



Environmental Sustainability Policy 2020

<p>Outcome requested:</p>	<p>That the Sustainability Committee should:</p> <ul style="list-style-type: none"> • Consider the environmental sustainability policy • Endorse the environmental sustainability policy • Approve the presentation of the environmental sustainability policy to the Senior Executive Team (SET)
<p>Executive Summary:</p>	<p>The environmental sustainability policy details the current environmental objective of the Queen Mary, University of London (QMUL). This policy will be reviewed annually to ensure that it is fit for purpose, reflects all significant environmental aspects of QMUL, ensure that it continue to improve its environmental performance and complies with all relevant environmental regulations.</p>
<p>Alignment with:</p> <ul style="list-style-type: none"> • QMUL Strategy • Internal Policies/Regulations • External Statutory Requirements 	<ul style="list-style-type: none"> • The Environmental Protection Act 1990 • Clean Air Act 1993 • The Climate Change Act 2008 • The Waste (England and Wales) Regulations 2011 • Water Framework Directive 2015 • The Energy Act 2016 • Clean Air Framework 2017 • Clean Air Strategy 2019
<p>Consideration of Strategic Risks:</p>	<p>This policy will be the framework on which QMUL's environmental management strategy will be developed and on which its environmental sustainability performance will be monitored and reported.</p>
<p>Subject to Prior and Onward Approval by:</p>	<p>Senior Executive Team</p>
<p>Confidentiality and Distribution:</p>	<p><i>Non-restricted</i></p>

Equality Impact Assessment:	<i>Not Applicable</i>
Author(s) :	Philip Tamuno & Garry Pritchard
Date:	<i>2 January 2020</i>

Environmental Sustainability Policy

Queen Mary University of London (QMUL) is a Russell Group University and one of UK's leading research-focused higher education institutions. We offer our students a stimulating, supportive and high quality learning experience.

We are proud to celebrate our collegial community and committed to act with the highest ethical standards and actively contribute to shaping our society. We create a truly inclusive environment, building on our cherished cultural diversity, where students and staff flourish, reach their full potential and are proud to be part of QMUL.

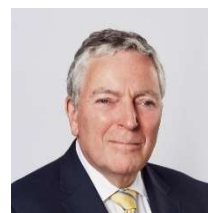
We are highly engaged with our local community and we are proactively exploring opportunities to address some of the significant and long-standing challenges within our region. We aspire to be the most inclusive research-intensive university in the world by 2030.

QMUL is committed to continue to improve its environmental performances as well as comply with all relevant environmental regulation. We will continue to be committed to:

- Integrating the principles of sustainable development across all areas of our operations and our academic programmes
- Integrating climate change adaptation and emergency into all aspects of our operations
- Reducing our carbon footprint and the environmental impacts of our direct and indirect operations
- Exploring and implementing initiatives that reduces the environmental and public health impacts of our travel and transportation
- Implementing energy efficiency measures across our Campuses as well as explore all relevant sources of renewable and decentralised energy generation
- Embedding environmental and climate change specifications into all relevant aspects of our procurement and commissioning processes
- Promoting the benefits of sustainable and catering services across our Campuses
- Embedding biodiversity enhancement and ecological conservation into all refurbishment and new build projects as well as our grounds management
- Reducing the wastes generated across our Campuses as well as divert all general wastes we generate from landfill
- Using quantitative and qualitative indicators to monitor and report our environmental performances to all relevant stakeholders
- Complying with all relevant environmental regulations
- Ensuring that we have adequate resources to coordinate and support the delivery of our environmental sustainability objectives.



Professor Colin Bailey (President and Principal)



Lord Clement-Jones (Chair of Council)



Sustainable Food and Catering Policy 2020

Outcome requested:	That the Sustainability Committee should: <ul style="list-style-type: none"> • Consider the sustainable food and catering policy • Endorse the sustainable food and catering policy • Approve the presentation of the sustainable food and catering policy to the Senior Executive Team (SET)
Executive Summary:	The sustainable food and catering policy sets out the sustainable food and catering of Queen Mary, University of London (QMUL). This policy will be reviewed annually to ensure that it is fit for purpose.
Alignment with: <ul style="list-style-type: none"> • QMUL Strategy • Internal Policies/Regulations • External Statutory Requirements 	<ul style="list-style-type: none"> • The Environmental Protection Act 1990 • Sustainable Procurement Action Plan 2007 • Climate Change Act 2008 • Energy Act 2016 • QMUL's Environmental Sustainability Policy 2020
Consideration of Strategic Risks:	This policy defines the scope of QMUL sustainable food and catering
Subject to Prior and Onward Approval by:	Senior Executive Team
Confidentiality and Distribution:	<i>Non-restricted</i>
Equality Impact Assessment:	<i>Not Applicable</i>
Author(s) :	Philip Tamuno & Garry Pritchard
Date:	<i>2 January 2020</i>

Sustainable Food and Catering Policy

Queen Mary University of London (QMUL) is a Russell Group University and one of UK's leading research-focused higher education institutions. We offer our students a stimulating, supportive and high quality learning experience.

