone teaching recognises the trombone teaching contributions of the late Neill Humfeld and honours living teachers who have achieved the highest level of excellence in their work.

2 Milton Court

As at 29 January 2014, 290 snags remained of the 6,098 that were formally identified at Practical Completion. In order to close out the remainder, Sir Robert McAlpine (SRM) and selected sub-contractors continue to remain in the building, with most work taking place at night so that the School has uninterrupted and unimpeded access during the day.

Informal monitoring and discussion of progress and priorities happens on a day-to-day basis by means of direct dialogue with SRM managers who are in the building most of the time. Formal monitoring takes place on a fortnightly basis at a meeting attended by the School, Heron, SRM, relevant sub-contractors, the quantity surveyor and contract administrator, the architects and other relevant members of the design team as appropriate. In this way, progress is monitored and priorities for the School identified. Any timing clashes are also discussed and solutions agreed.

In terms of the nature of the defects that are still outstanding, there is one that is sufficiently serious to bring to the Board's attention, which is the heat being experienced at the top of the Theatre fly tower when significant amounts of theatre lighting are deployed. Excessive heat can have a destabilising effect on the control systems for the automated flying system, which are located in cabinets at the top of the fly tower.

A new solution to resolve the issue has been proposed by the design team, and this is to be tested in the very near future. An oral update on the latest position will be provided to the Board at its meeting.

There is a further issue affecting Milton Court that is in fact nothing to do with the construction project, and so does not count as an official contractual snag. Significant amounts of rain water are leaking into the basement plant areas that are situated directly underneath the south footway of Silk Street. It is thought that the problem is largely caused by leaking pavement lights, which would be the responsibility of the City to rectify. The easiest solution is to remove them entirely and pave over, but there remains uncertainty whether some of them are needed to provide emergency smoke ventilation to the car park underneath Speed House. As soon as a definitive answer to this crucial question becomes available, the required works can be planned.

3 Taught Degree-Awarding Powers (TDAP)

The scrutiny panel appointed by the Quality Assurance Agency (QAA) to test the School's application for taught degree-awarding powers submitted its report to the relevant QAA committee in early December. The report was almost entirely positive and the School was surprised to receive a letter later that month asking for further clarification and reassurance on three main areas of concern:

- the effectiveness of the Board of Governors
- the management of the academic infrastructure (principally, by inference, the Teaching and Learning Board)
- the perceived slow response to earlier recommendations arising from QAA audits

A response was requested by 16 January and this will be referred to the committee in February. If the committee is satisfied by the response, they will make a recommendation to the QAA Board and thence to the Privy Council. It is hoped that the process will have been concluded by the end of this academic year, for implementation in autumn 2015.

4 2013 Admissions

The annual survey of admissions is provided in the standard format at Appendix A. The data on sexual orientation, religion and gender reassignment are new this year.

The survey shows a year-on-year increase of 53 fte, with a small decrease in the undergraduate population more than offset by an increase in postgraduates. This balance needs to be kept under review: a strong postgraduate population is a sign of academic and artistic strength but there is considerably more churn in the postgraduate population and much greater demand for financial support.

For the first time, we have been able to compare our music recruitment performance with all of the competitor institutions in the Conservatoires UK Admissions Service (CUKAS), including the Royal Academy of Music. Comparison with our nearest competitors in music (RAM and RCM) shows that, while Guildhall received fewer applications at both undergraduate and postgraduate levels, our conversion rates were better:

		Applicants	Offers	Acceptances	%offered	%accepted
Undergraduate	Guildhall	659	189	118	28.7	62.4
	RAM	825	195	113	23.6	57.9
	RCM	929	261	120	28.1	46.0
Postgraduate	Guildhall	806	240	178	29.8	74.2
	RAM	1051	298	194	28.4	65.1
	RCM	990	378	174	38.2	46.0
Total	Guildhall	1465	429	296	29.3	69.0
	RAM	1876	493	307	26.3	62.3
	RCM	1919	639	294	33.3	46.0

Table 1 – Applicants, offers and acceptances, 2013 entry Source: CUKAS annual report and Guildhall School registry

In headline terms, in 2013 the RAM required 411 (28%) more applications to obtain 11 (3.7%) more acceptances and the RCM required 454 (31%) more applications to obtain 2 fewer acceptances. Put another way, 3 out of ten applicants to Guildhall receive an offer (i.e. they meet the standard for entry) and of those 7 out of ten accept their offer.

Comparison with CUKAS also shows that the Guildhall School has a better gender balance than CUKAS institutions and a higher percentage of applications from ethnic minority students (12.4% undergraduate and 14.3% postgraduate as against 7.5% and 9.4% respectively at CUKAS institutions).

Disaggregated data for acting and technical theatre are not available.

5 2014 applications

As at 1 February, the School had received 647 applications for undergraduate music (an increase of 1% on the same point last year) and 809 applications for postgraduate music (an increase of 14%). Applications for drama close on 28 February.

As of 7 February, the School had made 215 offers for undergraduate music and received 119 acceptances towards an intake target of 121. Postgraduate admissions are still in train and several departments have yet to hold auditions and/or make offers.

Auditions were held in New York during January for both music (>50 candidates) and acting (>120 candidates), both totals showing appreciable increases on previous years. For the second time, the School staged a concert at the Weill Recital hall at Carnegie Hall, which was well attended and appreciated.

6 Admissions Review

Following the decision of the Senior Management Team that the CUKAS system would not, at present, meet the needs of the School, a review of the School's entire admissions process has been initiated with the intention of improving the applicant experience and consolidating and automating processes. Initial work has begun and a list of possible system developments over the next two admission cycles has been drawn up. Developments will be introduced incrementally to ensure applicants and staff can benefit from changes at the earliest opportunity. A new on-line applicant portal has just been launched for applicants who have accepted the School's offer. Via the portal, applicants can update their personal details, apply for a place in the Sundial Court residence, see personalised information about their fees, pay their deposit, and get information about scholarships.

7 Brand Review, Visual Identity and Case for Support

The School has initiated a series of interlinked reviews to improve its attractiveness to the highest quality applicants. A brand review conducted by an experienced external consultant has helped to identify a very strong consensus around the School's core values: a high degree of professional craft and creativity, and a strong commitment to learning, that place the institution at the forefront of cultural change.

In light of the outcomes of the brand review, the School has engaged market leaders Pentagram to review its visual identity. Pentagram will present their emerging conclusions and recommendations at the Board meeting.

The More Partnership review of the School's fundraising performance included among its recommendations that a new 'case for support' should be developed. The School has therefore commissioned the More Partnership to assist us in defining and expressing as effectively as possible the arguments in favour of philanthropic support for the School's range of activities.

8 Programme Developments

In light of the additional student recruitment required to deliver the long-term financial plan agreed by the City Corporation in April 2013, the School has identified a number of potential new programmes to broaden the discipline range and increase admissions while maintaining high standards in core activities:

- MA in Opera Making & Writing (new) for entry September 2014 validated for five years, subject to meeting conditions
- MA in Collaborative Theatre Production & Design (new) for entry September 2014—going through validation process
- MA in Training Actors to be offered as a full-time programme for entry 2014 onwards to improve overseas marketability change already approved
- BA in Technical Theatre Arts Stage & Costume Management pathway to be split for 2015 entry to improve overall marketability change to be presented for approval this academic year
- BA in Performance and Collaboration (new) for entry September 2015 going through validation process

In addition, the School is evaluating the possibility of expanding non-degree activity in acting, programmes aimed at the North American Junior Year Abroad market, arts management at BA and/or MA level, and performance-related, classroom-based programmes at BA and/or MA level.

9 Regional and International Developments

The CYM Centre in Norwich opened last September with some 60 students and the size of the cohort has grown appreciably since the opening. The Norfolk Music Education Hub is acting as banker and there is no financial risk to the School.

The opening of the CYM Centre at Hestercombe in Taunton has been delayed by the late transfer of the property from Somerset County Council to the Hestercombe trust. The service is now scheduled to start on 1 March. Set-up costs have been met by a grant from the Esmée Fairbairn foundation. From March the Centre's running costs will be offset by tuition fees in the same way as the London CYM centres operate.

The future of Prima del Teatro, the international summer school to which all Guildhall acting students are sent at the end of their second year, has been in doubt for some time and the School has been investigating other ways in which this extremely valuable international experience can be provided in future. An attractive possibility exists in Fontainebleau, which could provide a viable future platform for summer school activity in music, drama and opera, as well as a potential year-round base for drama training in English aimed at continental-trained actors who wish to work in English. Informal, preliminary meetings have been held with the local authorities in Fontainbleau with a view to gauging the possible strength of their financial and other support.

In view of the growing amount of international activity in Canada, the USA, Europe and the Far East, the School has engaged the services of a senior internationalisation officer from King's College London to advise on ways in which this network of partnerships can be strengthened and expanded.

10 Enterprise

Guildhall Creative Entrepreneurs: Nine entrepreneurs have joined the first year of the scheme, which supports Guildhall School alumni to create, launch and make a success of their businesses. The 12 month programme – run in partnership with Cause4 - includes access to coaching, business planning, marketing and sales, and fund raising training. Their first pitch day took place on 19 December at Milton Court, attended by School and Barbican senior staff who provided feedback on the business propositions. Training continues, alongside bespoke professional support from selected mentors, ahead of the entrepreneurs' pitch to angel investors in June. The experience and development of this first cohort will be used to inform research into the business plan for a sustainable creative entrepreneurs' hub.

Entrepreneurship and Enterprise (E&E) Supporting Innovation: In October a questionnaire was circulated to staff in order to benchmark the School's capacity for innovation. A number of open sessions were held for staff to discuss issues and opportunities raised by the survey. These sessions were attended by 25 members of staff across School departments and levels. We committed to using the information gathered to further develop and grow enterprise and entrepreneurship initiatives at the School, and are following up on key recommendations, including:

- Embedding Entrepreneurship & Enterprise policy in the School with the support of an E&E working group; establishing priorities and criteria for what might be supported as an innovation project at the Guildhall school
- Researching the feasibility of an innovation fund, open to all staff which will support both ideas generation and the selection and management process for project proposals
- Implementing or improving communications channels
- Undertaking research into innovation project ideas generated in the sessions

Barbican-Guildhall Business Training: In December Fidelity Foundation confirmed that we had been successful in our application for funding to support the development of a Barbican-Guildhall training offer. The funding (£33,500, bid for through Barbican Development) will go in part towards engaging a consultant to help us work up a marketable offer which is distinctive, high quality and aligned with our brand values.

Summer Schools: The 2014 short course and summer schools' brochure has been published, which lists more than 20 options across Music, Drama, Technical Theatre and Wellbeing. The programme is anticipated to perform well, with over 40 bookings already made since the courses went live at the end of December.

Contact:

Professor Barry Ife CBE Principal Guildhall School of Music & Drama tel: (7)382 7141

email: principal@gsmd.ac.uk

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Student Statistics 2013/2014

Student Numbers at 1 December 2013 (excl Erasmus)

UNDERGRADUATE (UG)

Programme	Total (FTE)
BA in Acting	46
BA in Technical Theatre Arts	66
BMus	330
Total	al 535
Total 2012/13	13 541

POSTGRADUATE (PG)

Programme	Total (FTE)
MA in Acting (full-time)	30
MA in Training Actors (part-time)	2
Artist Diploma	22
Guildhall Artist Masters extended	9
programme (PG Cert Year all pathways)	
(full-time only)	
Guildhall Artist Masters Part 1 Performance	135.5
(full or part-time)	
Guildhall Artist Masters Part 1 Composition	4.5
(full or part-time)	
Guildhall Artist Masters Part 1 Leadership	14
(full-time only)	
G णुldhall Artist Masters Part 2 (full-time	62
D pathways)	
(full-time only)	19
MPhil/DMus in Composition	9
լ ֆիil/DMus in Performance	9
MPhil/DMus Leadership	1
MMA/DMA (discontinuing)	*0
Total	308
Total 2012/13	244.5

OTHER

Programme	Total (FTE)
AGSM (UG level)	1
Advanced Certificate (PG level)	7.5
Fellows**	28
Total	36.5
(*)(*)(*) +	77

- * MMA/DMA students are registered at City University but are taught in the School. Whilst there are still some registrations on this programme they are all writing-up and have no fte.

 ** Fellows are students only in respect of their extra-mural tuition.

70 60 50 40 30 20 10 % awarded in category

Sex profile (new intake)

	% split	2009	2010	2011	2012	2013
Ð٨	Male	50.0	49.7	49.2	47.5	49.4
	Female	50.0	50.3	50.8	52.5	9.05
ЬG	Male	47.8	41.7	47.5	50.3	43.6
	Female	52.2	28.3	52.5	49.7	56.4

What is your sexual orientation? (new intake)

	Prefer not to say	Gay man	Gay woman	Hetero -sexual	Bisexual	Other
UG	31.8% 3.5%	3.5%	0.6%	62.4%	1.2%	1.2% 0.6%
PG	30.4% 5.2%	5.2%	%0.0	0.0% 61.3%	2.1%	2.1% 1.0%

Age profile (new intake)

		2009	2010	2011	2012	2013
	Under 21	8.97	82	83.6	85.2	83.5
OG	21 to 24	18.3	14.5	14	11.7	15.3
%	25 to 39	5.4	3.5	2.4	3.1	1.2
	Over 40	0	0	0	0	0
	Under 21	0	1.8	1.5	0	2.7
PG	21 to 24	1.95	55.5	55.9	64.7	55.3
%	25 to 39	42.8	41.4	41.1	34.8	41.5
	Over 40	1.1	1.2	1.5	0.5	0.5

Qualifications awarded (as at 17 January 2014)

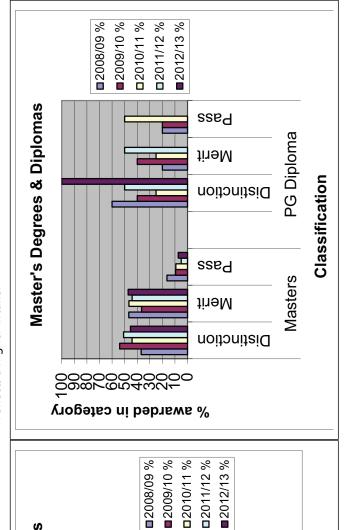
QUALIFICATIONS AWARDED	2008/09	2009/10	2010/11	2011/12	2012/13
Bachelor's Degrees	122	114	133	133	150
Master's Degrees	122	126	*161	113	108
PG Diplomas	2	2	4	4	1
Total	249	245	298	250	259

Bachelor's Degree Classifications

Is your gender identity the same as the gender you were originally assigned at birth? (new intake)

	Prefer not to say	Yes	8
UG	21.8%	77.6%	%9.0
PG	25.8%	74.2%	0.0%

* The Increase in awards in 2010/11 reflects a higher intake.



