



## Environmental Sustainability Action Plan 2020-23

<b>Outcome requested:</b>	That the Sustainability Committee should: <ul style="list-style-type: none"> <li>• Consider our environmental sustainability action plan (ESAP)</li> <li>• Endorse this strategy</li> <li>• Approve the presentation of the ESAP to the Senior Executive Team (SET) via the Estate Strategy Board (ESB)</li> </ul>
<b>Executive Summary:</b>	Our 2020 – 2023 environmental sustainability action plan (ESAP) has been developed as an immediate response to the current and emerging environmental risks and challenges, and is aligned with the UK’s 2050 net zero carbon target and de-carbonisation priority. We know we need to do more, and through this action plan we will establish strong foundations for the development of a longer-term, more ambitious strategy and plan. We will engage staff and students across the institution in the development of this longer-term strategy and plan over the next 2-3 years.
<b>Alignment with:</b> <ul style="list-style-type: none"> <li>• <b>QMUL Strategy</b></li> <li>• <b>Internal Policies/Regulations</b></li> <li>• <b>External Statutory Requirements</b></li> </ul>	<ul style="list-style-type: none"> <li>• The Environmental Protection Act 1990</li> <li>• Clean Air Act 1993</li> <li>• The Climate Change Act 2008</li> <li>• The Waste (England and Wales) Regulations 2011</li> <li>• Water Framework Directive 2015</li> <li>• The Energy Act 2016</li> <li>• Clean Air Framework 2017</li> <li>• Clean Air Strategy 2019</li> </ul>
<b>Consideration of Strategic Risks:</b>	The ESAP will serve as the framework on which QMUL’s environmental objectives and commitment to continue to comply with all relevant regulations will be delivered.
<b>Subject to Prior and Onward Approval by:</b>	Not Applicable
<b>Confidentiality and Distribution:</b>	<i>Non-restricted</i>
<b>Equality Impact Assessment:</b>	<i>Not Applicable</i>
<b>Author(s) :</b>	Philip Tamuno & Philippa Lloyd

**Date:**

*22 July 2020*





Queen Mary  
University of London

# Environmental Sustainability Action Plan

2020 - 2023



July 2020

## Approval Page

Version	Governance Group	Date Approved
1.0	Senior Executive Team (SET)	

DRAFT



## Foreword

We are aware that current and emerging environmental trends and challenges affect all aspects of our operation. In response to these risks, we are actively exploring opportunities and implementing initiatives that will continue to enhance our resilience to these environmental risks and challenges.

Our environmental sustainability action plan (2020 - 2023) was developed as part of our immediate response to these global environmental risks and commitment to embed good environmental practices across all areas of our operation. In addition, our six-year 30% carbon reduction target against our 2018/19 baseline is our immediate response to the global risks associated with climate change.

Our long-term environmental priorities are to continue to improve our environmental performance and play an active role in supporting the delivery of the United Nations Sustainable Development Goals (UN SDGs). We will also continue to engage with our relevant stakeholders and like-minded organisation to make our planet a better place to live.

We are a global university with students and staff from over 160 countries. We will continue to use this privileged opportunity to offer sustainable development education to everyone within our university community as well as provide evidence of the benefits of good environmental sustainability practices.

Our corporate social responsibility priorities and environmental sustainability objectives will continue to underpin the way we deliver teaching, research, consultancy, and other associated activities and engage with all stakeholders along with add value to our communities.



Professor Colin Bailey  
President and Principal



Lord Clement-Jones  
Chair of Council

# Table of Content

Approval Page.....	i
Foreword .....	ii
Table of Content.....	iii
Abbreviation and Acronyms.....	iv
Overview .....	1
Governance: Roles and Responsibilities .....	2
Climate Change and Carbon Footprint .....	2
Environmental Sustainability Action Plan (ESAP).....	3
Appendices.....	4
Appendix 1: Environmental Sustainability Action Plan.....	4
Appendix 2: Recently Commissioned Energy Efficiency Projects.....	19
Appendix 3: Secured and Funded Energy Efficiency Projects (£2,465,509).....	20
Appendix 4: Business Travel Template.....	21
Appendix 5: Environmental Sustainability Staff Induction Template .....	22

## Abbreviation and Acronyms

Building Management System	BMS
Building Research Establishment Environmental and Assessment Method	BREEAM
Business as Usual	BAU
Carbon	CO <sub>2</sub> e
Continue Professional Development	CPD
Corporate Social Responsibility	CSR
Display Energy Certificate	DEC
Environmental Management System	EMS
Environmental Sustainability Management Plan	ESMP
Estates Strategy Board	ESB
Full-Time Equivalent	FTE
Institute of Environmental Management and Assessment	IEMA
Kaplan International College London	KICL
Key Performance Indicator	KPI
Laboratory Efficiency Assessment Framework	LEAF
Low-Emission-Vehicle	LEV
Queen Mary, University of London	QMUL
Queen Mary E-learning Platform	QMPlus
Reduced Emission Scenario	RES
Salix Energy Efficiency Loan	SEEL
Senior Executive Team	SET
Service Level Agreement	SLA
Sustainable Development Goals	SDGs
Sustainability Committee	SC
Times Higher Education	THE
Ultra-Low-Emission Vehicle	ULEV
United Nations	UN
Value at Stake	VAS
Vice Principal	VP

# Overview

Queen Mary, University of London (QMUL) is a member of the Russell Group and one of the UK’s leading research-focused higher education institutions. We provide higher education to more than 27,000 students and have more than 4,600 staff. With over 160 nationalities represented on our campuses, we offer our students a stimulating, supportive, high-quality learning experience through our world-leading education and research.