QMUL is committed to exploring every opportunities, which ensures that all food bought, consumed and prepared across our Campuses have as little as possible impact on the environment. We will also continue to:

- Using local, seasonally available ingredients as standard, to minimise food transport, storage and energy use
- Excluding fish species identified as most at risk by the Marine Conservation Society and specifying fish only from sustainable sources
- Ensuring that meat, dairy and egg products are produced to high environmental, ethical and animal welfare standards
- Buying fair-trade certified products for foods and drinks imported from poorer countries to ensure a fair deal for disadvantaged producers
- Specifying produce from farming systems that have minimal environmental harm and under ethical standards
- Increasing the proportion of meals rich in fruit, vegetables, pulses and nuts, while reducing foods of animal origin (meat, dairy products and eggs), as livestock farming is one of the most significant contributors to climate change
- Embedding energy efficiency and good energy management practices across all our catering processes
- Ensure that free tap water is available as alternative to single use bottled water across our Campuses
- Ensuring that all major catering and food suppliers have certified environmental management system



Ian McManus (Director of Estates, Facilities and Capital Development)



Environmental Sustainability Strategy: Overview

<p>Outcome requested:</p>	<p>That the Sustainability Committee should:</p> <ul style="list-style-type: none"> • Consider the structure and scope of our environmental sustainability management • Endorse the scope of our environmental sustainability strategy (as detailed in Appendix 1) • Decide any issue(s) that should be escalated
<p>Executive Summary:</p>	<p>This report contain an overview of our environmental sustainability strategy. This strategy will serve as the framework / system on which we deliver our environmental objectives, continue to comply with all relevant environmental regulations and enhance our resilience to the adverse impacts of climate change.</p> <p>Monitoring, managing and reporting all significant areas in which we interact with the environment will be an integral aspect of our environmental strategy. We will continue to promote the benefits of embedding good environmental practices across all areas of our operations and academic activities.</p> <p>Our 2018/19 environmental footprint and performances will be used as the baseline on which our environmental sustainability strategy will be developed. This strategy will support our commitment to continue to:</p> <ul style="list-style-type: none"> • Reduce our environmental footprint • Reduce costs in energy, water and waste • Embed good environmental practices into all areas of our operations • Improve our environmental and corporate image • Comply with all relevant environmental regulations
<p>Alignment with:</p> <ul style="list-style-type: none"> • QMUL Strategy 	<ul style="list-style-type: none"> • The Environmental Protection Act 1990 • Clean Air Act 1993 • The Climate Change Act 2008

<ul style="list-style-type: none"> • Internal Policies/Regulations • External Statutory Requirements 	<ul style="list-style-type: none"> • The Waste (England and Wales) Regulations 2011 • Water Framework Directive 2015 • The Energy Act 2016 • Clean Air Framework 2017 • Clean Air Strategy 2019
Consideration of Strategic Risks:	The environmental management strategy will serve as the framework on which QMUL's environmental objectives and commitment to continue to comply with all relevant regulations will be delivered.
Subject to Prior and Onward Approval by:	Not Applicable
Confidentiality and Distribution:	<i>Non-restricted</i>
Equality Impact Assessment:	<i>Not Applicable</i>
Author(s) :	Philip Tamuno & Garry Pritchard
Date:	<i>2 January 2020</i>

Environmental Sustainability Strategy: Overview

Executive Summary:

This report contains an overview of our environmental sustainability strategy. This strategy will serve as the framework / system on which we deliver our environmental objectives, continue to comply with all relevant environmental regulations and enhance our resilience to the adverse impacts of climate change.

Monitoring, managing and reporting all significant areas in which we interact with the environment will be an integral aspect of our environmental strategy. We will continue to promote the benefits of embedding good environmental practices across all areas of our operations and academic activities.

Our 2018/19 environmental footprint and performances will be used as the baseline on which our environmental sustainability strategy will be developed. This strategy will support our commitment to continue to:

- Reduce our environmental footprint
- Reduce costs in energy, water and waste
- Embed good environmental practices into all areas of our operations
- Improve our environmental and corporate image
- Comply with all relevant environmental regulations

Scope: Environmental Sustainability Strategy

Appendix 1 details the scope of our environmental sustainability strategy and management system. Relevant quantitative and qualitative key performance indicators (KPIs) will be identified and used to monitor our environmental performance. The main strands of our environmental sustainability strategy are:

- Carbon management and reduction

- Building energy use
- Travel and transportation
- Construction (New build, refurbishment and maintenance)
- Climate change adaptation and climate emergency
- Water management
- Waste management
 - Recycling and waste segregation
 - Hazardous waste management and compliance
- Biodiversity and habitat enhancement
- Sustainable procurement and commissioning
- Sustainable food and catering
- Embedding sustainable development
 - Awareness and engagement
 - Education for sustainable development
- Environmental compliance (as well as pollution and emission management)

Carbon Management

The carbon emitted from the electricity and gas used across our Campuses as well as from our travel and transportation (international flights and commuting) will represent our carbon footprint.

Our 2018/19 carbon footprint will be the baseline on which our carbon reduction performance will be monitored and reported.

Building Energy efficiency

Table 1 show that we are in line to achieve a 7% reduction in the electricity used across our Campuses at the end of the current academic year compared to 2018/19. This projection is based on the electricity that we used between August and November 2019.

Table 1: Electricity used across QMUL's Campuses

Campus	Electricity kWh 2018-19	Electricity kWh 2019-20 (Trend)	Percentage Increase
Charterhouse	6,904,126	7,302,530	6%
Whitechapel	7,940,688	8,007,213	1%
Mile End	21,208,363	18,007,244	-15%
Lincoln's Inn Field	80,838	75,370	-7%
Chislehurst Sports Ground	50,234	19,213	-62%
Empire House	0	109,364	100%
	38,184,249	33,520,935	-7%

As seen in Table 2, we are in line to record a 16% increase in the gas used across our Campuses by the end of the 2019/20 academic year compared to the gas we used during the 2018/19 financial year. This projected increase is based on the gas we used between August and November 2019.