က

2.2

Degree Classes

Principal Study (at 1 Dec 2013) (not including Fellows)

86.5

13.5

11.7

10.5

10.6

12.9 0

0.8

0.5

2013

2012

2011

2010

2009

Ethnicity profile (new intake)

White (British, Irish, & other white)

1.6

Numbers are too small to provide meaningful data at a smaller level of

2013 15.3 0

2012

2011 15.8 6.5

2010 15.6 7.1

2009 7.0 3.3

> Declared disability **Declared disability**

% <u>5</u>0 ₩ 5d

Disability profile (new intake)

granularity.

10.2 9

What is your religion? (new intake)

82.5 15.9

86.1

80.9 17.6 1.5

81.6 16 2.5

83.9

White (British, Irish, & other white)

Not known or refused

All other ethnicities*

% **5**0

12.8

15.6

9.0

Not known or refused

All other ethnicities*

PG %

	lotal	(115/
	DO	ЬG
Baritone/Bass	16	16.5
Bassoon	6	5.5
Cello	20	18
Clarinet	10	4.5
Composition	22	11.5
Counter Tenor	-	4
Double Bass	10	4
Electronic Music	19	0
Flute	13	10.5
Fortepiano	0	1
Guitar	4	5
Harp	4	4
Harpsichord	0	0
Horn	14	3
Jazz Clarinet	1	0
Jazz Double Bass	2	0
Jazz Electric Bass	-	0.5
Jazz Flute	0	0
Jazz Guitar	4	2.5
Jazz Percussion	2	1.5
Jazz Piano	4	0
Jazz Saxophone	8	1
Jazz Singing	12	3
Jazz Trombone	2	0.5
Jazz Trumpet	3	0
Jazz Tuba	-	0
Jazz Violin	-	0.5
Joint	1	0
Lute	0	0
Mezzo-Soprano	11	22
Oboe	6	3.5
Percussion	6	5
Piano	38	57.5
Recorder	2	9
Saxophone	6	2
Soprano	34	33.5
Tenor	13	13.5
Trombone	14	2
Trumpet	13	1
Tuba	3	0
Viola	7	6
Violin	39	31.5
Grand Total	391	283.5

29.4%

1.0%

religion

Spiritual

Jewish 1.8% 1.0%

Christian

Buddhist

Prefer not to say

30.6%

37.1% 32.4%

NG Б

Any other religion or belief

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Agenda Item 11

Committee: Board of Governors of the Guildhall School of Music & Drama	Date: 24 Februa	ary 2014
Subject: Guildhall School Carbon Reduction Str	ategy	Public
Report of: The Director of Operations and Building Barbican / Guildhall School of Music &	•	For Decision

SUMMARY

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:

- 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.

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.

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 sectorwide 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.

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ANNEX A



Carbon reduction strategy 2011 to 2020

Version 1.4

Approved by the Board of Governors of the Guildhall School on 14 February 2011

Version 2.0, updated January 2012

Approved by the Board of Governors of the Guildhall School on 20 February 2012

Version 2.1, updated January 2013

Approved by the Board of Governors of the Guildhall School on 4 February 2013

Version 2.2, updated January 2014

To be approved by the Board of Governors of the Guildhall School on 24 February 2014

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Executive summary

The Guildhall School of Music & Drama acknowledges that in the face of mounting global scientific consensus of mans' part in global climate change, there is a moral responsibility to act to reduce carbon.

The UK Climate Change Act of 2008 has 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.

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.

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.

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 version published in February 2012 increased the target for these emissions to 43% by 2020. Following a further reduction in 2011/12 that is consistent with that target, this latest version maintains the target at that level. This reduction is 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.

Following the collection and analysis of the necessary data, the third 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. Again, this latest version maintains the targets at that level, but a review of the targets will be undertaken in future years once a larger dataset has been built up. These reductions are measured against a 2010 baseline, this being the first year in which the data have been compiled. However, in the case of transport emissions, this will be changed to 2012, due to a significant change in the methodology for calculating air transport emissions. The plan will be further revised in the future to include a target for emissions arising from procurement, once a sector-wide approach has been agreed.

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'.

Introduction and background

The Guildhall School

- 1. The Guildhall School of Music & Drama is one of Europe's leading conservatoires, offering musicians, actors, stage managers and theatre technicians an inspiring environment in which to develop as artists and professionals. The School first opened its doors on 27 September 1880 to 62 part-time students in a disused warehouse in the City of London. Today it is situated in the heart of one of Britain's most important arts venues at the Barbican, with a growing international reputation for its teaching and research.
- 2. The modern Guildhall School is distinctive in being the only major European conservatoire which is both a music school and a drama school, and one which is pre-eminent in technical theatre, professional development and music therapy. A thriving Junior Guildhall, the recent addition of the Centre for Young Musicians and a range of annual summer schools further complement the outstanding opportunities available.
- 3. Situated in the heart of the City, the School moved to its present premises in the Barbican in 1977 solidifying a unique link with both Europe's largest arts and conference centre, including the Barbican Hall and the Pit Theatre, and the world-class London Symphony Orchestra. This connection is now formally recognised with the establishment of a partnership between the School, the Barbican Centre and the LSO to create the world's leading centre for performance, training and education in the performing and visual arts.
- 4. The School currently numbers approximately 900 students on its roll call, of which approximately 570 are undergraduate and 330 postgraduate. In any given year, more than a third of the students are from outside the UK typically representing over 40 nationalities.

The Guildhall School's Estate

- 5. The Guildhall School of Music & Drama currently comprises approximately 30,300 m² gross internal area over four neighbouring buildings which are continually updated and enhanced.
 - i) The main building is in Silk Street and attached to the Barbican Centre. It was purpose-built by the City of London and was officially opened by the Lord Mayor of London on 25 October 1977.
 - ii) Sundial Court, the School's hall of residence, is located in Chiswell Street, just around the corner from the main Silk Street building. Sundial Court has 177 bedrooms in thirty-nine flats, each with either three, four, five or six bedrooms.
 - iii) John Hosier Annexe, named after the Principal of the School from 1978 to 1988, has 46 teaching/practice rooms and is located at the west end of the Barbican Estate.
 - iv) A small space in the neighbouring John Trundle Court building was acquired in 2007 and contains one large teaching space as well as office accommodation.
- 6. The Guildhall School recently embarked on a major building project to expand its

facilities. Milton Court, based across the road from the current Silk Street building, opened in September 2013, providing the School with state-of-the-art performance and teaching spaces in approximately 11,385 m², including:

- a 608-seat Concert Hall
- a 227-seat Theatre
- a Studio Theatre
- three major rehearsal rooms
- TV studio suite

as well as teaching, meeting and administrative spaces, complementing and extending those currently in use in the Silk Street building. Designed to top quality professional standards, the new building will mean that the School's facilities will at long last match the outstanding quality of its training and the success of its graduates.

- 7. The School's buildings are very intensively used. Each term is 12 weeks in duration, but in practice there is considerable academic activity in the week before and the week after each term, meaning that the buildings are being used for teaching purposes for 42 weeks per year.
- 8. In order to provide sufficient space for individual student practice, the main Silk Street building is open during term time from 7am 10pm Monday to Friday, 8am 9pm on Saturday and 9am 9pm on Sunday.
- 9. During the summer vacation the Silk Street building and Sundial Court are used extensively for summer schools, some of which are organised by the School and some by external companies that hire the facilities.
- 10. With the exception of the new Milton Court building all of the School's existing estate is grade 2 listed.

The City of London Corporation

- 11. The Guildhall School is owned and governed by the City of London Corporation as part of its contribution towards the cultural life of London and the nation. The City is one of the most significant sponsors of the arts in the UK. It provides the Barbican Centre, Europe's largest multi arts and conference venue, and directly funds the London Symphony Orchestra's residency. It is also a major funder of the enormously popular Museum of London and supports a year-round programme of major arts festivals and events in the City and neighbouring areas.
- 12. The City is also the port health authority for the whole of the Thames estuary, owns and runs four famous markets: Smithfield, Billingsgate, Spitalfields and Leadenhall, manages a portfolio of property throughout London and maintains and safeguards over 10,000 acres of open space in and around it, including Hampstead Heath, Epping Forest, Burnham Beeches and a string of parks and commons in Kent and Surrey. It also runs the five bridges that cross the Thames into the City, including Tower Bridge, a major tourist attraction and an international symbol for London as a whole.
- 13. As part of the City of London Corporation, the Guildhall School is not a legal entity in its own right. As such, the School is subject to all the policies and rules of the City and in many cases has helped to develop them. This includes policies

relating to sustainability and carbon reduction, an area in which the City has been active since 1975.

HE sector context

- 14. In addition to the funding that the Guildhall School receives from the City, it receives funding as part of the HE sector from the Higher Education Funding Council for England (HEFCE). Feedback to HEFCE shows that there is widespread agreement in the sector that sustainable development is important. The sector has agreed that tackling climate change is a challenging agenda and we need to move quickly to do it.
- 15. It is also a growing political priority both nationally and internationally. The United Nations' Intergovernmental Panel on Climate Change has concluded that warming of the climate system is unequivocal and that human activities make a substantial contribution¹. Lord Stern's review of climate change² in 2006 concluded that the benefits of strong and early action will far outweigh the economic costs of not acting. In June 2008 Lord Stern said that the costs of stopping greenhouse gases rising to dangerous levels had already doubled since 2006 to 2 per cent of GDP. HE makes an important contribution to the UK's sustainable development strategy, updated in 2005, not least because of the sheer size of the estates that it controls.

Context and drivers

Climate Change Act 2008

16. The Climate Change Act 2008³ aims to improve carbon management and help the transition towards a low-carbon economy in the UK. It sets the world's first legally binding targets for greenhouse gas emissions of at least 80 per cent by 2050 and at least 34 per cent by 2020⁴, against a 1990 baseline. Major parts of the public sector such as the NHS⁵ and schools⁶ have developed carbon reduction strategies. In summer 2009 the Government published the UK Low Carbon Transition Plan⁵, which sets out how the UK will meet the 34 percent cut in emissions on 1990 levels by 2020. Nationally, emissions have already been reduced by 21 per cent.

¹ 'Climate change 2007: the physical science basis', available at <u>www.ipcc.ch</u> under Publications and Data/Reports.

² 'Stern Review on the Economics of Climate Change', available at <u>www.hm-treasury.gov.uk</u> under Independent reviews.

³ Further information is available at www.decc.gov.uk under Legislation/Climate Change Act 2008.

⁴ The 2009 Budget set the first carbon budgets, as required by the Climate Change Act. This increased the level of the 2020 target from 26 per cent to 34 per cent. A further increase to 42% has been recommended by the Committee on Climate Change.

⁵ 'Saving Carbon, Improving Health: NHS Carbon Reduction Strategy for England' may be read at www.sdu.nhs.uk under Carbon reduction strategy.

⁶ 'Carbon Emissions from Schools: Where they arise and how to reduce them' may be read at <u>www.sd-commission.org.uk</u> under Our work/Education, Young People and skills/Schools.

⁷ The plan is available at www.decc.gov.uk under Publications.

Carbon Reduction Commitment

- 17. The Carbon Reduction Commitment Energy Efficiency Scheme (CRC) is a mandatory carbon emissions reporting and pricing scheme to cover all organisations using more than 6,000 MWh per year of electricity (equivalent to an annual electricity bill of about £500,000). The CRC came into force in April 2010 and aims to significantly reduce UK carbon emissions not covered by other pieces of legislation. The primary focus is to reduce emissions in non-energy intensive sectors in the UK. This complements the role of Climate Change Agreements and the EU Emissions Trading Scheme, which are directed primarily at energy-intensive organisations. It is UK-wide, covering large businesses and public sector organisations, and around 80 universities and colleges are likely to be within its scope. The City of London Corporation is within its scope and the Guildhall School's carbon emissions will therefore be taken into account as part of the City's reporting.
- 18. Participants in the CRC need to measure and report their carbon emissions annually, following a specific set of measurement rules. The first annual report of emissions was in July 2011. Starting in 2012, participants will buy allowances from Government each year to cover their emissions in the previous year. This means that organisations that decrease their emissions can lower their costs under the CRC.
- 19. In October 2010, the Government announced two significant changes to the CRC as a part of the Comprehensive Spending Review:
 - The money raised from the sale of allowances will be retained by the Government rather than recycled back to CRC participants.
 - The first sale of allowances to cover emissions in fiscal year 2011/12 will be in 2012 rather than 2011.
- 20. The price of allowances has been set at a fixed price of £12 per tonne CO₂ through fiscal year 2012/13, with a floating market price after that. Assuming CO₂ emissions of 1,401 tonnes in 2011/12 (refer to table after paragraph 50) at a price of £12 per tonne, the CRC scheme has been y costing the School approximately £16,800 a year and will rise to approximately £25,000 a year with the addition of Milton Court to the estate (refer to paragraphs 58-62). The price of allowances is likely to rise each year reinforcing the incentive to the School to reduce consumption and hence the costs of both the allowances and the energy itself.
- 21. A publicly available CRC performance league table shows how each participant is performing compared to others in the scheme.

