

Sustainability Report for 2013-2014



QMUL Snapshot

26 hectares

Over 5 campuses: Mile End, Whitechapel, Charterhouse Square, West Smithfield and Lincoln's Inn Fields (includes sports grounds of 13 hectares)

17,053 students

13,070 undergraduates and 3,663 postgraduates, 11,422 home students and 5,631 overseas students and 151 nationalities

2,000+ students

Studying in Beijing, China for a joint degree from the Beijing University of Posts and Telecommunications and QMUL

3,488 staff

Full time equivalent, including casuals

3 Faculties

Humanities and Social Sciences, Science and Engineering and Barts and The London School of Medicine and Dentistry

£300 million

Annual income with £250m spent on new facilities and resources over the last fifteen years







Sustainability @ QMUL

Our Vision

Sustainability (encompassing environmental, social and economic considerations) will be fully embedded in the culture and practices of Queen Mary University of London; including all operational, teaching and research activities by 2020.

Our Approach

QMUL is committed to developing and maintaining an environment that enhances human health and fosters the transition toward sustainability. Sustainability should be advanced through research, analysis and experience gained over time.

In order to achieve this we apply a triple bottom line approach giving consideration to environmental, social and economic practices to achieve a sustainable future for QMUL.

Therefor at QMUL we use the Brundtland definition of sustainability from Our Common Futures (1987):

'Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.'



Contact the team

To find out more about sustainability at QMUL or to get involved

- Check out our website http://www.qmul.ac.uk/about/sustainability/index.html
- Email sustainability@gmul.ac.uk
- 'Like' our Facebook page QMUL Sustainability
- Follow us on twitter @QMSustain

Sustainability @ QMUL

Introduction to Sustainability

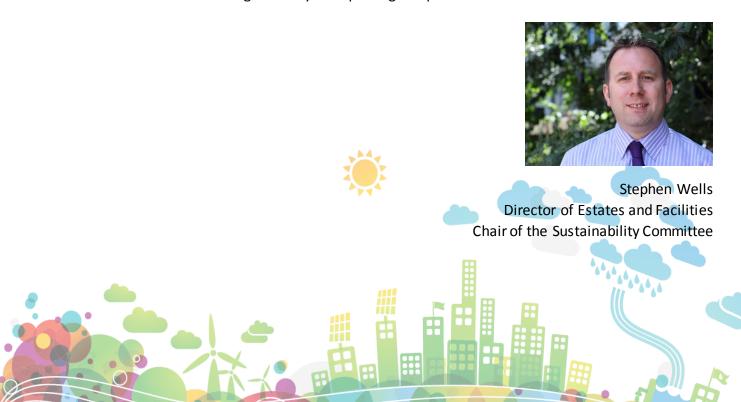
At Queen Mary University of London (QMUL) we are committed to embedding sustainability at all levels throughout the organisation to ensure our ongoing economic, social and environmental sustainability.

This involves us not only guaranteeing strategically that sustainability is a priority but ensuring that our graduates are equipped with the skills and knowledge to be prepared for the challenges of the workplace and understand their role in the international community. With this in mind we recognise that it is essential for us to promote and embed sustainable practices in all that we do from how we manage our estate, invest our funding and to what we teach.

We offer a variety of courses to students and conduct research which contributes to our sustainable future but we need to ensure education for sustainability in embedded throughout the curriculum. Estates and Facilities are committed to addressing the various areas of sustainability by promoting energy security, saving water and reducing waste, to name a few. However to move the sustainability agenda forward we need to address the wider issues relating to Corporate Social Responsibility (CSR) to set us apart from our competitors and provide the best offering to students.

Within this, our second Annual Sustainability Report we aim to be transparent and honest in our assessment of our economic, social and environmental performance. We except that there are areas we can improve on however we are all proud of our achievements to date and look forward to the coming years when we can start to see the benefits of the work we do on reducing our the impact on the triple bottom line.

I wish to personally thank all staff and students for their participation in sustainability at QMUL and encourage the continuation of the support and effort which at an individual, departmental/faculty and institutional level contributes significantly to improving our performance.



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This report has been produced to provide a summary of our sustainability performance in 2013/14. GRI guidelines have been applied however areas where data is not currently available have been excluded resulting in this report having an environmental performance focus. We are working towards being able to produce a full GRI report based on the materiality analysis which we review annually. For further information about anything contained in this report please get in touch.