Table 2: Natural Gas used across QMUL's Campuses

Campus	Gas - kWh 2018/19	Gas - kWh 2019/20 (Trend)	Percentage Increase
Charterhouse	6,281,653	7,386,085	18%
Whitechapel	5,087,112	6,185,950	22%
Mile End	15,276,812	16,656,197	9%
West Smithfield	73,658	549,273	646%
Empire House	0	113,727	100%
	26,719,235	30,891,232	16%

Based on our current energy usage, our estates carbon footprint is in line to increase by 1% from 14,707 tCO_{2e} to 14,878 tCO_{2e} at the end of the current academic year. In response to this challenge, we are currently exploring opportunities to reduce the electricity and gas used across our Campuses.

We will also use the display energy certificates (DECs) of our buildings issued on 31 December 2018 as the baseline on which we monitor the energy performances of our buildings.

Travel and Transportation

We are aware of the environmental and public health impacts of emissions from travel and transportation. Therefore, implementing a “no idling” policy across our Campuses will be a fundamental aspect of our carbon reduction priority.

The reduction of carbon (tCO_{2e} per FTE) emitted from our business air travel will be an integral aspect of our carbon management. We will continue to promote various remote communication options as part of our commitment to reduce carbon footprint.

We will continue to promote initiatives, which encourages all staff and students to cycle as well as provide safe cycle parking facilities across our Campuses.

Construction: New Builds and Refurbishment

The materials and the processes associated with construction and refurbishment projects have the potentials to adversely impact on our local environment. However, embedding good environmental practices into construction, new build and refurbishment projects would positively contribute to:

- Biodiversity preservation and enhance
- Reduction of pollution (water, dust and noise) and emissions (carbon emissions from machinery and refrigeration (HCFC's))
- Waste minimisation and material re-use
- Enhanced energy and water efficiency

As part of the delivery of our environmental objectives, all our major new builds and refurbishment projects (i.e. those projects generally over 1,000 m² in floor area) will

target the attainment of Building Research Establishment Environmental Assessment Method (BREEAM) Excellent and Very Good ratings respectively.

Climate Change Adaptation and Emergency

The impacts of adverse climate change are becoming obvious. Therefore, we will actively integrate climate change adaptation into all aspects of our operations and we will continue to implement initiatives, which reduces the direct and indirect emissions from our operations.

Sustainable Procurement and Commissioning

The goods and services we procure have varying level of impacts on the environment. Therefore, including environmental specifications into relevant aspects of our procurement and commissioning processes will influence our supply chain, suppliers and contractors to embed good environmental practices into their operations.

Sustainable Food and Catering

Embedding good environmental practices into the way we source, prepare and process food have the potential of enhancing our environmental performance and reducing the environment impacts of the food we serve across our Campuses.

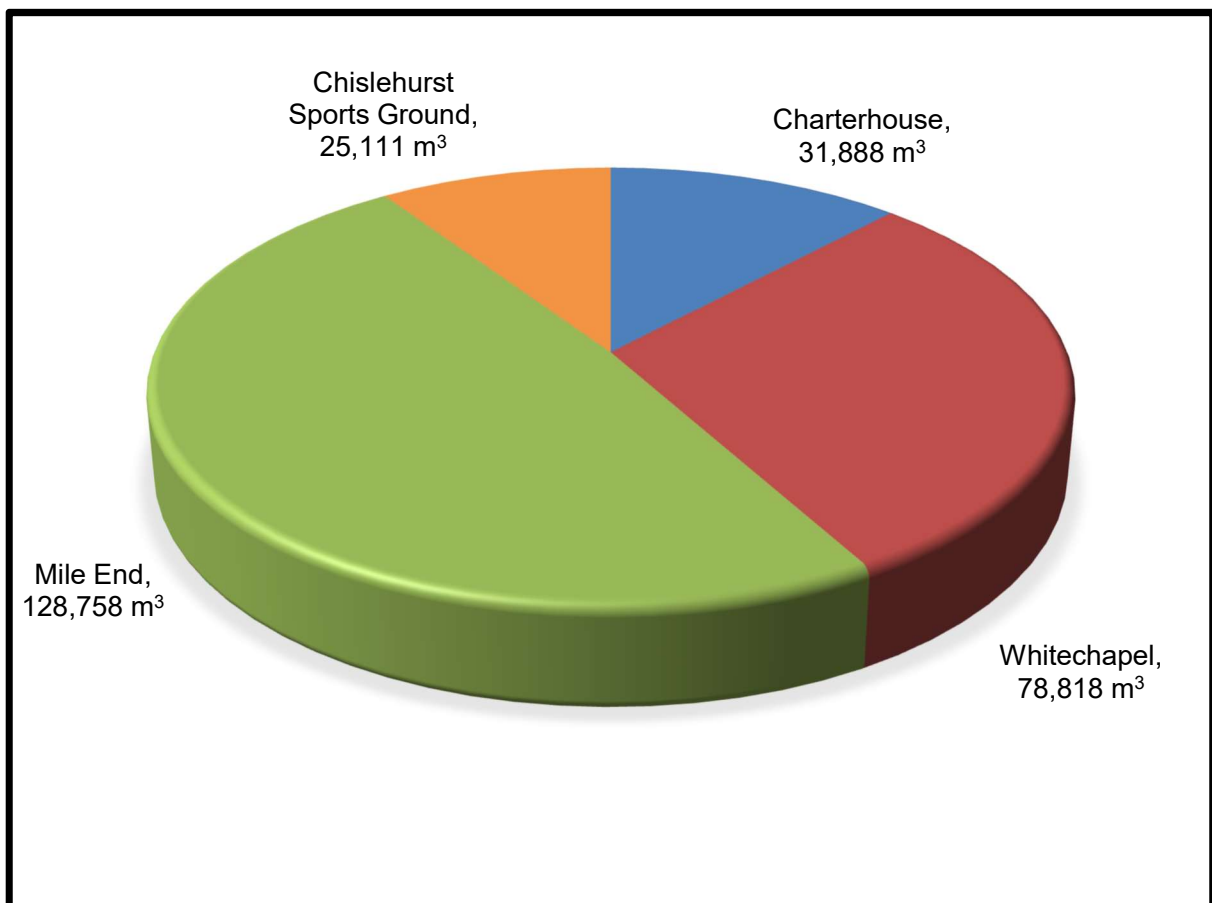
The additional benefits associated with sustainable food and catering are waste minimisation and reduction, water efficiency, energy efficiency and climate change mitigation. We will continue to promote the benefits of sustainable food and catering across our Campuses.