Display Energy Certificates

22. Universities and colleges need to comply with increasingly stringent Building Regulations, which are now requiring energy efficiency improvements to buildings that are being extended or having changes made to building services. Since 1 October 2008, all public buildings have also been required to have Display Energy Certificates showing their actual energy usage, as recorded by gas, electricity and other meters, so that the public can see the building's energy efficiency in use.

Cost savings

23. Potential cost savings are an important driver behind efficiency improvements, both directly from reduced resource usage and indirectly from reduced maintenance. However, ambiance and comfort is also a driving force: over or under heated rooms create discontent and inefficient working practices.

Moral responsibilities and reputation

24. In the face of mounting global scientific consensus of mans' part in global climate change, there is a moral responsibility to act to reduce carbon. As a sector, the HE community has committed to being at the vanguard of initiatives to act in a more sustainable way, and increasingly HE institutions are being judged on how well they are performing. Since 2007 a Green League Survey has been published in the national media, which ranks HE institutions across a range of sustainability and environmental measures. Consistently low performance in this league table could ultimately affect an institution's reputation. HEFCE is also starting to introduce funding incentives according to how well HE institutions are performing (see section below on HEFCE requirements).

Classification of emissions sources

- 25. The World Resources Institute (WRI) has developed a classification of emission sources around three 'scopes':
 - scope 1 refers to direct emissions that occur from sources that are owned or controlled by the organisation, for example emissions from combustion in owned or controlled boilers, furnaces, vehicles
 - scope 2 accounts for emissions from the generation of purchased electricity consumed by the organisation
 - **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 for example, commuting and procurement.

Scope	Description	Examples
Scope 1: Direct emissions	Direct emissions occur from sources that are owned or controlled by the HEI	Direct fuel and energy use Transport fuel used in institutions' own vehicle fleets
Scope 2: Electricity indirect emissions	Emissions from the generation of purchased electricity consumed by the HEI	Purchased electricity
Scope 3: Other indirect emissions	Scope 3 emissions are a consequence of the activities of the HEI, but occur from sources not owned or controlled by the HEI	Water Waste Land-based business travel Commuting (both staff and students) Air travel (international students; international student exchange; business
		Procurement

HEFCE requirements

- 26. HEFCE's Carbon Reduction Strategy for the HE sector comprises:
 - A sector-level target for carbon reductions that is in line with UK targets.
 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.
 - A requirement for institutions to set their own targets for 2020 for scope 1 and 2 emissions against a 2005 baseline. This year is being used as a baseline because it is used for reporting against UK targets, and research done for HEFCE demonstrated that robust data for scope 1 and 2 is available for that year at institutional level. This will provide consistency across the sector against which progress can be monitored and reported.
 - A commitment from institutions to achieve actual improvements through actions that are appropriate for their institution, recognising the diversity of the sector.
 - Support from HEFCE, UUK and GuildHE for institutions to achieve carbon reductions.
 - Funding incentives in particular HEFCE is linking capital funding to performance against carbon management plans.
 - Plans for annual monitoring and reporting on progress against the sector-level target.
 - A method of regularly evaluating the approach and taking action to learn from progress to date.
- 27. The HE sector targets are absolute targets, which mean actual carbon emission reductions against the levels in a fixed past year. The UK national targets under different policies and legislation are absolute and set against a 1990 baseline year. The rationale for this approach is based on the fact that the capacity of the Earth to manage carbon emissions is itself finite. Targets have so far been set for scope 1 and 2 emissions only, because this baseline has been calculated with a reasonable degree of confidence. There is a degree of uncertainty for scope 3 emissions for 1990. HEFCE is working with the sector to improve measurement of scope 3 emissions, including procurement, with the intention of setting sector-level targets for these emissions by December 2013. In order to achieve this, HEFCE has commissioned research on measuring scope 3 emissions in the HE sector in the areas of transport, water and waste and procurement. All three reports have been published and in January 2012 HEFCE released Guides to Good Practice in the areas of transport⁸ and water and waste⁹.
- 28. Recognising the significant diversity of the sector with its range of missions, priorities, histories, subject mix, infrastructure and research, institutions have been asked to set targets and develop plans that are appropriate to their individual circumstances but within the national target framework. HEFCE is collating these targets through the second phase of the Capital Investment Framework CIF2 and will determine whether collectively they are sufficient to meet the sector target. If necessary, HEFCE will consider what additional policy levers can be used to achieve further carbon reductions.

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⁸ http://www.hefce.ac.uk/pubs/hefce/2012/12 02/

⁹ http://www.hefce.ac.uk/pubs/hefce/2012/12 01/

Linking capital funding to carbon performance

- 29. HEFCE's distribution of capital funding is based on the Capital Investment Framework, which relies on a mix of metrics, information submitted by institutions and HEFCE's knowledge of institutions in order to make a holistic and balanced assessment. The 84 institutions (including the Guildhall School) that satisfied the requirements of CIF1 are now benefiting from a streamlined process for capital funding. HEFCE remodelled the process for CIF2 as follows:
 - metrics expanded to include carbon emissions
 - strategic questions include a more specific and demanding requirement in relation to carbon
 - institutions required to report on progress in implementing their carbon plans, and on the results achieved.
- 30. Institutions that do not meet the requirements of CIF2 are at risk of 40% of their capital funding from HEFCE being withheld. This means that an approved Carbon Reduction Strategy needed to be in place by 31 March 2011.
- 31. HEFCE did not specify how carbon plans should be developed or what they should contain. However, there are a number of key elements that HEFCE requires to be present in an institution's carbon management plan, which are needed to satisfy the requirements of CIF2. These are:
 - A carbon management policy or strategy this could be part of a wider environmental/sustainability policy.
 - A carbon baseline for 2005 that covers all scope 1 and 2 emissions. This
 year is being used as a baseline because it is used for reporting against UK
 targets, and research has demonstrated that robust data for scope 1 and 2 is
 available for that year at institutional level. This will provide consistency
 across the sector against which progress can be monitored and reported.
 Institutions are encouraged to measure a baseline for scope 3 emissions and
 in the longer term HEFCE expects these to be included.
 - Carbon reduction targets. These must:
 - cover scope 1 and 2 emissions, although institutions may choose to set additional targets for wider aspects
 - be set against a 2005 baseline. Institutions may choose to set their reductions in context by setting additional targets against an alternative baseline year
 - be set to 2020, because this is the timescale for interim government targets. This will provide consistency across the sector against which progress can be monitored and reported. Institutions may also set interim milestones
 - be publicly available.
 - An implementation plan to achieve absolute carbon emission reductions across scopes 1, 2 and 3 including timescales and resources. These may cover capital projects and actions to embed carbon management within the institution, for example, through corporate strategy, communication and training.
 - Clear responsibilities for carbon management.
 - A commitment to monitor progress towards targets regularly and to report publicly annually.
 - The carbon management plan and targets must be signed off by the governing body.

Approach to carbon reduction

- 32. The first version of this document, published in February 2011, created a plan for reducing the School's carbon emissions and set a target for scope 1 and 2 emissions by 2020. The plan is a working document and will be updated on a regular basis in the light of the School's progress towards achieving its target. Having achieved extremely good reductions in scope 1 and 2 emissions in 2010/11, the second version considerably increased the target for these emissions. It also included targets for scope 3 emissions in the areas of transport and water and waste, following the collection and analysis of the necessary data. This third revision maintains all targets at the level of the second revision. The plan will be further revised in the future to include a target for emissions arising from procurement, once a sector-wide approach has been agreed.
- 33. The strategy has been developed by members of the School's Sustainability Steering Group (SSG), in particular by staff in the engineering department, and in close consultation with colleagues in the Energy Management Team of the City of London Corporation. The SSG includes staff members representing a wide cross section of the School's activities, both academic and non-academic. It includes the President of the Student Union and other student representatives. Students were also consulted directly when a workshop was held, facilitated by a member of the City's sustainability team, which asked students to consider what a more carbon-free world might look like in 2050 and what measures needed to be put in place to get there.
- 34. The City has been engaged with carbon reduction since 1975, and has developed a range of sustainability policies including a Carbon Descent Plan. The School's own Carbon Reduction Strategy mirrors those of the City and is complementary to them, whilst setting a target that is realistic for the Guildhall School.
- 35. The City's approach to carbon reduction is summarised by the 'Three 'E's':
 - Energy procurement buy energy as cheaply and efficiently as possible
 - Energy efficiency use energy as efficiently and wisely as possible
 - Energy design use technology to reduce the amount of energy required in the first place

Carbon accountability and hierarchy

36. The carbon hierarchy in the table below provides a systematic and structured approach to managing and reducing emissions in a socially responsible and cost-effective way. Actions at the top of the hierarchy are more transformative and lasting in terms of reducing emissions. A carbon hierarchy is being used by the Department for Children, Schools and Families' Zero Carbon Task Force to help move towards the Government's ambition of delivering zero-carbon school buildings from 2016.

The carbon hierarchy

The carbon merarchy	T	1		
REDUCE	Avoid unnecessary use		_	MC
energy/fuel demand	Passive features (for example insulation, daylight, solar gain/shading, thermal mass)	 Evaluate impacts 	 Apply control measures 	ONITOR • Learn from existing projects and practice
	Encourage energy-conscious behaviours	e imp	ontro	от е
EFFICIENCY	Use energy-efficient equipment	acts	l mea	xistin
of equipment and energy/fuel sources	Provide simple and effective controls		sures	g pro
	Recover useful heat		٠,	jects .
	Use clean fossil fuel technology			and p
DECARBONISE energy/fuel supplies	On-site or near-site renewable energy sources, including community schemes			ractice
BEFRIEND	Seek partnerships to increase capacity to do the above			
NEUTRALISE energy/fuel supplies	Consider responsible carbon offsetting schemes			
	Procure green electricity supplies			

Source: Adapted from the DCSF Zero Carbon Task Force and Parkin 'The Positive Deviant: sustainability leadership in a perverse world', Earthscan, London.

Key areas where carbon reductions can occur

- 37. Carbon reductions can be achieved by actions in any or all of the following areas:
 - Behavioural change and awareness raising 'softer' methods can play a
 significant role in highlighting changing institutional priorities and in
 encouraging behavioural and cultural change. Studies suggest that as much
 as 30% carbon reduction could be achieved by behavioural change. Actions
 can include the insertion of environmental objectives into staff appraisals, job
 descriptions and the induction process, as well as educational initiatives such
 as workshops.
 - Lights, computers and electrical appliances ensuring that all equipment is switched off when not in use and not just left in standby mode.
 - Building energy and space management good space management not only reduces carbon emissions, it also frees up resources that can be used for teaching and research.
 - Building fabric upgrade.
 - Efficient energy supply (e.g. CHP).
 - Renewable energy sources.

Waste

38. Management of waste reduces the environmental impacts associated with disposal, including the production of the greenhouse gas methane, and helps conserve finite resources.

Travel, including cycling

- 39. In 2006 emissions from transport (business travel, and staff and student commuting) accounted for 35 per cent of the HE sector's carbon baseline. Sustainable travel is about encouraging people to make informed choices about the way they travel and being aware of the consequences of these choices on their health, their environment and their local community.
- 40. At the Guildhall School, the emissions data for daily commuting are significantly less than the sector average, as most staff and students already commute by public transport or bicycle. However, the high percentage of overseas students means that significant carbon emissions are generated by travel between the School and home at the beginning and end of term.

Procurement

41. Procurement decisions have a large effect on the rate of consumption and productivity of resources, and institutions are able to influence the social and environmental impact of companies in the supply chain.

Carbon offsetting

- 42. When done correctly, carbon offsetting compensates for unavoidable emissions by paying someone to make an equivalent CO₂ saving elsewhere in the world. More and more individuals and businesses are volunteering to offset their emissions. Offsetting is not a 'cure' for climate change; the most effective way to combat climate change is to reduce emissions. However, good-quality offsetting can balance the impact of our actions and help raise awareness of climate change issues. The cost of offsetting can also provide an incentive to make further emission reductions at home.
- 43. Carbon offsetting will not be accepted by HEFCE as a means of meeting an institution's carbon reduction target for scopes 1 and 2. However, carbon offsetting may form part of an institution's carbon management plan for mitigating the effects of essential activities that create emissions under scope 3. Before choosing to offset, it is important that steps are taken to measure and, where possible, avoid and reduce emissions. To be able to offset, HEIs can then calculate their unavoidable emissions to know how many tonnes of CO₂ they wish to offset. Once the number of tonnes to be offset is known, credits can be bought from emissions reduction projects for the equivalent amount.
- 44. The carbon market is complex and there are numerous types of credits available for offsetting. To help consumers identify which credits are good-quality credits, the UK Government has established a voluntary quality assurance scheme for carbon offsetting.
- 45. The Guildhall School has analysed the benefits of carbon offsetting together with the financial cost of doing so, and has concluded that there is still much to be achieved by investment in technical interventions that actually reduce emissions in the first place. The conclusion is that the School's financial resources are better spent, at least for the time being, on carbon reducing initiatives rather than on carbon offsetting, as carbon reducing initiatives will have a far greater effect. The situation will be further reviewed in future years.