Our Economic Performance

Utilities

The utilities represent a large spend area for QMUL. Any savings increase our economic sustainability and allow us to invest in improvements on site.

Electricity

During the 2013/14 year we had a contract change in October 2013. This resulted in the unit rate for electricity increasing by 10% for half hourly meters and 7% for non-half hourly. We also acquired additional meters during this period resulting in an overall increase in expenditure even though the consumption reduced.

Gas

During the 2013/14 year we had a contract change in October 2013. This resulted in the unit rate for gas increasing by 7%. This increase resulted in cost savings between 2012/13 and 2013/14 being considerably lower than the consumption reduction for the same period. This demonstrates the need to target a large percentage reduction in consumption as this is the only way to positively impact the budget.

Water

Even with a reduction in consumption water spend has increased due to a 4-7% price increase in April 2014. This increase occurs annually and demonstrates our need to make tangible savings in consumption to mitigate the impact of further price increases.



CRC

The annual emissions have increased this year to $28,160 \text{ tCO}_2$ compared to $2012/13 28,032 \text{ tCO}_2$ this is equal to 128 tCO_2 (£1536). This increase can be attributed to higher occupancy, extended opening hours and increased operations. The full breakdown is provided in the following table.

Supply Type	Consumption 1st April 2012 - 31st March 2013 (kWh)	Consumption 1st April 2013 - 31st March 2014 (kWh)	Difference (kWh)
HH (Electricity)	37,346,561	37,353,784	↑ 7,223
NHH (Electricity)	2,173,619	2,401,933	↑ 228,314
AMR (Gas)	35,910,503	34,221,242	↓1,689,261
No AMR (Gas)	187,646	1,927,856	↑ 1,740,210



Our Economic Performance

Sustainable Procurement

By embedding sustainability into our <u>procurement</u> practices and reviewing our impact areas QMUL is able to make interventions in a variety of areas.

Procurement Guidelines

The Sustainable Procurement Group created a set of Sustainability Guidelines to be included in a number of suitable tenders going forward. These guidelines have been designed to address the environmental management and sustainability credentials of companies which tender for contracts and frame works.

DEFRA Prioritisation Tool

After completing the DEFRA prioritisation tool a number of spend areas where highlighted as areas to address. The overall priorities include Maintenance, IT, Waste, Lab Consumables, and Utilities. How we have currently addressed each of these areas is detailed below.

Maintenance

To better manage maintenance spend and ensure a high quality service is delivered we have appointed MITIE as our Planned Preventative Maintenance provider. This will rationalise spend, improve performance and address the impact area.

IT

IT are in the process of going through a transformation project to address a number of service areas. This has included the introduction of multifunctional devices, new PC and a paper contract. The equipment selected is energy efficient, duplex and black and white is default and the paper is from a sustainable source.

Waste

A Waste Manager has been appointed who will be rationalising all waste streams to ensure we move up the waste hierarchy. To compliment this a central compound is being built at Mile End.

Lab Consumables

To address the impact from lab consumables the number of purchasers are being addressed and the introduction of central stores considered.

Utilities

A flexible energy procurement contract has been introduced for Electricity and Gas contracts for 3 (+2) years. This contract ensures we do not pay above market value or a 'loaded' rate. We have also appointed a 'green' electricity provider. This contract is predicted to save in the region of £500K annually and better manage the risk associated with energy procurement.

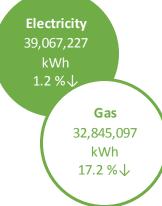


Energy

Energy consumption is a priority areas for QMUL. Efficient management produces annual savings, lowers carbon emission and also improves the building performance which means staff and students get better facilities.

Electricity and Gas Consumption

Energy consumption has decreased at QMUL when you compare 2012/13 to 2013/14. This downward trend can be attributed to a number of energy saving capital projects and successful engagement programs. Overall the Residences had a 14% reduction in electricity which counteracted the increase of 1% across the other sites. All sites experienced a reduction in gas consumption. This can be attributed to a more stable year in regard to weather and improved heating controls. We are still waiting on a number of final bills however we are still profiling a substantial saving for the 2013/14 year.



SALIX Investment

We have invested our SALIX funding in lighting upgrades to improve student's perception of our facilities whilst saving energy. In 2013/14 we upgraded the lights in Dawson Hall, QMotion gym and our careers centre. In addition to this to improve security onsite we changed our external lighting to LEDs. This SALIX work has resulted in QMUL adopting a minimum refurbishment standard for lights which includes LED fittings and control mechanisms.