Water Management and Efficiency

Our March to July 2019 water consumption data was used to generate our 2018/19 water consumption profile¹. Based on these data, we estimated that 264,574 m³ of water were used across our Campuses, with Mile End accounting for approximately 49% of the water we used between August 2018 and July 2019.

Figure 1 show our water use profile² during the 2018/19 academic year. As part of our commitment to reduce the pressure we have on local water resources, we will actively explore and implement water efficiency measures across our Campuses as well as avoid water wastage.

Figure 1: Water Use Profile of Queen Mary, University of London (2018/19)



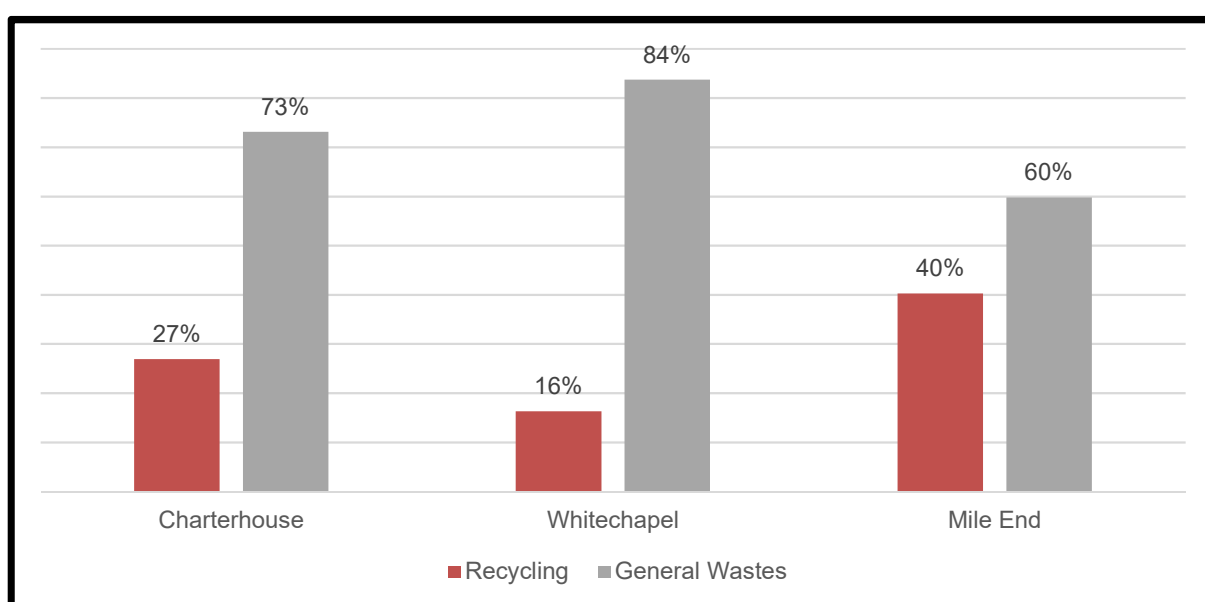
¹ This will be updated when we receive copies of our August to February 2019 water services invoices

² Estimated

Recycling and Waste Management

We generated 1,588 tonnes of waste across our three main Campuses, but only 33% of these were recyclable materials. As seen in Figure 2, there are opportunities to improve recycling across our Campuses.