Carbon emissions data - scopes 1 and 2

- 46. The data on the next page shows how the Guildhall School's total direct greenhouse gas emissions (scopes 1 and 2) have been calculated for academic years 2005/06 to 2012/13. The first year establishes the 2005 baseline, as required by HEFCE, against which the School's future greenhouse gas reduction targets will be based.
- 47. All buildings have data for the consumption of purchased electricity, measured in kWhs per month. In addition, the School's main building in Silk Street has data for the consumption of hot and chilled water from the Citigen CHP plant, and the residential accommodation at Sundial Court has data for the consumption of hot water from Citigen. Again, these data are shown in kWhs per month. The School also runs one diesel-fuel Transit van, which it uses largely for local and inter-site deliveries. Data for this vehicle has been included shown in miles travelled per month.
- 48. The Department of the Environment, Food and Rural Affairs (DEFRA) has developed conversion factors that can be used to calculate carbon emissions for a given fuel. All the above data have been converted into Tonnes CO₂e using the Guidelines to DEFRA / DECC's GHG conversion factors for company reporting ¹⁰. The exact conversion factors used for each fuel in each year are shown in the data tables., and are updated each year as necessary.
- 49. In the case of hot and chilled water from Citigen's CHP plant, the School has been consistent with City of London Corporation policy and used the relevant conversion factors for natural gas. Whilst at first glance this appears to be an anomaly, it is because Citigen does not generate electricity for the national grid for 100% of the time. When it is not generating electricity, it satisfies the heating and chilling requirements of its customers by using stand-alone gas boilers and electric chillers.
- 50. Although the above methodology is an over-estimate of the City Corporation's and the School's carbon emissions, there is a compensating factor because it is the kWhs of metered hot (and chilled) water that is being measured as opposed to the more correct kWhs of natural gas used to generate it. Rather than attempt to calculate the equivalent kWhs of natural gas used, which would require complicated assessments of the efficiency of Citigen's gas boilers, the City Corporation prefers to calculate its carbon emissions based on the lower kWhs of hot (and chilled) water supplied, because this is more than compensated by the fact that gas conversion factors are being applied to all of the metered hot (and chilled) water, when in fact at least some of it is carbon free (being the by-product of electricity generation). As Citigen builds up its customer base, with longer CHP running justified, the carbon factor for heat and chilled water supplied will gradually improve.

¹⁰ http://www.defra.gov.uk/publications/files/pb13773-ghg-conversion-factors-2012.pdf