Specifications

All Estates and Facilities Capital Projects now require sign off from the Sustainability Team in order to be approved. This has resulted in increased influence over the impact of projects on sustainability. Due to this BREEAM and Ska requirements are being considered in a variety of projects even if certification is not being sought. In addition to this minimum performance standards have been introduced to address Hand Dryers, Lighting and Controls.

TEAM Energy

The energy management platform used by the Sustainability Team has been upgraded to a web based system. Data has been audited and a dashboard is being trialled which will result improved M&T and the option to share access with staff and students around QMUL.

Display Energy Certificates

DECs are in place for the majority of our buildings within QMUL. To find out more or check a building rating visit our <u>website</u>.

Water

Effective water management not only has a positive impact on QMULs environmental performance but improves financial resilience and can support sustainable grounds management with the introduction of grey water harvesting.

Consumption

Water consumption has decreased across the 3 main sites when comparing 2012/13 consumption to 2013/14. This can be attributed to efficiency and engagement works undertaken as we have seen a decrease through a period of growth. The consumption increased in the Residences. Some of this was due to increased summer occupancy but overall the rest of the year had a slight increase meaning we should target water reduction engagement in 2014/15.

Water 236,544 m³ 3.4%↓

Water Compliance Works and Trade Effluent Consents

Over the past 12 months a number of building have been tested and had any water compliance works addressed this has resulted in increased assurance for staff that the water systems in place are safe to drink and has identified leaks and any repairs required. In addition to this work has begun reviewing all Trade Effluent consents and producing improved guidance for Lab users in hazardous waste disposal.

World Water Day

To promote the importance of water to staff and students on the UN world Water Day we held a number of event in all our halls and sites to promote simple ways to save. We offered all staff the chance to be given a Water Hippo and 4 minute shower timer from Thames water. We also gave the option for students in halls to collect the times and take part in the 4 minute shower challenge. This event was a huge success and we have already planned a 2015 event which will include a water explorer game designed to identify how much water individual use and a clean-up of Regents canal.





Carbon Emission

HEFCE requires all HEIs to commit to reducing scope 1 and 2 carbon emission by 2020. QMUL has committed to a 34% tCO₂e reduction using a 2008/9 baseline year and is now addressing scope 3 emissions.

Scope 1 and 2

Scope 1 and 2 emissions are from electricity and gas consumption onsite. Overall carbon reduced from 26,925 tCO $_2$ e to 24,937 tCO $_2$ e. This is attributable to the engagement and refurbishment work undertaken on site. QMUL needs to reduce to 15,634 tCO $_2$ e by 2020 which amounts to a 37% reduction on 2013/14 levels.

Carbon 24,937 tCO₂e 7.38 %↓

Scope 3

The following table details the current scope 3 emissions targets we have committed to at QMUL.

Scope	HEFCE	Reduction Target (2020)	Baseline year
Transport fuels - fleet consumption	Required	50% (cap 5.31 tCO₂e)	2009-10
Water and Waste Water	Required	30% (cap 187.22 tCO₂e)	2009/10
Waste Disposal	Required	30% (cap 6047.86 tCO ₂ e)	2010/11
Procurement	Required	TBC 2014/15	2010/11
Transport- Business Travel	Required	10%(cap at 952 tCO₂e)	2012/13
Transport-Commuter Travel-Staff	Optional	TBC 2014/15	2012/13
Transport-Commuter Travel-Students	Optional	TBC 2014/15	TBC

Carbon Management and Implementation Plan

The Carbon Management and Implementation Plan (CMIP) has been revised to include Scope 3 emission this will be approved and published in 2014/15. We will also be introducing monthly updates and an annual review process to ensure it remains relevant to the needs of QMUL as it grows.

Capital Investment

Capital projects carbon credentials are reviewed by the Carbon Reduction Group who monitor and inform carbon reduction works at QMUL. In 2013/14 funding was made available to expand the scope of the SALIX works to cover a larger area. In addition to this funding has been secured for the next 3 years to create an investment program to support the delivery of the CMIP.

EcoCampus Environmental Management System

To complement the CMIP the Environmental Management System (EMS) was accredited to the Silver EcoCampus standard. In 2014/15 we will be updated all documentation and completing a gap analysis to identify the steps required to make our EMS fully compliant to both ISO 14001 and ISO 50001.