Figure 2: Recycling Performances across QMUL's Campuses (2018/19)



Embedding Environmental Sustainability

We have identified some national and international environmental sustainability campaigns that we will be participating in between January and July 2020. An overview of these campaigns are:

- January 2020: Big Energy Saving Week – 20 January 2020.
- February 2020: Resource efficiency and sustainable procurement
- March 2020: Global Recycling Day (18 March 2020). This campaign will be coordinated by the Waste Manager.
- April 2020: The Big Pedal Day (22 April 2020). During this event, bicycle repair services will be provided free of charge to all Colleagues and Students

- May 2020: National Walking Month. This National campaign will be used to promote the public health and environmental benefits of walking
- June 2020:
 - World Environment Day (5 June 2020). We will use this event to promote the benefits of good environmental practices and our social responsibilities to our environment.
 - International Clean Air Day (20 June 2020). We will use this campaign to promote the environmental and public health benefits of sustainable travel
- July 2020: International Plastic Bag Free Day (3 July 2020). This campaign will be used to highlight the risks of plastic (micro-plastic) pollution and the benefits of reducing the use of plastic bags

As part of our commitment to embed good environmental practices across QMUL, we will be advertising and encouraging all colleagues to attend a workshop (Environmental Sustainability Skills for the Workforce) designed and accredited by the Institute for Environmental Management and Assessment (IEMA). This workshop will be delivered on Campus and the main content of this course are:

- The main environmental risks and opportunities we face
- The importance of resource efficiency
- The impacts of pollution, prevention, control and legislation
- The impact of transport
- The role each individual can play in supporting the delivery of sustainable development

As part of our participation in the EcoCampus programme, all interested QMUL's student will be able to access a webinar designed for students who want to know more about environmental management and how they can be involved in supporting the delivery of the principles of sustainable development.

We will also be coordinating specialised environmental workshops and courses during the current academic year. Some of these training programmes are:

- Internal environmental auditing
- Environmental compliance
- Environmental management system and sustainable development

Environmental Assurance

We will be rolling out an environmental auditing programme. This programme will cover all areas in Appendix 1 as well as used to monitor our performance against our environmental objectives.

The outcome and all outstanding audit actions will be presented at the quarterly Sustainability Committee meetings.

Conclusions and Recommendations

A draft version of our environmental sustainability strategy will be presented at the next scheduled (April 2020) Sustainability Committee meeting.

We are encouraging all relevant stakeholders be involved in our journey of improving our environmental performance and reducing our environmental footprint.

We are recommending that the Sustainability Committee should:

- Consider the content of this report
- Endorse the scope of our environmental sustainability strategy (as highlighted in Appendix 1)
- Decide any issue(s) that should be escalated

Author (Position): Philip Tamuno (Head of Sustainability)

Date: 2 January 2020

Appendix 1: Scope of Environmental Sustainability Strategy

Aspects	Lead	Scopes	Frequency
Leadership and Strategic Commitment	Colin Bailey	<ul style="list-style-type: none"> • Board approved and up to date environmental sustainability policy • Designated SET Environmental Sustainability Lead • Environmental sustainability performance as part of QMUL's annual report 	Quarterly Quarterly Annual
Environmental Sustainability Management Review	Ian McManus	<ul style="list-style-type: none"> • Environmental assurance and governance • Environmental compliance and performance review 	Quarterly Quarterly
Institutional Roles, Responsibilities and Authorities	Ian McManus	<ul style="list-style-type: none"> • Coordinated and integrated resources to support and coordinate the delivery of QMUL's environmental objectives 	Quarterly
Operational Planning and Control	Garry Pritchard	<ul style="list-style-type: none"> • Adequate resources and systems to support and coordinate the delivery of QMUL environmental objectives 	Quarterly
Emergency preparedness and Response	Steven Exley	<ul style="list-style-type: none"> • Assurance and systems that enhances QMUL's resilience to the adverse impacts of climate change 	Quarterly
Environmental Policy	Philip Tamuno	<ul style="list-style-type: none"> • Up to date environmental sustainability policy 	Annual
Environmental Objectives	Philip Tamuno	<ul style="list-style-type: none"> • Up to date SMART (Qualitative and Quantitative) indicators used to monitor and report QMUL's environmental performance 	Quarterly

Aspects	Lead	Scopes	Frequency
Organisation Context (Environmental Aspects)	Philip Tamuno	<ul style="list-style-type: none"> Updated environmental aspects register that addresses all relevant regulations and standards 	Monthly
Compliance and Obligations	Philip Tamuno	<ul style="list-style-type: none"> Updated environmental legal register 	Quarterly
Environmental Management Actions	Philip Tamuno	<ul style="list-style-type: none"> Environmental sustainability strategy and management system 	Quarterly
Environmental sustainability competence and awareness	Philip Tamuno	<ul style="list-style-type: none"> Year round environmental awareness campaigns linked to National and International Campaigns Environmental sustainability, sustainable development and environmental compliance educational programme 	Quarterly Quarterly
Communication and Engagement	Philip Tamuno & Samantha Osborne	<ul style="list-style-type: none"> Promotion of good environmental sustainability practices Participate in National and International Campaigns 	Monthly Quarterly
Education for Sustainable Development	Philip Tamuno & David Wallace	<ul style="list-style-type: none"> Advertise relevant courses and workshops Delivery of environmental sustainability workshops 	Quarterly Quarterly
Environmental Performance Review	Philip Tamuno	<ul style="list-style-type: none"> Updates presented to the Sustainability Committee Annual environmental sustainability Report 	Quarterly Annual
Monitoring, Measuring, Analysis and Evaluation	Philip Tamuno	<ul style="list-style-type: none"> Energy and water management Review of environmental KPIs Management review and escalation 	Monthly Monthly Quarterly