				ELE	CTRICITY (k)	Wh)			
	Month	2006 - 07	2007 - 08	2008 - 09	2009 - 10	2010 - 11	2011-12	2012-13	2013-14
	Aug	87,000	44,080	78,168	145,997	92,257	98,279	102,648	101,024
	Sep	111,372	55,541	103,323	148,112	110,537	109,676	111,436	102,701
_	Oct	123,659	128,912	134,587	151,835	128,852	125,142	129,893	123,532
OL OL	Nov	144,213	135,221	141,614	147,732	134,869	128,331	132,678	135,759
MAIN SCHOOL	Dec	112,285	119,561	128,156	127,798	123,216	121,530	108,606	111,764
품	Jan	153,004	136,064	178,570	154,803	123,517	129,234	145,959	
S	Feb	141,463	138,225	180,473	141,732	118,656	134,614	125,640	
Z	Mar	143,729	134,248	192,340	147,330	127,426	126,628	138,949	
₹	Apr	99,191	127,032	166,355 160,106	114,491	92,505	111,532	115,172 118,355	
~	May Jun	117,865 113,516	126,953 122,132	169,799	123,142 134,121	111,118	129,483	115,722	
	Jul	99,976	114,514	161,642	128,630	118,599 120,050	123,304 110,772	114,773	
	Total	1,447,273	1,382,483	1,795,132	1,665,723	1,401,600	1,448,525	1,459,831	574,780
	rotai	.,,2.0	.,002,100	.,,,,,,,,	1,000,120	1,101,000	.,,.20	.,,	0.1,100
	Aug		34,720	34,720	43,140	32,490	0	7,035	5,061
×	Sep						0	10,079	7,050
뿌	Oct	44,280					0	10,966	9,379
Ž	Nov		35,100	34,720	24,970	84,620	72,900	14,218	9,262
⋖	Dec						0	15,100	14,661
8	Jan	37,720					0	19,156	
S	Feb		13,350	35,100	24,970	40,320	0	18,054	
9	Mar	24,190					78,570	14,804	
7	Apr	F0 100	0.4 =00	00.010	00.400	40 =00	9,620	13,017	
Ī	May	56,430	34,720	33,640	33,460	40,760	12,170	13,461	
JOHN HOSIER ANNEX	Jun						9,800	9,558	
	Jul Total	162,620	117,890	138,180	126,540	198,190	7,530 190,590	4,276 149,724	45,413
	rotal	102,020	117,090	130,100	120,040	130,190	180,080	140,724	40,413
	Aug	7,880							116,559
	Sep								126,268
2	Oct	8,266							147,272
Ė	Nov	47,780							140,334
MILTON COURT HV SUPPLY	Dec								140,007
ON COUR SUPPLY	Jan	45,108							
S E	Feb	53,664							
N US	Mar	16,328							
) 10 10	Apr	23,501							
i	May								
2	Jun								
	Jul Total	202,525							670,440
	Total	202,020							070,110
Z	Aug	2,688							
◙	Sep								
- 4	Oct	2,930							
TZ ST,	Nov	15,029							
Ď ü	Dec								
었 座	Jan	9,539							
2 "	Feb	14,618							
LTON COURT 1 OOR FIRE STATION	Mar	44 504							
ILTON COURT LOOR FIRE ST,	Apr May	11,564							
≥ ਛ	Jun								
2ND	Jul								
2	Total	56,368							
7		56,368							
-	Total	56,368	3,968	3,968	3,968	2,395	91	1,088	1,522
-	Total Aug Sep	56,368	3,840	3,840	3,840	2,395		1,310	1,776
-	Aug Sep Oct	56,368	3,840 3,968	3,840 3,968	3,840 3,968	2,395 2,395	2,862	1,310 3,064	1,776 3,954
-	Aug Sep Oct Nov	56,368	3,840 3,968 3,840	3,840 3,968 3,840	3,840 3,968 3,840	2,395	2,862 2,921	1,310 3,064 4,117	1,776 3,954 3,757
-	Aug Sep Oct Nov Dec	56,368	3,840 3,968 3,840 3,968	3,840 3,968 3,840 3,968	3,840 3,968 3,840 3,968	2,395 2,395 2,395	2,862 2,921 4,280	1,310 3,064 4,117 6,821	1,776 3,954 3,757
-	Aug Sep Oct Nov Dec Jan	56,368	3,840 ⁷ 3,968 3,840 ⁷ 3,968 3,968	3,840 3,968 3,840 3,968 3,968	3,840 3,968 3,840 3,968 3,968	2,395 2,395	2,862 2,921 4,280 4,166	1,310 3,064 4,117 6,821 6,245	1,776 3,954 3,757
-	Aug Sep Oct Nov Dec Jan Feb	56,368	3,840** 3,968 3,840** 3,968 3,968 3,712**	3,840 3,968 3,968 3,968 3,968 3,584 3	3,840 3,968 3,840 3,968 3,968 2,816	2,395 2,395 2,395 9,716	2,862 2,921 4,280 4,166 5,552	1,310 3,064 4,117 6,821 6,245 5,354	1,776 3,954 3,757
-	Aug Sep Oct Nov Dec Jan Feb Mar	,	3,840 ⁷ 3,968 3,840 ⁸ 3,968 3,968 3,712 ⁷ 3,968	3,840* 3,968 3,840* 3,968 3,968 3,584* 3,968	3,840 3,968 3,840 3,968 3,968 2,816 3,968	2,395 2,395 2,395 9,716	2,862 2,921 4,280 4,166 5,552 3,500	1,310 3,064 4,117 6,821 6,245 5,354 5,180	1,776 3,954 3,757
-	Aug Sep Oct Nov Dec Jan Feb Mar Apr	3,840	3,840 ⁷ 3,968 3,840 ⁸ 3,968 3,968 3,712 ⁷ 3,968 3,840 ⁸	3,840 ** 3,968 3,840 ** 3,968 3,968 3,584 ** 3,968 3,840 **	3,840 3,968 3,840 3,968 3,968 2,816 3,968 3,840	2,395 2,395 2,395 9,716 10,438 1,458	2,862 2,921 4,280 4,166 5,552 3,500 3,281	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176	1,776 3,954 3,757
-	Aug Sep Oct Nov Dec Jan Feb Mar	,	3,840 ⁷ 3,968 3,840 ⁸ 3,968 3,968 3,712 ⁷ 3,968	3,840* 3,968 3,840* 3,968 3,968 3,584* 3,968	3,840 3,968 3,840 3,968 3,968 2,816 3,968 3,840 3,968	2,395 2,395 2,395 9,716 10,438 1,458 1,642	2,862 2,921 4,280 4,166 5,552 3,500	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460	1,776 3,954
-	Aug Sep Oct Nov Dec Jan Feb Mar Apr May	3,840 3,968	3,840* 3,968 3,840* 3,968 3,968 3,712* 3,968 3,840* 3,968	3,840 ** 3,968 3,840 ** 3,968 3,968 3,584 ** 3,968 3,840 ** 3,968	3,840 3,968 3,840 3,968 3,968 2,816 3,968 3,840	2,395 2,395 2,395 9,716 10,438 1,458	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176	1,776 3,954 3,757
JOHN TRUNDLE COURT 1 21	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun	3,840 3,968 3,840	3,840* 3,968 3,840* 3,968 3,712* 3,968 3,840* 3,968 3,840*	3,840° 3,968 3,840° 3,968 3,584° 3,968 3,840° 3,968 3,840°	3,840 3,968 3,840 3,968 3,968 2,816 3,968 3,840 3,968 3,840	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019	1,776 3,954 3,757
-	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul	3,840 3,968 3,840 3,968 15,616	3,840 ,3,968 3,840 ,3,968 3,968 3,968 3,712 ,3,968 3,840 ,3,968 3,840 ,3,968 46,848	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 3,968 3,840 7 1,632 44,384	3,840 3,968 3,840 3,968 3,968 2,816 3,968 3,840 3,968 3,840 3,968 45,952	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329	1,776 3,954 3,757 1,742
-	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Total	3,840 3,968 3,840 3,968 15,616	3,840 3,968 3,840 3,968 3,968 3,712 3,968 3,840 3,968 3,840 3,968 46,848	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384	3,840 3,968 3,840 3,968 3,968 2,816 3,968 3,840 3,968 3,840 3,968 45,952	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329	1,776 3,954 3,757 1,742 12,751 224,166
Y JOHN TRUNDLE COURT 1	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Total	3,840 3,968 3,840 3,968 15,616 97,567 111,372	3,840 ,3968 3,840 ,3968 3,968 3,712 ,3968 3,840 3,968 3,840 3,968 46,848 82,768 59,381	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384	3,840 3,968 3,840 3,968 3,968 2,816 3,968 3,840 3,968 45,952	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329	1,776 3,954 3,757 1,742 12,751 224,166 237,795
Y JOHN TRUNDLE COURT 1	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Total	3,840 3,968 3,840 3,968 15,616 97,567 111,372 179,134	3,840 7 3,968 3,840 7 3,968 3,968 3,712 7 3,968 3,840 7 3,968 46,848 82,768 59,381 132,880	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384 116,856 107,163 138,555	3,840 3,968 3,840 3,968 3,968 2,816 3,968 3,840 3,968 45,952 193,105 151,952 155,803	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 127,142 112,932 131,247	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137
Y JOHN TRUNDLE COURT 1	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Total	3,840 3,968 3,840 3,968 15,616 97,567 111,372 179,134 207,022	3,840 ,3968 3,840 ,3968 3,968 3,712 ,3968 3,840 ,3968 3,840 ,3968 46,848 82,768 59,381 132,880 174,161	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384 116,856 107,163 138,555 180,174	3,840 3,968 3,840 3,968 3,968 2,816 3,968 3,840 3,968 45,952 193,105 151,952 155,803 176,542	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 127,142 112,932 131,247 221,884	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329 110,771 122,825 143,923 151,013	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137 289,112
Y JOHN TRUNDLE COURT 1	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Total	3,840 3,968 3,840 3,968 15,616 97,567 111,372 179,134 207,022 112,285	3,840 ° 3,968 3,840 ° 3,968 3,968 3,712 ° 3,968 3,840 ° 3,968 46,848 82,768 59,381 132,880 174,161 123,529	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384 116,856 107,163 138,555 180,174 132,124	3,840 3,968 3,840 3,968 3,968 3,846 3,968 3,840 3,968 45,952 193,105 151,952 155,803 176,542 131,766	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 127,142 112,932 131,247 221,884 123,216	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767 98,370 109,676 128,004 204,152 125,810	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329 110,771 122,825 143,923 151,013 130,527	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137 289,112 268,174
Y JOHN TRUNDLE COURT 1	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Total Aug Sep Oct Vov Dec Jan	3,840 3,968 3,840 3,968 15,616 97,567 111,372 179,134 207,022 112,285 245,372	3,840 ,3,968 3,840 ,3,968 3,968 3,712 ,3,968 3,840 ,3,968 3,840 ,3,968 46,848 82,768 59,381 132,880 174,161 123,529 140,032	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384 116,856 107,163 138,555 180,174 132,124 182,538	3,840 3,968 3,840 3,968 3,968 3,840 3,968 3,840 3,968 45,952 193,105 151,952 155,803 176,542 131,766 158,771	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 127,142 112,932 131,247 221,884 123,216 133,233	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767 98,370 109,676 128,004 204,152 125,810 133,400	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329 110,771 122,825 143,923 151,013 130,527 171,360	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137 289,112 268,174
Y JOHN TRUNDLE COURT 1	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Total Aug Sep Oct Nov Dec Jan Feb	3,840 3,968 3,840 3,968 15,616 97,567 111,372 179,134 207,022 112,285 245,372 209,745	3,840 ,3968 3,840 ,3968 3,968 3,712 ,3968 3,840 3,968 46,848 82,768 59,381 132,880 174,161 123,529 140,032 155,287	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384 116,856 107,163 138,555 180,174 132,124 182,538 219,157	3,840 3,968 3,840 3,968 2,816 3,968 3,840 3,968 45,952 193,105 151,952 155,803 176,542 131,766 158,771 169,518	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 127,142 112,932 131,247 221,884 123,216 133,233 158,976	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767 98,370 109,676 128,004 204,152 125,810 133,400 140,166	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,019 1,495 45,329 110,771 122,825 143,923 151,013 130,527 171,360 149,048	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137 289,112 268,174
ELECTRICITY JOHN TRUNDLE COURT 1 ESIDENTIAL	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Total Aug Sep Oct Nov Dec Jan Feb Mar	3,840 3,968 3,840 3,968 15,616 97,567 111,372 179,134 207,022 112,285 245,372 209,745 184,246	3,840 7 3,968 3,840 7 3,968 3,968 3,712 7 3,968 3,840 7 3,968 46,848 82,768 59,381 132,880 174,161 123,529 140,032 155,287 138,216	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384 116,856 107,163 138,555 180,174 132,124 182,538 219,157 196,308	3,840 3,968 3,840 3,968 3,968 2,816 3,968 3,840 3,968 45,952 193,105 151,952 155,803 176,542 131,766 158,771 169,518 151,298	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 127,142 112,932 131,247 221,884 123,216 133,233 158,976 137,864	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767 98,370 109,676 128,004 204,152 125,810 133,400 140,166 208,698	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329 110,771 122,825 143,923 151,013 130,527 171,360 149,048 158,933	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137 289,112 268,174 0
ELECTRICITY JOHN TRUNDLE COURT ESIDENTIAL	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Total Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Total	3,840 3,968 3,840 3,968 15,616 97,567 111,372 179,134 207,022 112,285 245,372 209,745 184,246 138,096	3,840 3,968 3,968 3,968 3,968 3,712 3,968 3,840 3,968 46,848 82,768 59,381 132,880 174,161 123,529 140,032 155,287 138,216 130,872	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384 116,856 107,163 138,555 180,174 132,124 182,538 219,157 196,308 170,195	3,840 3,968 3,840 3,968 2,816 3,968 3,840 3,968 45,952 193,105 151,952 155,803 176,542 131,766 158,771 169,518 151,298 118,331	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 112,932 131,247 221,884 123,216 133,233 158,976 137,864 93,963	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767 98,370 109,676 128,004 204,152 125,810 133,400 140,166 208,698 124,433	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329 110,771 122,825 143,923 151,013 130,527 171,360 149,048 158,933 134,365	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137 289,112 268,174 0 0
ELECTRICITY JOHN TRUNDLE COURT ESIDENTIAL	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jul Total Aug Sep Oct Nov Dec Jan Feb Mar	3,840 3,968 3,840 3,968 15,616 97,567 111,372 179,134 207,022 112,285 245,372 209,745 184,246 138,096 178,263	3,840 7 3,968 3,840 7 3,968 3,968 3,712 7 3,968 3,840 7 3,968 46,848 82,768 59,381 132,880 174,161 123,529 140,032 155,287 138,216 130,872 165,641	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384 116,856 107,163 138,555 180,174 132,124 182,538 219,157 196,308 170,195 197,714	3,840 3,968 3,840 3,968 2,816 3,968 3,840 3,968 45,952 193,105 151,952 155,803 176,542 131,766 158,771 169,518 151,298 118,331 160,570	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 127,142 112,932 131,247 221,884 123,216 133,233 158,976 137,864 93,963 153,520	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767 98,370 109,676 128,004 204,152 125,810 133,400 140,166 208,698 124,433 144,114	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329 110,771 122,825 143,923 151,013 130,527 171,360 149,048 158,933 134,365 134,276	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137 289,112 268,174 0 0 0
Y JOHN TRUNDLE COURT 1	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Total Aug Sep Oct Nov Dec Jan Feb Mar Apr May Aug Sep Oct Nov Dec Jan Feb Mar Apr May	3,840 3,968 3,840 3,968 15,616 97,567 111,372 179,134 207,022 112,285 245,372 209,745 184,246 138,096	3,840 3,968 3,968 3,968 3,968 3,712 3,968 3,840 3,968 46,848 82,768 59,381 132,880 174,161 123,529 140,032 155,287 138,216 130,872	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384 116,856 107,163 138,555 180,174 132,124 182,538 219,157 196,308 170,195	3,840 3,968 3,840 3,968 2,816 3,968 3,840 3,968 45,952 193,105 151,952 155,803 176,542 131,766 158,771 169,518 151,298 118,331	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 112,932 131,247 221,884 123,216 133,233 158,976 137,864 93,963	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767 98,370 109,676 128,004 204,152 125,810 133,400 140,166 208,698 124,433	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329 110,771 122,825 143,923 151,013 130,527 171,360 149,048 158,933 134,365	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137 289,112 268,174 0 0 0
ELECTRICITY JOHN TRUNDLE COURT 1	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Total Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Jun Jun Jun Jun Jun Jun Jun Jun Heres	3,840 3,968 3,840 3,968 3,968 15,616 97,567 111,372 179,134 207,022 112,285 245,372 209,745 184,246 138,096 178,263 117,356	3,840 3,968 3,840 3,968 3,968 3,712 3,968 3,840 3,968 3,840 3,968 46,848 82,768 59,381 132,880 174,161 123,529 140,032 155,287 138,216 130,872 165,641 125,972	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384 116,856 107,163 138,555 180,174 132,124 182,538 219,157 196,308 170,195 197,714 173,639	3,840 3,968 3,840 3,968 2,816 3,968 3,840 3,968 45,952 193,105 151,952 155,803 176,542 131,766 158,771 169,518 151,298 118,331 160,570 137,961	2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 127,142 112,932 131,247 221,884 123,216 133,233 158,976 137,864 93,963 153,520 119,848	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767 98,370 109,676 128,004 204,152 125,810 133,400 140,166 208,698 124,433 144,114 134,484	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329 110,771 122,825 143,923 151,013 130,527 171,360 149,048 158,933 134,365 134,276 127,299	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137 289,112 268,174 0 0
TOTAL ELECTRICITY NON-RESIDENTIAL JOHN TRUNDLE COURT 1	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Total Aug Sep Oct Nov Dec Jan Feb Mar Apr Nov Dec Jan Feb Mar Apr May Jun Total	3,840 3,968 3,840 3,968 15,616 97,567 111,372 179,134 207,022 112,285 245,372 209,745 184,246 138,096 178,263 117,356 103,944 1,884,402	3,840 3,968 3,840 3,968 3,968 3,968 3,712 3,968 3,840 3,968 46,848 82,768 59,381 132,880 174,161 123,529 140,032 155,287 138,216 130,872 165,641 125,972 118,482 1,547,221	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384 116,856 107,163 138,555 180,174 132,124 182,538 219,157 196,308 170,195 197,714 173,639 163,274 1,977,696	3,840 3,968 3,840 3,968 3,968 2,816 3,968 3,840 3,968 45,952 193,105 151,952 155,803 176,542 131,766 158,771 169,518 151,298 118,331 160,570 137,961 132,598 1,838,215	2,395 2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 127,142 112,932 131,247 221,884 123,216 133,233 158,976 137,864 93,963 153,520 119,848 122,001 1,635,824	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767 98,370 109,676 128,004 204,152 125,810 133,400 140,166 208,698 124,433 144,114 134,484 119,575 1,670,882	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329 110,771 122,825 143,923 151,013 130,527 171,360 149,048 158,933 134,365 134,276 127,299 120,544 1,654,884	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137 289,112 268,174 0 0 0 0 0 0 0 1,303,384
TOTAL ELECTRICITY ONN-RESIDENTIAL JOHN TRUNDLE COURT ON TRUNDLE COURT ON TRUNDLE COURT ON TRUNDLE COURT	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Total Aug Sep Oct Nov Dec Jan Feb Mar Apr Mov Dec Jan Feb Mar Apr Mov Dec Jan Feb Mar Apr May Jun Jul Total	3,840 3,968 3,840 3,968 15,616 97,567 111,372 179,134 207,022 112,285 245,372 209,745 184,246 138,096 178,263 117,356 103,944 1,884,402	3,840 7 3,968 3,840 7 3,968 3,968 3,968 3,840 7 3,968 46,848 82,768 59,381 132,880 174,161 123,529 140,032 155,287 138,216 130,872 165,641 125,972 118,482 1,547,221	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 3,968 1,632 44,384 116,856 107,163 138,555 180,174 132,124 182,538 219,157 196,308 170,195 197,714 173,639 177,7196 1977,696	3,840 3,968 3,840 3,968 2,816 3,968 3,840 3,968 45,952 193,105 151,952 155,803 176,542 131,766 158,771 169,518 151,298 118,331 160,570 137,961 132,598 1,838,215	2,395 2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 127,142 112,932 131,247 221,884 123,216 133,233 158,976 137,864 93,963 153,520 119,848 122,001 1,635,824	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767 98,370 109,676 128,004 204,152 125,810 133,400 140,166 208,698 124,433 144,114 134,484 119,575 1,670,882	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329 110,771 122,825 143,923 151,013 130,527 171,360 149,048 158,933 134,365 134,276 127,299 120,544 1,654,884	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137 289,112 268,174 0 0 0 0 0 0 1,303,384
TOTAL ELECTRICITY NON-RESIDENTIAL NON-RESIDENTIAL	Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun Total Aug Sep Oct Nov Dec Jan Feb Mar Apr Nov Dec Jan Feb Mar Apr May Jun Total	3,840 3,968 3,840 3,968 15,616 97,567 111,372 179,134 207,022 112,285 245,372 209,745 184,246 138,096 178,263 117,356 103,944 1,884,402	3,840 3,968 3,840 3,968 3,968 3,968 3,712 3,968 3,840 3,968 46,848 82,768 59,381 132,880 174,161 123,529 140,032 155,287 138,216 130,872 165,641 125,972 118,482 1,547,221	3,840 7 3,968 3,840 7 3,968 3,968 3,584 7 3,968 3,840 7 1,632 44,384 116,856 107,163 138,555 180,174 132,124 182,538 219,157 196,308 170,195 197,714 173,639 163,274 1,977,696	3,840 3,968 3,840 3,968 2,816 3,968 3,840 3,968 45,952 193,105 151,952 155,803 176,542 131,766 158,771 169,518 151,298 118,331 160,570 137,961 132,598 1,838,215	2,395 2,395 2,395 2,395 9,716 10,438 1,458 1,642 1,249 1,951 36,034 127,142 112,932 131,247 221,884 123,216 133,233 158,976 137,864 93,963 153,520 119,848 122,001 1,635,824	2,862 2,921 4,280 4,166 5,552 3,500 3,281 2,461 1,380 1,273 31,767 98,370 109,676 128,004 204,152 125,810 133,400 140,166 208,698 124,433 144,114 134,484 119,575 1,670,882	1,310 3,064 4,117 6,821 6,245 5,354 5,180 6,176 2,460 2,019 1,495 45,329 110,771 122,825 143,923 151,013 130,527 171,360 149,048 158,933 134,365 134,276 127,299 120,544 1,654,884	1,776 3,954 3,757 1,742 12,751 224,166 237,795 284,137 289,112 268,174 0 0 0 0 0 0 0 1,303,384

				СН	P (Citigen) (k	Wh)			
	Month	2006 - 07	2007 - 08	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012-13	2013-14
	Aug	33,640	21,270	24,830	41,660	27,770	15,640	24,540	7,024
	Sep	29,590	24,810	23,920	48,000	29,350	16,990	25,710	11,405
_ إ	Oct	39,340	45,900	50,920	77,870	25,170	25,740	55,318	18,206
₹ ∑	Nov	69,850	92,180	76,640	68,930	37,240	31,840	47,650	17,741
CHP ENTI	Dec	83,800	132,920	141,710	90,590	70,440	35,750	163,850	21,290
10 H F	Jan	104,800	125,730	189,080	123,820	51,390	44,430	50,000	
AL C SIDI SCF	Feb	112,350	98,990	213,360	106,940	40,250	54,730	48,714	
	Mar	94,210	110,910	96,000	93,910	35,290	45,780	49,786	
	Apr	54,640	79,670	110,260	93,000	22,220	35,880	59,071	
NON AM	May	44,330	37,520	70,510	54,640	22,220	31,580	31,114	
ž	Jun	28,080	27,160	43,990	30,450	25,000	23,590	22,341	
	Jul	17,400	25,600	40,880	24,840	15,000	14,780	10,593	
	Total	712,030	822,660	1,082,100	854,650	401,340	376,730	588,687	75,666
Conversi	on Factor	0.185	0.18396	0.18523	0.18360	0.18521	0.18521	0.18521	0.18521
TON	NES CO₂e	131.726	151.337	200.437	156.914	74.332	69.774	109.031	14.014

			FLEET VEH	ICLE (Miles t	ravelled)	
	Aug			44	15	
	Sep		363	310	134	
	Oct		202	367	137	
	Nov		873	199	322	
VEHICLE	Dec		199	54	48	
프	Jan		201	23	613	
5	Feb		55	71	211	
H-	Mar		154	414	764	
EET	Apr		340	411	155	
<u> </u>	May		499	519	212	
-	Jun	811	464	760	208	
	Jul	301	83	206	231	
	Total	1,112	3,433	3,378	3,050	