Waste and Recycling

Moving up the waste hierarchy and avoiding producing waste is the ultimate goal however to achieve this we first need to address the various waste streams we have at QMUL.

Waste Management

Waste has been highlighted through the DEFRA prioritisation tool and Environmental Management System as a high impact areas. With the recruitment of a Waste Manager, data collection and validations is a priority areas in 2014/15, once we have accurate data we will be able to introduce effective management.

Battery Recycling

Battery recycling at QMUL is increasing with more collection points than ever before. Green Impact teams are encouraged to avoid purchasing disposable batteries and opt for rechargeable ones.

Better World Books

We have better world books collection point in the library reception at Mile End. Since the scheme began 1746 books have been reused or recycled in our library, saving 27 trees, 5,741 kWh and 3,716 lbs of greenhouse gases.

Reuse Rehome!

We teamed up with London Reuse and CRISP to run the end of year recycling campaign in the Halls of residence. This year we covered all halls on all sites and also collected items from around the campus. This resulted in a record number of new starter bedding packs being produced for September 2014 and a large number of items being diverted from landfill and sent to charitable organisations.



Stationery Amnesty

For Go Green Week Waste Not Wednesday QMSU held a Stationery Amnesty to divert waste from landfill and save our students money. Professional Services collected and sorted items unwanted stationery from all sites, donated these to the SU who created packs and gave all the items away in Library Square. This event was estimated to save the students over £700.







Biodiversity

QMUL is fortunate to have a large amount of open space on our sites, this gives us the opportunity to address biodiversity and enhance the staff and student experience at QMUL.

Biodiversity Audits

<u>Biodiversity audits</u> were completed at all sites in the past year. Due to our diverse environment we identified a number of significant species on site. Following these audits we are now looking at management and enhancement options to make the most of the land we have, this includes introducing a new food growing areas and ensuring all projects which involve landscaping look at native species.

Allotments

Participation in our <u>allotments</u> has grown so much this year when we have to relocate our plots in 2014/15 we will be increasing the number available and also looking for suitable plots at other sites. Geography staff have also introduced a compost heap and wormery.

Wildflower Meadows

Our wildflower meadows our going from strength to strength and were highlighted in our biodiversity audits as improving the biodiversity on site.

Frog Life Pond

We are partnering up with the Frog Life Project to identify a suitable location in Tower Hamlets to build a pond. The pond will be in a local community area or school to help teach people about the importance of biodiversity.



Protected and Invasive Species

At our Mile End site we have a Black Poplar and at Chislehurst we have evidence of Hawk and Bat activity however from the Chislehurst audits we also identified a small area of Japanese Knotweed. To address this we are training our staff and introducing a management plan.



Sustainable Catering

By ensuring our catering adheres to strict <u>sustainability</u> standards we offer high quality food whilst educating our customers about the importance of seasonal, local and healthy diets.

Meat Free Monday

We hold a monthly Meat Free Monday <u>event</u> at the Curve with special promotions on vegetarian meals often utilising seasonal produce. This encourages staff and students to think about the impact of their diet on the environment. To promote this further and reduce the amount of wastage at QMUL we plan on working with Love Food Hate Waste in the next 12 months on a number of events.

Seasonal Menu

We also offer monthly seasonal meals and promotions where we publish what is in season, factsheets, the recipe used and the source of the produce. To find out more about the various promotion visit the <u>website</u> or follow @QMHospitality.

Soil Association

QMUL has been awarded the Soil Association Bronze standard for 1 year. Achieving this catering mark demonstrates our commitment to sourcing local seasonal produce with high welfare standards. This includes Red Tractor meats, MSC certified fish and Free Range eggs and poultry. In addition to this we having been trialling organic meals with the hope to increase the number of meals offered in the future.

Going forward we intend to increase the coverage of the catering mark and progress to the silver standard.



Fairtrade

In March 2012 QMUL became a Fairtrade University and committed to embedding Fairtrade produce throughout the organisation. The key group driving this is the Fairtrade Steering Group who oversee all engagement and promotion of Fairtrade. We held a Fairtrade fortnight with a number of catering promotions and information stands throughout the year. In 2014/15 we plan on holding events and debates to increase education and awareness of the work the Fairtrade Foundation does.



Sustainable Transport

With a growing interest in Scope 3 emissions and the health and wellbeing of people on site sustainable transport has never been so important.

Cycling Facilities

Over the past year we have invested in improving the facilities available to cyclists on site. We have increased the number of bike parking spaces to over 150 at Mile End, a number of these are also undercover. To improve this further we are considering where additional bike parking spaces can be located and looking at getting them installed at all sites in conjunction with large refurbishment works.