Aspects	Lead	Scopes	Frequency
Internal Audit, Evaluation and Compliance	Philip Tamuno	<ul style="list-style-type: none"> • Internal audit programme • Environmental assurance • Internal environmental audit 	Quarterly Quarterly Monthly
Procurement and Commissioning	Bahar Shahin	<ul style="list-style-type: none"> • Up to date sustainable procurement guide • Influencing supply chain • Environmental sustainability specifications included in all relevant procurement and commissioning processes 	Quarterly Monthly Monthly
Air Conditioning	Garry Pritchard	<ul style="list-style-type: none"> • Compliance with relevant environmental, energy and emission regulations 	Quarterly
Boilers and Chillers (including maintenance)	Timothy Lee	<ul style="list-style-type: none"> • Energy efficiency ratings and performances of boilers and chillers across all Campuses 	Quarterly
Sustainable Food and Catering	James Cornwall-Walker	<ul style="list-style-type: none"> • Up to date sustainable food and catering policy • Energy use • Water use • Recycling and waste segregation • Embedding sustainable development • Environmental compliance • Management, storage and disposal of food waste 	Annually Monthly Monthly Monthly Monthly Monthly Monthly
Carbon Management Plan	Philip Tamuno	<ul style="list-style-type: none"> • Up to date carbon management plan 	Quarterly

Aspects	Lead	Scopes	Frequency
		<ul style="list-style-type: none"> Review of QMUL's carbon reduction performance Carbon reduction performance 	Quarterly Quarterly
Utilities – energy and water management	Philip Tamuno	<ul style="list-style-type: none"> Review of QMUL's energy and water performance Identify, prioritise and implement low-cost energy and water efficiency measures Energy and water budget performance 	Monthly Monthly Quarterly
Building Design and Construction	Project Managers	<ul style="list-style-type: none"> Embed relevant environmental specifications into all new builds, refurbishment and construction project Environmental assurance and compliance BREEAM assessment and target 	Quarterly Quarterly Quarterly
Asbestos Management	Andrew Cumming	<ul style="list-style-type: none"> Up to date Asbestos register Assurance of compliance with relevant waste management regulations 	Monthly Quarterly
Information and Waste Electrical Equipment	IT Department	<ul style="list-style-type: none"> Safe storage and disposal of all waste electrical and electronic equipment (WEEE) Compliance with hazardous waste regulations 	Quarterly Quarterly
Recycling and Waste Management	Paul Monk	<ul style="list-style-type: none"> Recycling and waste segregation performance Waste management and compliance audits Weight of each waste streams Assurance of compliance with waste duty of care 	Monthly Monthly Monthly Quarterly Quarterly

Aspects	Lead	Scopes	Frequency
		<ul style="list-style-type: none"> Recycling and waste segregation awareness campaigns / events 	
Grounds Maintenance	Paul Monk	<ul style="list-style-type: none"> Biodiversity and ecological enhancement Embedding good environmental practices Green regeneration activities Awareness and training for all Grounds Staff 	Monthly Monthly Quarterly Quarterly
Clinical Waste Management and Compliance	Suzanne Mason	<ul style="list-style-type: none"> Clinical waste segregation performance Hazardous waste compliance and audits Weight of each waste streams Assurance of compliance with hazardous waste regulation Hazardous waste handling awareness 	Monthly Monthly Monthly Quarterly Quarterly
Drainage and Emissions (Mile End)	Andrew Megennis	<ul style="list-style-type: none"> Compliance with Trade Effluent Regulations 1989 Assurance of safe storage and disposal of all hazardous materials Designated of surface water and wastewater drains 	Monthly Quarterly Quarterly
Drainage and Emissions (Whitechapel)	Valeriy Hnachuk	<ul style="list-style-type: none"> Compliance with Trade Effluent Regulations 1989 Assurance of safe storage and disposal of all hazardous materials Designated of surface water and wastewater drains 	Monthly Quarterly Quarterly

Aspects	Lead	Scopes	Frequency
Drainage and Emissions (Charterhouse)	Ian Wisser	<ul style="list-style-type: none"> • Compliance with Trade Effluent Regulations 1989 • Assurance of safe storage and disposal of all hazardous materials • Designated of surface water and wastewater drains 	Monthly Quarterly Quarterly
Laboratories and Workshops	Relevant Managers	<ul style="list-style-type: none"> • Energy Use • Water use • Embedding sustainable development • Recycling and waste segregation • Assurance of compliance with relevant hazardous materials and waste storage and disposal regulations 	Monthly Monthly Monthly Monthly Monthly
Nursery	Linda Happe	<ul style="list-style-type: none"> • Energy Use • Water use • Embedding sustainable development • Recycling and waste segregation • Non-infectious waste segregation • Waste management compliance 	Monthly Monthly Monthly Monthly Monthly Monthly
Residences	Suzanne Cantelo	<ul style="list-style-type: none"> • Energy Use • Water use • Embedding sustainable development • Recycling and waste segregation 	Monthly Monthly Monthly Monthly Monthly

Aspects	Lead	Scopes	Frequency
		<ul style="list-style-type: none"> • Waste management compliance 	
Student Union	Mike Wojcik	<ul style="list-style-type: none"> • Energy Use • Water use • Embedding sustainable development • Recycling and waste segregation • Waste management compliance 	Monthly Monthly Monthly Monthly Monthly
Humanities and Social Sciences	Marta Timoncini	<ul style="list-style-type: none"> • Energy Use • Water use • Embedding sustainable development • Recycling and waste segregation • Waste management compliance 	Monthly Monthly Monthly Monthly Monthly
Medicine and Dentistry	Robert Bennett	<ul style="list-style-type: none"> • Energy Use • Water use • Embedding sustainable development • Recycling and waste segregation • Waste management compliance 	Monthly Monthly Monthly Monthly Monthly
Science and Engineering	Anne Parry	<ul style="list-style-type: none"> • Energy Use • Water use • Embedding sustainable development • Recycling and waste segregation 	Monthly Monthly Monthly Monthly