Conversion Factor		0.48499	0.43619	0.43470	0.42877	0.42877	0.42877	0.42877
TONNES CO₂e	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Г			TOTAL TO	ONNES CO2e	NON-RESIDE	NTIAL		
	2006 - 07	2007 - 08	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012-13	2013-14
	1,130.892	977.813	1,267.221	1,143.555	935.789	939.251	970.183	692.256

RESIDENTIAL

				ELI	ECTRICITY (k	Wh)			
	Month	2006 - 07	2007 - 08	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012-13	2013-14
	Aug	49,803	46,208	43,394	61,755	55,671	51,203	53,541	51,905
	Sep	54,389	44,583	47,767	51,177	50,891	47,907	49,333	45,449
-	Oct	62,536	58,302	60,493	61,886	55,385	56,717	53,375	51,277
RT	Nov	61,113	63,076	60,525	62,639	55,861	54,045	49,040	52,544
OO I	Dec	50,135	59,084	54,566	50,536	47,797	42,378	38,660	43,513
SE	Jan	57,035	60,463	64,252	60,376	53,408	49,830	48,765	
7 2	Feb	54,746	60,971	61,098	55,563	47,204	49,858	45,943	
DIA	Mar	59,113	61,603	66,315	62,202	55,495	49,865	50,356	
	Apr	46,911	55,945	55,457	48,171	46,279	41,286	41,511	
<u>5</u> ∞	May	57,279	61,064	65,530	58,956	54,617	49,630	46,741	
S	Jun	53,018	57,549	61,516	53,532	52,381	48,635	46,134	
	Jul	52,021	53,935	62,196	54,927	53,706	52,294	51,472	
	Total	658,099	682,784	703,109	681,720	628,695	593,648	574,871	244,688
•	•								

Conversion Factor	0.53382	0.53865	0.53594	0.52582	0.52037	0.52037	0.52037	0.52037
TONNES CO₂e	351.306	367.782	376.824	358.462	327.154	308.917	299.146	127.328

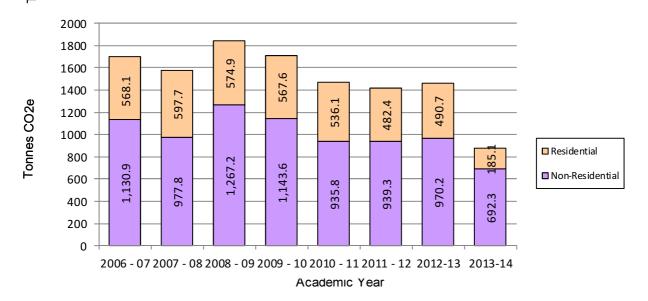
				СН	P (Citigen) (k	(Wh)			
	Aug	33,770	52,670	37,640	14,450	54,530	14,770	4,460	30,452
	Sep	31,590	44,070	43,000	45,280	60,450	48,120	5,976	41,667
-	Oct	79,490	87,200	75,500	67,920	86,790	63,700	55,318	71,841
IR I	Nov	130,310	110,410	109,960	99,120	135,200	90,150	105,864	70,464
COU	Dec	153,480	183,010	168,740	135,000	181,980	122,470	136,208	97,742
υΣ	Jan	141,450	150,310	149,580	149,130	158,300	136,900	142,500	
7 2	Feb	152,220	158,140	148,180	181,790	124,600	129,700	139,300	
SID	Mar	141,240	160,150	111,690	164,140	129,100	107,970	132,771	
	Apr	92,010	109,180	87,490	105,650	64,330	86,180	141,857	
□ ∞	May	84,790	92,997	63,700	83,220	50,000	84,310	74,200	
S	Jun	67,080	58,273	39,570	53,630	58,000	51,250	59,244	
	Jul	64,190	43,250	34,290	39,920	25,000	1,240	36,389	
	Total	1,171,620	1,249,660	1,069,340	1,139,250	1,128,280	936,760	1,034,087	312,166

Conversion Factor	0.185	0.18396	0.18523	0.18360	0.18521	0.18521	0.18521	0.18521
TONNES CO ₂ e	216.750	229.887	198.074	209.166	208.969	173.497	191.523	57.816

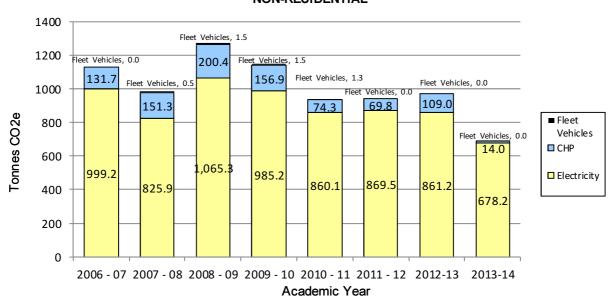
2006 - 07 2007 - 08 2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012-13	2013-14
		2010 11	2011-12	2012-13	2013-14
568.056 597.669 574.898	567.628	536.123	482.414	490.669	185.145

		TOTAL T	ONNES C	O₂e ALL SC	DURCES		
2006 - 07	2007 - 08	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012-13	2013-14
1,698.948	1,575.482	1,842.119	1,711.183	1,471.912	1,421.665	1,460.852	877.401

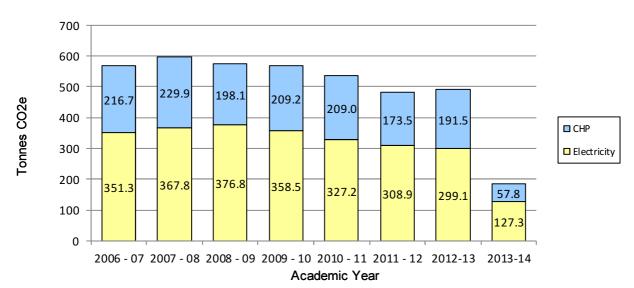
TOTAL GREENHOUSE GAS EMISSIONS - SCOPES 1 AND 2



GREENHOUSE GAS EMISSIONS - SCOPES 1 AND 2 NON-RESIDENTIAL



GREENHOUSE GAS EMISSIONS - SCOPES 1 AND 2 RESIDENTIAL



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Assessment against baseline and target – scopes 1 and 2

- 51. The data in the previous section show that the Guildhall School's total direct greenhouse gas emissions (scopes 1 and 2) in academic year 2005/06 amounted to **2,047.545 tonnes**. This establishes the 2005 baseline against which the School's future greenhouse gas reduction targets will be based, in line with the rest of the HE sector.
- 52. After significant reductions in the following two years, there was a substantial increase in 2008/09, largely due to the failure of the BEMS in the main Silk Street building. After this problem was solved, energy consumption immediately started to fall, leading to a reduction of carbon emissions in 2009/10 of 5.48% to 1,730.256 tonnes. This represents a reduction of 15.5% against the 2005 baseline.
- 53. In 2010/11, a further very considerable reduction was achieved of 15.67% to 1,459.042 tonnes, which represents a reduction of 28.74% against the 2005 baseline. This achievement is attributable in the most to further refinements to the settings of the BEMS in the Silk Street building as engineering staff become ever more experienced in using it, but also in part to the effects of behavioural change by staff and by students, which is beginning to make a noticeable difference to energy consumption.
- 54. As a consequence of the above results, the Guildhall School committed itself to increasing its target for the reduction of total scope 1 and 2 direct greenhouse gas emissions arising from its existing estate from 30% to 43% by the academic year 2019/20 against its 2005 baseline. This is an absolute target, meaning that total direct greenhouse gas emissions arising from its existing estate (i.e. not including Milton Court) must not exceed 1,167.101 tonnes in 2019/20.
- 55. 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
- 56. The School achieved its first milestone target in the 2011/12 period with a reduction, of 3.95% to 1,401,352 tonnes, which represents a reduction of 31.56% against the 2005 baseline. In the the 2012/13 period this has reduced to 28% of baseline. This can be attributed to the colder winter conditions in this period. This observations is supported by a degree day comparison with the 2005 baseline year which shows a 31% increase in degree days for 2013. With further carbon reduction measures planned for the next rporting period we will continue to strive towards the overall target of 43% by 2019/20.
- 57. The School believes its 2020 reduction target to be appropriate and achievable but realistic, and takes into account the following factors:
 - The initiatives and controls already in place as a result of the School being part of the City of London Corporation
 - The reductions already achieved as a result of the new BEMS being operational

 The constraints arising from the School's buildings being grade 2 listed, and the specialist uses to which large parts of the School's estate are put as an international performing arts institution

Milton Court

- 58. The Guildhall School's long-awaited new facilities at Milton Court became operational in September 2013, adding some 11,385m² to the School's estate. The building has been designed to the highest possible environmental standards for its type, including the use of the Citigen CHP plant for all its heating and most of its cooling requirements. It has achieved a BREEAM¹¹ rating of very good. Nonetheless it is inevitable that the addition of a building of this size to the estate will lead to an overall increase in the School's energy consumption and therefore its carbon emissions.
- 59. The School's 2020 carbon reduction target of 43% therefore relates to the estate as it exists in 2013 and does not include Milton Court.
- 60. The designers of Milton Court have provisionally estimated that its annual energy consumption is likely to be in the region of 1,660,000 kWhs, which equates to total scope 1 and 2 direct greenhouse gas emissions of 632.554 tonnes. This is calculated as follows:

Milton Court	Electricity	CHP (Citigen)	Total
kWhs	970,000	690,000	1,660,000
Conversion factor	0.52037	0.18521	
Tonnes CO₂e	504.759	127.795	632.554

- 61. Since the commissioning of the building, its energy consumption has been monitored separately from the rest of the estate. The first four months monitored consumption are above the estimates, this being accounted for by commissioning difficulties with the M&E plant alongside a greater utilisation than originally predicted. If possibilities emerge for reducing its energy consumption by technical interventions, these will be pursued and appropriate reduction targets set accordingly. Overall space utilisation of the entire enlarged estate will also be monitored carefully, to ensure that the most effective and efficient use is made of all the School's assets.
- 62. The table below estimates what the Guildhall School's predicted annual carbon emissions for Milton Court.. Taking account of the above carbon reduction targets and milestones for its existing estate and assuming that the carbon model for Milton Court prove to be accurate, the table shows that the School's overall emissions will increase with the addition of Milton Court, but by 2015/16 will still be below the 2005 baseline. Once the increased size of the estate is taken into account, the carbon emissions per m² of estate reduce from 0.091 tonnes to 0.053 tonnes, a reduction of 41.54%.

	2005 - 06	2010 - 11	2011 - 12	2015 - 16	2019 - 20
Total tonnes CO ₂ e for existing estate	2,047.545	1,459.042	1,401.352	1,269.478	1,167.101

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¹¹ BREEAM (Building Research Establishment Environmental Assessment Method) is the leading and most widely used environmental assessment method for non-domestic buildings. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building's environmental performance.

Total tonnes CO ₂ e for Milton Court				632.554	632.554
Total tonnes CO ₂ e for enlarged estate	2,047.545	1,459.042	1,401.352	1,902.032	1,799.655
Approx. total area of estate (m ²)	22,614	22,614	22,614	33,999	33,999
Tonnes CO₂e per m² of estate	0.091	0.065	0.062	0.056	0.053

Carbon emissions data – scope 3

- 63. Scope 3 indirect carbon emissions arise principally from transport, from water and waste and from procurement. These carbon emissions are indirect, i.e. they are a consequence of the organisation's activities but the source of the emissions is not under the organisation's direct control. As a result, scope 3 emissions are much harder to calculate and the institution can only affect them by behavioural change.
- 64. HEFCE is not expected to set a sector-wide target until December 2013.

 Nonetheless, all HEIs have been encouraged to attempt a calculation of their emissions from these activities and the Guildhall School has done so for transport and for water and waste. These data are given on the next pages.
- 65. Student travel surveys were carried out in October 2010 and 2012, which gathered data on the modes of transport used by students when commuting to and from the School on a daily basis, and when travelling to and from their home address at the beginning and end of each term. Relevant multiplication factors were then applied to calculate an estimated total for those two years.
- 66. A staff travel survey was first carried out in May 2011, which gathered data on the modes of transport used by staff when commuting to and from the School on a daily basis. Relevant multiplication factors were then applied to calculate an estimated total for that year. Staff and student business travel for 2010/11, e.g. to conferences, courses, concerts etc., was calculated by examining the travel expense claims made through the School's finance system. A follow up survey was carried out in May 2013
- 67. The Guildhall School's water supply to the main Silk Street building is shared with the adjacent Barbican Centre. Water consumption for this building has been calculated at 40% of the total combined consumption, which is metered. Water consumption for Sundial Court for 2010/11 onwards has been taken directly from meter readings. Water consumption for 2010/11 onwards for John Hosier Annex and for the offices at John Trundle Court has been estimated from the utility bills. Waste water volumes in all buildings have been calculated at 49% of the water supply volumes, this being the fraction applied by the utility company to the School's bills. All volumes are measured in cubic metres.
- 68. Waste volumes for 2010/11 onwards have been calculated in tonnes recycled and tonnes not recycled for mixed municipal waste. Until 2010/11, the City of London sent its non-recyclable waste to landfill. From 2011/12 onwards, this waste is sent to an energy recovery plant in South East London.
- 69. The Department of the Environment, Food and Rural Affairs (DEFRA) has developed conversion factors that can be used to calculate scope 3 carbon emissions for various modes of transport and for water and waste. All the data have been converted into Tonnes CO₂e using the Guidelines to DEFRA / DECC's

GHG conversion factors for company reporting¹². The exact conversion factors used are shown in the data tables.

70. A calculation for procurement will be attempted, and included in a further revision to this strategy, once a sector-wide approach has been agreed.