Cycle Day

We held our annual <u>Cycle Day</u> in April 2014. The day included training, maintenance, breakfast for cyclists, blind spot awareness training and security marking. We also gave away some cycling goodies.

Dr Bike

Throughout the year we held a number of free bike maintenance sessions to encourage people to cycle to QMUL. During these sessions over 50 bikes were repaired and staff were also given hints and tips on how to maintain their bikes at home.

London Cycling Campaign

The LCC joined us for <u>4 days</u> at Mile End and Whitechapel to offer training, maintenance and advice to cyclists at QMUL and from the local area.

Visitors	Sign ups	Bikes repaired	Guided ride	Bike try outs
457	239	51	10	8



Cyclist Group

We have an active cyclists' group with over 300 members. It is an <u>online</u> network of <u>cyclists</u> from QMUL who are keep up to date with cycling news and events and campaign for better facilities.



Our Social Performance

Engagement

Engaging staff and students in sustainability is essential to achieve our vision at QMUL.

Sustainability Committees and Cluster Groups

We have a number of Committees and Cluster Groups to provide staff and students a chance to inform the work of the sustainability team. In 2013/14 all the <u>terms of references</u> were reviewed and approved to refocus the efforts of QMUL.



Go Green Week

The student activity cluster group led on the 2013/14 plans for <u>Go Green Week</u>. The SU, Catering, Security, Sustainability and Green Mary Society joined forces and held a number of events to promote sustainability. This included cycle training, catering promotions and a stationery amnesty. In 2014/15 we plan to increase the spread of Go Green Week and work on increasing participation from the local community.

Student Switch Off

This year's <u>Student Switch Off</u> resulting in a 4.4% decrease in consumption saving £6240 and 29 tCO₂, the winning hall was Stocks Court who were given a BBQ to celebrate.

Green Impact

Participation in <u>Green Impact</u> has grown over the last 12 months with 15 large teams submitting workbooks and 6 additional teams signing up for next year so far. We also had a record number of special awards nominations, with our Environmental Hero Cathy Valder Hogg from Green IT winning the National Environmental Hero Award. For a full list of winners check out

Green Mary

Green Mary is the College's student environmental society. Green Mary meet regularly to discuss sustainability issues and work in collaboration with College staff and students to implement the Sustainability Vision. To find out more about the plans for 2014/15 check out the information sheet.

Visit <u>Green Mary</u> website or the Green Mary <u>Facebook</u> page and join now!



Our Social Performance

Education for Sustainable Development

Embedding sustainability into our curriculum, research and training ensures we are able to produce graduates with transferable sustainability skills which they can apply when they leave QMUL.

Curriculum and Research

We have not completed a formal audit of all teaching and research areas to identify how sustainability is embedded is the curriculum however we have pockets of excellent practice which we are trying to gather information on. A key way we are doing this is by embedding the Green Impact campaign in the support areas of academics departments so they can collate information. We also offer training to academics, offer the estate and related data up for research and hold course specific lectures when requested.

Coursework

During 2013/14 the Sustainability Team supported a number of courses with coursework and lecture material this included an IT project on Energy Data Promotion in the Residences in conjunction with our Student Switch Off campaign, auditing lectures and Masters research support looking at engagement, energy and waste.

Training

The sustainability team offer a number of training opportunities for students at QMUL in relation to the various campaigns we run. The training has been designed to reach a wide audience, be assessable and positively contribute to the employability of our graduates.

Student Switch Off Ambassador Training

Halls assistants and over 15 students were trained on the Student Switch Off (SSO) campaign this year. These students were then tasked with supporting the campaign and spreading the core SSO messages in the halls. This proved to be a success with a number of volunteers supporting the campaign.

Green Impact Project
Assistants and Auditors
This year NUS have trained 10
Project Assistants and 12
Auditors to support the Green
Impact Campaign. This provided
student with project
management, reporting, events
and auditing skills as well as
increasing their knowledge of
sustainability issues.

If you would like the Sustainability Team to support your coursework or teaching please email sustainability@gmul.ac.uk



Thank you for taking the time to read our Annual Sustainability Report. In order to keep this report sustainable we have not printed any paper copies and would ask you to not print it either.

If you would like more information, would like to comment on the Sustainability Report or would like to get involved with sustainability on site <a href="mailto:email



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