Aspects	Lead	Scopes	Frequency
		<ul style="list-style-type: none">• Waste management compliance	Monthly



Energy Efficiency and Budget Performance Q1 (2019/20)

Outcome requested:	That the Sustainability Committee: <ul style="list-style-type: none"> • Consider the energy efficiency and budget performance Quarter 1 (2019/20) for assurance purpose • Consider issues that should be escalated
Executive Summary:	This report details our energy efficiency performance against our budget and contain an overview of projects that have been implemented via the Salix energy efficiency loan.
Alignment with: <ul style="list-style-type: none"> • QMUL Strategy • Internal Policies/Regulations • External Statutory Requirements 	<ul style="list-style-type: none"> • The Environmental Protection Act 1990 • Clean Air Act 1993 • The Climate Change Act 2008 • The Energy Act 2016
Consideration of Strategic Risks:	Reducing the energy used across our Campuses will reduce our exposure to rising and volatile energy prices.
Subject to Prior and Onward Approval by:	Based on the Sustainability Committee recommendation
Confidentiality and Distribution:	<i>Non-restricted</i>
Equality Impact Assessment:	<i>Not Applicable</i>
Author(s) :	Philip Tamuno & Garry Pritchard
Date:	<i>2 January 2020</i>

Electricity and Gas Consumption and Budget Performance: Quarter 1

This report details our electricity and gas consumption and spend performances against our 2019/20 energy budget. Our 2019/20 budget was based on the performances of energy efficiency projects that were scheduled to be completed during the 2018/19 academic year (See Appendix 1 for an overview of Salix funded energy efficiency projects).

During the 2018/19 academic year, we used 37,260,482 kWh (37,260 MWh) and 29,197,851 kWh (29,198 MWh) of electricity and gas respectively.

Our 2019/20 academic year energy budget were set to deliver 12.8% reduction in electricity and 10.6% increase in gas used across our Campuses.

Based on the electricity and gas used across our Campuses between August and October 2019, we are in line to use 4,585,735 kWh (14.1% higher) more electricity than projected and 2,435,277 kWh (7.5% lower) less gas than budgeted by the end of the current academic year.

The above implies that we are line to spend £688,138 over our 2019/20 energy budget by the end of the 2019/20 academic year. £86,129 of this budget over-spend is attributed to the 14% and 11% increase in electricity and gas costs respectively compared to what we paid for energy during the 2018/19 academic year.

Identifying, prioritising and implementing robust energy efficiency projects will support the delivery of our commitments to continue to reduce the energy used across our Campuses as well as reduce our carbon footprint.

The Figures below gives an overview of the current trend of our electricity and gas budget (MWh) performances. This is based on the assumption that we will continue to maintain our Quarter 1 energy consumption profile throughout the current financial year.