¹² http://www.defra.gov.uk/publications/files/pb13773-ghg-conversion-factors-2012.pdf

TOTAL GREENHOUSE GAS EMISSIONS - SCOPE 3

TRAVEL

STAFF COMMUTER TRAVEL SURVEY MAY 2013

			TOTAL DISTANCES TRAVELLED (KILOMETRES)										
						TOTALDIST		LLLED (KILOIVIL					
			London	National			Train		Train				
		Bicycle	Bus	Coach	Car	Motorbike	(u/ground)	Train (DLR)	(o/ground)	Walk	Plane	Total	
Full time staff	2011	14,529	37,256	0	35,124	28,908	182,329	20,675	1,399,384	5,123	0	1,723,328	
	2013	47,150	46,103	0	32,195	17,929	185,726	0	1,402,503	2,258	0	1,733,864	
Part-time/fractional staff	2011	6,815	5,096	0	22,248	1,875	26,792	1,341	426,597	1,164	0	491,928	
	2013	2,809	3,144	0	1,676	991	16,740	0	244,036	136	0	269,532	
Hourly- paid staff	2011	12,439	1,043	0	0	0	20,730	4,167	261,030	615	0	300,024	
nourry- paid starr	2013	58,453	3,268	52,140	44,527	2,996	120,446	0	576,245	154	3,258	861,487	
Total	2011	33,783	43,395	0	57,372	30,783	229,850	26,183	2,087,011	6,902	0	2,515,279	
TOTAL	2013	108,412	52,515	52,140	78,398	21,916	322,912	0	2,222,784	2,548	3,258	2,864,883	
				•									
Conversion Factor		0.00000	0.08314	0.02932	0.19023	0.11891	0.06361	0.06006	0.04904	0.00000	0.183404		
TONNES CO2e	2011	0.000	3.608	0.000	10.914	3.660	14.621	1.573	102.347	0.000	0.000		
TOININES CO2E	2013	0.000	4.366	1.529	14.914	2.606	20.540	0.000	109.005	0.000	0.598		

TOTAL TONNES CO ₂ e ALL MODES OF T	RANSPORT (STAFF COMMUTER TRAVEL)
2010-11	136.723
2012-13	153.558

STAFF AND STUDENT BUSINESS TRAVEL 2012 - 13

						TOTAL DISTA	ANCES TRAV	ELLED (KILOMET	TRES)				
			National			Train	Train	Train	Plane	Plane	Plane		
		Ferry	Coach	Car	Taxi	(u/ground)	(o/ground)	(internat'l)	(domestic)	(shorthaul)	(longhaul)	Total	
	2011	519	157	3,900	654	104	34,960	7,113	1,835	62,090	563,878	675,210	
	2013	0	1,653	2,526	2,832	4,476	49,300	13,818	0	643,079	313,854	1,031,539	
Conversion Factor		0.11608	0.02932	0.19023	0.144343	0.06361	0.04904	0.01235	0.326615	0.183404	0.165362		

	Conversion Factor		0.11608	0.02932	0.19023	0.144343	0.06361	0.04904	0.01235	0.326615	0.183404	0.165362
TONINES CO	2011	0.060	0.005	0.742	0.094	0.007	1.714	0.088	0.599	11.388	93.244	
	TONNES CO₂e	2013	0.000	0.048	0.480	0.409	0.285	2.418	0.171	0.000	117.943	51.900

TOTAL TONNES CO₂e ALL MODES OF TRANSP	TOTAL TONNES CO₂e ALL MODES OF TRANSPORT (STAFF AND STUDENT BUSINESS TRAVEL)							
2010-11	107.941							
2012-13	173.654							

	TOTAL TONNES CO₂e FROM ALL FORMS OF TRANSPORT							
2010-11	244.664							
2012-13	327.212							

Notes

Not adjusted for the whole hourly-paid staff community to avoid distortion of figures

2011/2012 Data has been recalculated using 2013 conversion rates

WATER AND WASTE WATER

NON-RESIDENTIAL

			WATER &	WASTE W	ATER (m ³)		
		Wa	ter		V	laste wate	r
	Month	2010 - 11	2011 - 12	2012-13	2010 - 11	2011 - 12	2012-13
	Aug	192	182	167	94	89	82
	Sep	186	176	162	91	86	79
	Oct	192	182	167	94	89	82
	Nov	186	176	162	91	86	79
00	Dec	192	182	167	94	89	82
Ĭ	Jan	192	182	167	94	89	82
SC	Feb	176	167	153	86	82	75
Z	Mar	192	182	167	94	89	82
MAIN SCHOOL	Apr	186	176	162	91	86	79
_	May	192	182	167	94	89	82
	Jun	186	176	162	91	86	79
	Jul	192	182	167	94	89	82
	Total	2,264	2,144	1,972	1,109	1,051	967
	Aug	22	21	19	11	10	9
	Sep	21	20	18	10	10	9
X	Oct	22	21	19	11	10	9
Z	Nov	21	20	18	10	10	9
AN	Dec	22	21	19	11	10	9
2	Jan	22	21	19	11	10	9
SE	Feb	20	19	18	10	9	9
Õ	Mar	22	21	19	11	10	9
ż	Apr	21	20	18	10	10	9
JOHN HOSIER ANNEX	May	22	21	19	11	10	9
7	Jun	21	20	18	10	10	9
	Jul	22	21	19	11	10	9
	Total	258	244	226	126	120	111

			WATER &	WASTE WA	ATER (m ³)		
			Water		W	laste wate	r
	Month	2010 - 11	2011 - 12	2012-13	2010 - 11	2011 - 12	2012-13
	Aug	4	4	3	2	2	2
_	Sep	4	3	3	2	2	2
R	Oct	4	4	3	2	2	2
٦ و	Nov	4	3	3	2	2	2
C	Dec	4	4	3	2	2	2
Ë	Jan	4	4	3	2	2	2
Z	Feb	3	3	3	2	2	1
30	Mar	4	4	3	2	2	2
JOHN TRUNDLE COURT	Apr	4	3	3	2	2	2
Z	May	4	4	3	2	2	2
ō	Jun	4	3	3	2	2	2
	Jul	4	4	3	2	2	2
	Total	44	41	38	21	20	19
		ı					
	Aug	218	206	190	107	101	93
AL	Sep	211	199	184	103	98	90
TOTAL NON-RESIDENTIAL	Oct	218	206	190	107	101	93
Ē	Nov	211	199	184	103	98	90
SID	Dec	218	206	190	107	101	93
ES	Jan	218	206	190	107	101	93
4	Feb	199	189	174	98	93	85
Ó	Mar	218	206	190	107	101	93
Z	Apr	211	199	184	103	98	90
-	May	218	206	190	107	101	93
ОТ	Jun	211	199	184	103	98	90
_	Jul	218	206	190	107	101	93
	Total	2,566	2,430	2,237	1,257	1,191	1,096

TOTAL TONNES CO2e NON-RESIDENTIAL										
		Water Waste water								
	2010 - 11	2011 - 12	2012-13	2010 - 11	2011 - 12	2012-13				
Conversion Factor a)	0.3441	0.3441	0.3441	0.7085	0.7085	0.7085				
TONNES CO ₂ e	0.883	0.836	0.770	0.891	0.844	0.777				

WATER AND WASTE WATER

RESIDENTIAL

			WATER &	WASTE W	ATER (m³)		
		Wa	Water			/aste wate	r
	Month	2010 - 11	2011 - 12	2012-13	2010 - 11	2011 - 12	2012-13
	Aug	868	733	754	425	359	369
	Sep	840	675	561	412	331	275
	Oct	868	905	968	425	443	474
₹	Nov	660	859	1271	323	421	623
Ď.	Dec	682	607	377	334	297	185
ပ္ပ	Jan	682	633	590	334	310	289
ب	Feb	784	787	980	384	386	480
₽	Mar	984	1022	836	482	501	410
SUNDIAL COURT	Apr	651	632	567	319	310	278
รเ	May	904	748	789	443	367	387
	Jun	1084	970	757	531	475	371
	Jul	890	801	651	436	392	319
	Total	9,897	9,372	8,511	4,850	4,592	4,459

TOTAL TONNES CO₂e RESIDENTIAL								
	Water Waste water							
	2010 - 11	2010 - 11 2011 - 12 2012-13 2010 - 11 2011 - 12 2012-						
Conversion Factor a)	0.3441	0.3441 0.3441 0.3441 0.7085 0.7085 0.70						
TONNES CO₂e	3.406	3.406 3.225 2.929 3.436 3.254 3.160						

TOTAL TONNES CO₂e WATER & WASTE WATER									
		Water		Waste water					
	2010 - 11	2011 - 12	2012-13	2010 - 11	2011 - 12	2012-13			
	4.288	4.061	3.698	4.327	4.097	3.936			

TOTAL TONNES CO₂e WATER & WASTE WATER BY ACADEMIC YEAR								
	2010 - 11 2011-12 2012-13							
Water	4.288	4.061	3.698					
Waste Water	Waste Water 4.327 4.097 3.936							
TOTAL	TOTAL 8.615 8.158 7.634							

NOTES:

i) 2010 - 11 data has been recalculated using 2012 conversion factors. 2013 conversion factors were the same as those for 2012.

SOURCES:

a) 2012 Guidelines to DEFRA / DECC's GHG conversion factors for company reporting - life-cycle conversion factors for water

NON-RESIDENTIAL

		INES)			
Г	2008 - 09	2011 - 12	2012-13		
	135.20	140.40	120.24	110.49	134.88

Conversion Factor	257 ^{a)}	257 ^{a)}	21 ^{b)}	21 ^{b)}	21
TONNES CO ₂ e	34.746	36.083	2.525	2.320	2.830

		WASTE SENT TO (TONNES):						
	LANDFILL				ENERG	Y RECOVERY		
	2008 - 09	2009 - 10	2010 - 11	2012-13	2011 - 12	2012-13		
	175.76	228.56	146.41	0	127.23	133.20		
Conversion Factor	290 ^{a)}	290 ^{a)}	290 ^{b)}	290	21 ^{b)}	21		
TONNES CO ₂ e	50.970	66.282	42.459	0	2.672	2.797		

	TOTAL TONNES CO2e NON-RESIDENTIAL							
:	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012-13			
	85.717	102.365	44.984	4.992	5.627			

RESIDENTIAL

	WASTE RECYCLED (TONNES)								
2008 - 09	2008 - 09 2009 - 10 2010 - 11 2011 - 12 2012								
202.80	70.20	106.92	135.84	68.62					

Conversion Factor	257 ^{a)}	257 ^{a)}	21 ^{b)}	21 ^{b)}	21
TONNES CO2e	52.120	18.041	2.245	2.853	1.441

		WASTE SENT TO (TONNES):						
		LANDFILL				Y RECOVERY		
	2008 - 09	2009 - 10	2010 - 11	2012-13	2011 - 12	2012-13		
	175.76	228.56	231.66	0	141.07	116.55		
Conversion Factor	290 ^{a)}	290 ^{a)}	290 ^{b)}	290	21 ^{b)}	21		
TONNES CO ₂ e	50.970	66.282	67.181	0	2.962	2.448		

	TOTAL TONN	IES CO ₂ e RESI	DENTIAL	
2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012-13
103.090	84.324	69.427	5.815	3.889

	TOTAL TONNES CO₂e ALL WASTE					
	2008 - 09	2009 - 10	2010 - 11	2011 - 12	2012-13	
Recycled	86.866	54.124	4.770	5.173	4.271	
Landfill / Energy recovery	101.941	132.565	109.640	5.634	5.245	
TOTAL	188.807	186.689	114.411	10.807	9.516	

Tonnes recycled as a	49.02%	31.54%	37.53%	47.87%	44.88%
percentage of total waste	43.02 /6	31.3470	37.3376	47.07/6	44.00 /6

TOTAL TONNES CO2e FROM WATER, WASTE WATER AND WASTE							
	2010 - 11	2011-12	2012-13				
Water and Waste Water	8.615	8.158	7.634				
Waste	114.411	10.807	9.516				
TOTAL	123.026	18.965	17.150				

NOTES:

i) 2010 - 11 data has been recalculated using 2012 conversion factors

ii) In 2011 - 12, the City of London started to send all its non-recyclable waste to an energy recovery plant in South East London

SOURCES:

- a) 2011 Guidelines to DEFRA / DECC's GHG conversion factors for company reporting life-cycle conversion factors for waste disposal (mixed municipal waste)
- b) 2012 Guidelines to DEFRA / DECC's GHG conversion factors for waste disposal (mixed municipal waste)

Assessment against baseline and targets – scope 3

Transport

- 71. The data in the previous section show that the Guildhall School's total indirect greenhouse gas emissions (scope 3) in academic year 2010 arising from student transport activity amounted to 983.654 tonnes. This reduced dramatically in 2012 to 692.568 tonnes, largely due to a new and more accurate methodology being adopted for the calculation of air transport. When adding staff commuter travel and staff and student business travel from the 2011 survey, a grand total of **958.918 tonnes** is reached for total emissions arising from travel.
- 72. Due to the School's location at the heart of the City of London, the data show that the vast majority of travel to and from the School, both by staff and students, is by public transport, cycling or walking. Less than 1% of travel is by car or taxi, and the School has no car-parking facilities of its own.
- 73. The data also show 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.
- 74. Consequently it is not considered feasible to expect a large reduction in greenhouse gas emissions from travel to be achievable.
- 75. 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 is now more realistic to set this target against the lower 2012 baseline of 958.918 tonnes. This is an absolute target, meaning that total indirect greenhouse gas emissions arising from transport must not exceed **882.205 tonnes** in 2019/20. This target will be reviewed after a larger dataset has been achieved over a longer period of years.
- 76. The School will seek to achieve this reduction by continuing to expand the availability of cycle bays to encourage staff and students to cycle to the School. It will also continue to ensure that the School's facilities are available for use by students throughout the year, for the benefit of students wishing to remain in London during the vacations. Currently the School is closed only on Christmas Day, Boxing Day and during the Easter weekend.
- 77. It should be noted that the data shown above for staff and student business travel include the emissions associated with a limited number of staff flying to New York and elsewhere in order to conduct auditions for students applying for places at the Guildhall School. If these trips did not take place, a considerably larger number of students would need to fly in the opposite direction to be auditioned in London.