Figure 1: Our 2019/20 Electricity Consumption Performance Compared to Budget

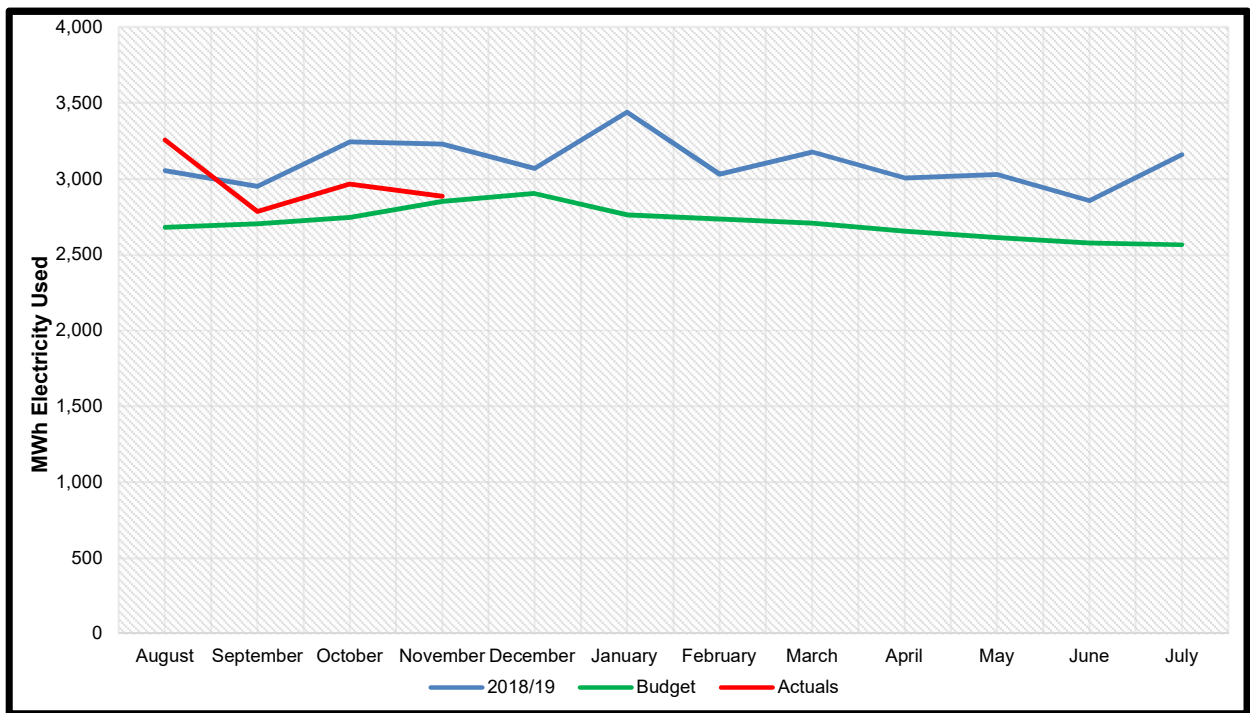
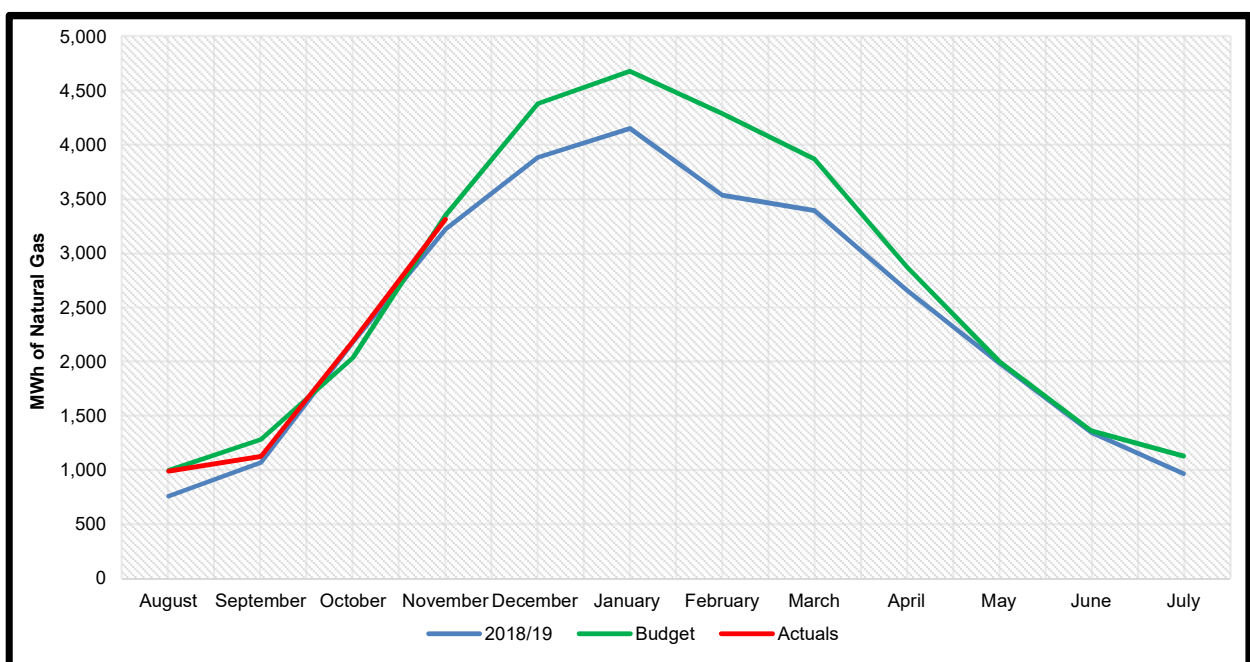


Figure 2: Our 2019/20 Gas Consumption Performance Compared to Budget



Appendix 1 contain an overview of the projects that were funded via the Salix energy efficiency loan scheme. An in-depth understanding of the individual and aggregate performances of these energy efficiency projects will be used to assess our performance against our carbon reduction target and our 2019/20 energy budget.

Conclusions and Recommendations

That the Sustainability Committee should consider:

- This report for information and assurance purpose
- Issues that should be escalated

Author (Position): Philip Tamuno (Head of Sustainability)

Date: 2 January 2019

Appendix 1: Funded Salix Energy Efficiency Projects

Project Type	Description	Energy Type	Technology Type	Project Cost	Completion Date
Combine Heat and Power (CHP)	CHP engine at Charterhouse Square (John Vane Centre)	Electricity and Gas	Cogeneration CHP	£807,259	November 2019 (scheduled to be commissioned in January 2020)
LED lighting	LED Lighting (Phase 2)	Electricity	T12/T8 to LED including new fitting	£206,158	Completed Jan 2019
BEMS – Remotely managed	Building Energy Management System (BEMS) – 5 Buildings	Electricity and Gas	Building Management System (BMS)	£608,739	Scheduled completion May / June 2019. Completed November 2019
LED lighting	LED Lighting (Phase 1)	Electricity	T12/T8 to LED including new fitting	£60,367	Completed December 2018
LED Lighting	LED Lighting (Phase 3)	Electricity	T12/T8 to LED including new fitting	£159,570	Completed June 2019
Loft Insulation	Loft Insulation (Maynard and Varey Houses)	Electricity	Insulation: Draught proofing	£17,956	Completed June 2019
Insulation: Draught Proofing	Draught Excluding (Geography, Laws and Queens)	Gas	Insulation: Draught Proofing	£43,484	Completed June 2019
Boilers	Laws Boiler Projects	Gas and Electricity	Boilers replacement (combination)	£206,542	Main works completed, delays due to asbestos. Completed November 2019
LED Lighting	LED Lighting (Phase 4)	Electricity	T12/T8 LED including new fittings	£28,859	Completed July 2019
Total Energy Efficiency Loan (From Salix)				£2,138,933	