Water and waste

78. The data in the previous section show that the Guildhall School's total indirect greenhouse gas emissions (scope 3) in academic year 2010/11 arising from

- water, waste water and waste amounted to 139.567 tonnes. This reduced dramatically in 2011/12 to just 21.063 tonnes, as a direct result of the City of London now sending its non-recyclable waste for incineration at an energy recovery plant in South-East London.
- 79. The Guildhall School has taken significant steps to reduce its water consumption by installing percussion taps in the majority of its estate and water saving shower devices in student accommodation. The School has just one hall of residence providing accommodation for 177 students.
- 80. Consequently it is not considered feasible to expect a large reduction in greenhouse gas emissions from water consumption to be achievable. The School will however be investing in additional water meters in order to measure its consumption more accurately.
- 81. On the other hand, greenhouse gas emissions arising from the disposal of waste have already reduced dramatically.
- 82. In 2010/11 the School set a target for the reduction of total scope 3 indirect greenhouse gas emissions arising from water, waste water and waste of **30%** by the academic year 2019/20 against the above 2010 baseline. This is an absolute target, meaning that total indirect greenhouse gas emissions arising from water, waste water and waste must not exceed 97.697 tonnes in 2019/20. Given that this target has already been exceeded, it is highly likely that the School should revise it. However there is still only a small amount of data available, and so this target will be reviewed after a larger dataset has been achieved over a longer period of years.

Implementation plan – scopes 1 and 2

- 83. In order to achieve its 2020 carbon reduction target for scope 1 and 2 emissions, the School has identified a number of initiatives and interventions that will reduce its energy consumption. Many of these are behavioural adjustments that attract little or no cost, a lot of which are already being implemented. Others are engineering or technical interventions that reduce the amount of energy needed to operate the School's buildings. Whilst these initiatives have a capital cost attached to them, they will of course generate future savings in energy costs and will provide a good return on investment particularly as energy costs inevitably rise. Apart from the possibility of introducing additional secondary glazing which needs detailed evaluation, the most expensive project is to install a voltage optimisation unit in the Silk Street building, but this is also expected to produce the greatest energy savings estimated at 8%. It is anticipated that the majority of the funding for the engineering and technical interventions will be found from the School's annual ring fenced strategic capital programme;- the 'capital cap'.
- 84. The following tables list the initiatives and projects that will be or are already being implemented, or are the subject of detailed evaluation to establish their viability.

Behavioural and awareness-raising solutions

Initiative	Detail	Action by	Timescale/ progress
Switch off electrical equipment	Staff and students are encouraged to turn off all electrical equipment, monitors, lights, printers, copier machines when at meetings, lunch and at the end of the day. Room-by-room data have been collected since September 2009 identifying how many appliances are left switched on at night, and an analysis of these data are published on the School's intranet to remind staff how well they are doing. An energy saving competition has also taken place.	SSG and Facilities department	Ongoing
Screen saver and/or desktop message to turn off monitors	This is a simple and effective reminder that switching off an unattended monitor saves more energy than leaving it on stand-by.	IT department	Ongoing
Encourage staff and students to turn the heating down or off if not needed, rather than opening windows	This is a particular problem in Sundial Court bedrooms, where windows are often used as the temperature control mechanism, rather than the thermostatically-controlled radiator valves. Awareness raising comprises notices in the Sundial Court handbook, as well as reminders at residential meetings.	Student Affairs and Facilities departments	Ongoing
Departmental environmental	This initiative involves the creation of a simple internal accreditation	SSG	Spring term 2014

Initiative	Detail	Action by	Timescale/ progress
accreditation	scheme, whereby the School's departments work towards a set of environmental and sustainability standards, thus creating a competitive approach to achieving a more sustainable institution.		
Sundial residents' meetings	These regular meetings are used to promote sustainability and environmental awareness and to encourage students to engage with the issues and contribute ideas.	Student Affairs and Facilities departments	Ongoing
Environmental video made by students	This would be a very effective way of engaging students and channelling the enthusiasm of some to raise awareness of the issues in others.	SSG and Student Affairs department	Spring term 2014
Use of foyer screens to show sustainability messages	The School has a number of large display screens in its main foyer, showing a variety of information such as forthcoming events and room bookings and usage for the day. The screens are programmed to show sustainability messages, either at times when their primary use is not necessary or interspersed with their primary use.	SSG and IT department	Ongoing
Environmental Awareness Days	The School organises regular events in the main foyer, usually on a termly basis, at which environmental films are shown, and energy-saving ideas and statistics are promoted, often in conjunction with external initiatives.	SSG	Ongoing
Incorporating sustainability issues into the recruitment and appraisal process	A commitment to working towards a more sustainable and environmentally friendly institution should be part of the job description of every staff member. Awareness of the initiatives in which the School is engaged should form part of the induction process. For certain management roles, particularly in Engineering and in Technical Theatre, specific environmental objectives are already being included in the appraisal process.	HR department	Implemented for Engineering, and Facilities staff in July 2013

Engineering and technical interventions

Initiative	Detail	Est. Cost £	Timescale/ progress
Installation of 'power	This is a voltage reduction and stabilisation unit that sits in-between	60,000	Summer term 2014
perfector' unit	the main incoming electrical supply		

Initiative	Detail	Est. Cost £	Timescale/ progress
	and the distribution board. It monitors the incoming supply voltage and reduces it to the EU standard of 220V, making a saving of 8%. This system has already been installed in Sundial Court, and installation in the Silk Street building is now planned.		
Installation of new Building Energy Management System (BEMS)	The BEMS is a computer-controlled system that manages the building heating, cooling, hot water and ventilation systems. New systems were installed in 2009 both in the Silk Street building and in Sundial Court, which allows us to monitor/manage all of the systems and optimise them for best energy usage.		Already complete. Further refinement of the settings is ongoing
Reduce run hours on heating circuits and ventilation systems	The run hours of the heating and ventilation systems in the Silk Street building and in Sundial Court have been reviewed in consultation with student union representatives, facilities and other relevant staff, enabling the School to use the BEMS to operate the heating circuits and ventilation systems more precisely to the times that suit operational requirements.		Ongoing
Introduction of low energy and LED lamps	A number of different trial lamps have been introduced, including replacing the old style lamps with the LED equivalent where possible. The resultant data have now been reviewed and a large scale replacement programme is to be implemented, with an expected energy saving of 8%. The development of low energy and LED lighting for theatre productions is being investigated for possible introduction in the future as the technology improves.	15,000	Commenced in Summer term 2013 and continuing
Installation of Chlorine Dioxide unit to reduce calorifier temperatures	The primary function of a Chlorine Dioxide unit is to control legionella bacteria. It constantly doses the water with chlorine dioxide, which is an oxidizing biocide that reacts with a wide range of organic substances and is effective against legionella bacteria. As a result of using this unit, the temperature of the hot water systems is able to be safely reduced thus saving energy in heating the water.		Completed autumn term 2010

Initiative	Detail	Est. Cost £	Timescale/ progress
Installation of variable speed drive pumps	The installation of these units reduces the pressure on the pumps and valves as the water flows around the systems. By using the BEMS to control them, the electricity used to drive the pumps is reduced.	9,000	Completed in Summer term 2013
Review of STARK meter overnight loads to reduce energy usage	STARK is the electricity monitoring system used by the distribution company, which produces half-hourly data. A review of these data enables the School to identify what is being left on overnight, and to reduce the static load units that are permanently switched on and make them switchable so they can be turned off when not required.		Ongoing
Removal of constant load transformers in engineering areas	A review of these units in the plant rooms and service risers revealed that they are not all required. Some units have been removed and the others have been put on isolation switches to allow them to be turned off.	1,000	Summer term 2013
Review and testing of movement sensors on lighting and air-conditioning	Installation of movement sensors enables local lighting and air-conditioning to be turned on only when the room is in use. This will need extensive testing due to the specialist uses to which many areas of the School are put. They will then be installed in all areas where it is practical.	4,000	Summer term 2013
Review HVAC system for use of "free cooling" to reduce chiller run times	The BEMS allows the School to review inside and outside temperatures, to enable the run times of the chiller and CHP cooling systems to be balanced by using cool air from outside.		Ongoing
Auto-shut down of IT equipment	Ensuring that staff and students switch off IT and other appliances that are their sole responsibility is a behavioural challenge, but equipment that is monitored centrally from the IT network can be automatically shut down when the School closes each night. This ensures that no energy is wasted by appliances being left on unnecessarily.		Ongoing
Investigate increased use of secondary	This is problematic due to the estate's grade 2 listing, but may be possible in some areas. Project requires detailed	800,000	Being evaluated

Initiative	Detail	Est. Cost £	Timescale/ progress
glazing	evaluation.		

Space management

- 85. One of the most effective ways of reducing energy usage and therefore scope 1 and 2 carbon emissions is to ensure the most efficient use of space. With the School's new facilities opening at Milton Court in 2013, a perfect opportunity has presented itself to re-examine usage in all the School's buildings to ensure maximum space utilisation in the enlarged estate.
- 86. External consultants were appointed to carry out a study into how the School's spaces should be reconfigured once the Acting department and large parts of the Technical Theatre department have relocated to Milton Court. The final report was received in February 2011, and this was followed by a thorough evaluation by the School's senior management team. Funds already allocated in the current capital programme will be utilised to execute some of the resultant refurbishment works, with provision to be made in the next programme (from 2014/15 to 2018/19) for the more ambitious schemes.

Implementation plan - scope 3

87. Although the Guildhall School does not anticipate being able to achieve substantial reductions in its scope 3 emissions because of its size and location, various initiatives have nonetheless been put in place, or are being evaluated, to reduce them as much as possible, as shown in the following table. Despite baseline data for emissions arising from procurement not yet being available, possible initiatives to reduce such emissions are already included in this plan.

Initiative	Detail	Action by	Timescale/ progress
Rainwater diverting	Diverted (grey) water can be reused for plant watering and WCs	Engineering department	Being evaluated
Roll out of percussion taps	Percussion taps switch off automatically, thus saving water	Engineering department	Largely complete
Installation of water saving shower units	Sundial Court Student accommodation	Engineering department	complete
Install additional water meters	Whilst water consumption in Sundial Court is accurately measured, usage in the main Silk Street building is not. Water meters in this building will enable accurate data to be compiled.	Engineering department	Summer term 2014
Reduce use of plastic	Encourage offices to use mugs/glasses rather than disposable plastic cups	SSG	Ongoing
Encourage paper-free working	Work towards greater use of electronic communication	SSG	Ongoing
Reduce paper usage	Print double-sided (all printers default to double-sided), reduce margin sizes, reuse scrap for notepaper, recycle envelopes	SSG	Ongoing
Increase recycling	Increase number of recycling points and consider other materials that can be recycled	SSG and Facilities department	Ongoing
Reduce waste going to skips	Review ways of reducing the amount from theatre sets that are thrown away after each production	Technical Theatre	Ongoing
Encourage cycling	Promote cycle safety and training schemes and increase cycle bays to support staff and students who wish to cycle to the School. Promote the cycle loan scheme	SSG	Ongoing
Procurement policy	Continue to consider locality of suppliers and agencies according to City of London procurement guidelines	All departments – monitored by SSG	Ongoing
Procurement policy	Continue to buy Fairtrade tea/coffee/cups and other produce	Facilities department	Ongoing
Procurement policy	Consider the 'green credentials' of suppliers, e.g. accredited to ISO	All departments	Being evaluated

Initiative	Detail	Action by	Timescale/ progress
	14001, before awarding contracts and placing orders	monitoredby SSG	

Governance and progress monitoring

Governors

88. The Committee of University Chairs' 'Guide for Members of Higher Education Governing Bodies in the UK' states that: 'The governing body is responsible for oversight of the strategic management of the institution's land and buildings with the aim of providing an environment that will facilitate high-quality teaching and learning and research.' Carbon management is a key strategic issue, so it is a crucial area for governors who should be informed and involved in decision-making on the institution's approach to reducing its emissions. This is why HEFCE has asked for carbon reduction plans to be signed off by the governing body.

Officers

- 89. At officer level, the School's Senior Management Team has ultimate responsibility for taking ownership and for communication of this strategy, and for ensuring that its action plan is implemented and progress monitored accordingly. The Senior Management Team will ensure that a monitoring report is submitted to the Board of Governors annually.
- 90. At an operational level, the Operations Board will have a role as the committee into which the SSG reports, particularly in respect of monitoring. It will receive progress reports on monitoring by receipt of the minutes of SSG meetings.
- 91. Detailed monitoring of this strategy will be carried out by the SSG at each of its meetings, which are twice termly. It will also be responsible for revising the strategy in the light of progress. The members of the SSG as at January 2014 are:

Michael Dick (The Director of Operations and Buildings)- Chairman Julia Lazarus (Student Affairs)
Adrian Yardley (Library)
Ayca Ibrahim (Music Office)
Ben Sumner (Technical Theatre)
Martin Auger / Tom Harrington (Estates Management)
Jennifer Kay (Registry)
Malcolm Johnson / Stephen Blackaby (Engineering)
Richard Antonel (IT)
Ieuan Davies (Student Union President)
Student Representatives (up to four)

Supplemented by colleagues from the City of London Corporation and other external experts as required.

By virtue of paragraph(s) 3 of Part 1 of Schedule 12A of the Local Government Act 1972.

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