Our 2020 – 2023 environmental sustainability action plan (ESAP) has been developed as an immediate response to the current and emerging environmental risks and challenges, and is aligned with the UK’s 2050 net zero carbon target and de-carbonisation priority. We know we need to do more, and through this action plan we will establish strong foundations for the development of a longer-term, more ambitious strategy and plan. We will engage staff and students across the institution in the development of this longer-term strategy and plan over the next 2-3 years.

As a higher education institution, we have a key role in supporting the delivery of the United Nations Sustainable Development Goals (UN SDGs). The SDGs are a set of 17 goals aimed at transforming the world by 2030 (see Figure 1). We will use the annual sustainability leadership scorecard to showcase our performance across all relevant aspects of these goals.

**Figure 1: The United Nation’s Sustainable Development Goals (UN SDGs)**





## **Governance: Roles and Responsibilities**

The scope of our environmental sustainability management plan covers all significant. All senior leaders across QMUL's is responsible for implementing the University's Environmental Sustainability policy in their areas of responsibility. The University's Sustainability Committee (SC) is responsible for the assurance of our environmental sustainability performance and regulatory compliance, and for monitoring performance against the ESAP. This committee meets at least four times every academic year. The SC reports to SET and to the Estates Strategy Board (ESB).

We are committed to attain and maintain ISO 14001:2015 EMS certification within the next two years. We will use our ISO 14001:2015 to demonstrate compliance with current and future statutory and regulatory requirements, deliver our environmental objectives, optimise all relevant environmental opportunities, and enhance our resilience to current emerging environmental challenges.

Progress against the University's Environmental Policy and our ESAP will be reported to the Sustainability Committee and through that Committee and our Estates Strategy Board to our Senior Executive Team. Council and other stakeholders will be kept informed of progress through an annual Sustainability Report, and updates through the year as required.

The Vice Principal Policy and Strategic Partnership (a member of the QMUL's Senior Executive Team) provides oversight of our environmental sustainability delivery approach and is the chair of the Sustainability Committee. The Vice Chair is the Director of Estates and Facilities.

Against each action in the ESAP, we will set key performance indicators so that we can monitor our progress towards embedding good environmental practices across all areas of our operations as well as our commitment to continue to improve our environmental performance.

## **Climate Change and Carbon Footprint**

QMUL is acutely aware of the need to reduce our carbon footprint. We committed previously to reducing scopes 1 and 2 of our carbon footprint 34% against our 2005/06 baseline (15-years carbon reduction target), and were well on target to do so (33.9% achieved by July 2019). We will now overshoot this target because of the impact of COVID-19 on our operations since the 23 March lockdown of activities in England.

We have adopted a six-year 30% carbon reduction target against our 2018/19 carbon footprint as one of our more immediate responses to the dangers and risks posed to the planet and our lives through climate change. We will look to deliver a net-zero carbon footprint by 2050 at the latest, and if possible, much sooner than that. This target will be embedded into our longer-term, more ambitious strategy that we will develop over the next 2-3 years.

## **Environmental Sustainability Action Plan (ESAP)**

The details of our approach to environmental sustainability are set out in our action plan detailed in Appendix 1.

The ESAP provides the framework against which we will monitor and manage all significant areas in which we interact with the environment and improve our environmental performance over the next three years.

# Appendices

## Appendix 1: Environmental Sustainability Action Plan

Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
Managing Carbon	<p><b>Context</b></p> <p>Our carbon footprint (CO<sub>2</sub>e) is represented by the emissions associated with the energy and water used across our UK campuses, fuel used by our vehicles and business travel. In 2018/19, we emitted 25,823 tCO<sub>2</sub>e. A breakdown of our 2018/19 carbon footprint show that our business travel (31.9m km) accounted for 38% of our carbon footprint, with the remaining 62% from the energy and water usage used across our UK campuses.</p> <p><b>Immediate Objectives / Actions</b></p> <ul style="list-style-type: none"> <li>• Adopt a six-year 30% carbon reduction target against our 2018/19 baseline</li> <li>• Climate change risks will be included in our risk registers.</li> <li>• We will continue to invest in initiatives that reduce our carbon footprint.</li> <li>• We will actively encourage all staff, students, visitors and major partners to reduce their carbon footprint.</li> <li>• We will share and promote research and innovation to help tackle the growing challenges and risks posed by climate change.</li> </ul>	<p>We will monitor:</p> <ul style="list-style-type: none"> <li>• Annual percentage reduction in tCO<sub>2</sub>e emitted by QMUL</li> <li>• Annual percentage reduction in Carbon tCO<sub>2</sub>e per total number of students</li> <li>• Annual percentage reduction in Scope 1: tCO<sub>2</sub>e</li> <li>• Annual percentage reduction in Scope 2: tCO<sub>2</sub>e</li> <li>• Annual percentage reduction in Scope 3: tCO<sub>2</sub>e</li> </ul>

Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<p><b>Longer-term ambition</b></p> <ul style="list-style-type: none"> <li>To achieve net-zero carbon by 2050 at the latest and sooner if we can. We will develop a net-zero carbon reduction target on or before July 2025.</li> </ul>	
Building Energy Efficiency	<p><b>Context</b></p> <p>The energy used across our UK campuses accounts for 61.1% of our 2018/19 carbon footprint. Only 33% of our 55 qualifying buildings currently achieve Display Energy Certificate (DEC) scores of C and above, which implies that there are opportunities to improve the energy performances of our buildings. Appendix 2 details some of the energy efficiency projects and initiatives that were recently completed and commissioned across our campuses. These projects were projected to reduce our electricity and gas use by 6,907,417 kWh and 1,710,999 kWh, respectively.</p> <p><b>Our Immediate Objectives / Actions</b></p> <ul style="list-style-type: none"> <li>We have secured a £2.46 million Salix energy efficiency loan to reduce the energy used at our Mile End and Whitechapel campuses (see Appendix 3)</li> <li>We signed a four-year building management system (BMS) contract of £1.5 million for the purpose of improving energy efficiency across our UK campuses.</li> <li>We will actively identify and implement initiatives to help improve our DEC scores.</li> <li>We will continue to promote good energy practices across all our campuses</li> </ul>	<p>We will monitor the following:</p> <ul style="list-style-type: none"> <li>Annual percentage reduction in kWh of electricity used</li> <li>Annual percentage reduction in kWh of gas used</li> <li>Annual percentage reduction in kWh / Litres of heating oil used</li> <li>Annual percentage improvement in DEC scores</li> <li>Annual percentage increase in renewable energy generated</li> <li>Annual proportion of green electricity tariff used</li> </ul>

Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<ul style="list-style-type: none"> <li>To reduce the energy used across our UK campuses by 30% by July 2025 against our 2018/19 baseline, which is likely to require further investment of the order of £3.6m.</li> </ul> <p><b>Longer-term ambition</b></p> <ul style="list-style-type: none"> <li>To ensure that all our procured electricity is on green tariff.</li> </ul>	
Travel and Transportation	<p><b>Context</b></p> <p>We are a university with global reach, and over 160 nationalities on campus. We well recognise the impact that the travel of students and staff has on the environment. Our 2018/19 business travel of 31.93 million km and the 2,385 litres of fuel we used in our own vehicles account for 9,919 tCO<sub>2</sub>e of our 2018/19 carbon footprint (38.4%). Long-haul flights made up at least 87% of our business travel footprint.</p> <p><b>Our Immediate Objectives / Actions</b></p> <ul style="list-style-type: none"> <li>Apply the lessons learned from remote working in lockdown to encourage people to focus more on essential travel only, and to keep air travel to a minimum.</li> <li>Continue to promote and share evidence of the good practice of sustainable transport (cycling, walking and public transport) as well as the public health and environmental impacts of transport emissions.</li> </ul>	<p>We will monitor:</p> <ul style="list-style-type: none"> <li>Annual percentage reduction in litres of fuel used in QMUL's vehicles</li> <li>Annual percentage reduction (km / miles) of Domestic flights</li> <li>Annual percentage reduction (km / miles) of Short-haul flights</li> <li>Annual percentage reduction (km / miles) of Long-haul flights</li> <li>Annual percentage reduction (km / miles) of International flights</li> <li>Annual percentage reduction (km / miles) of non-flight travel</li> <li>Annual proportion of bicycle storage per students and staff</li> </ul>



Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<ul style="list-style-type: none"> <li>• Appendix 4 has been developed as part of our commitment to capture in-depth data of our business. These data will be used identify our top fliers and implement incentives/approaches to reduce our business travel.</li> <li>• Actively engage with individuals, departments and research groups whose research, training, consultancy and other associated activities entails long-haul international flights</li> <li>• Implement a “no vehicle idling” policy across all our UK campuses.</li> <li>• Develop proposals to incentivise use of “greener” vehicles on campus (eg installation of EV charging points, possible parking levy).</li> <li>• Subject to available funds, increase the infrastructure and facilities across our campuses that support cycling and sustainable travel.</li> <li>• Progressively reduce our business travel in line with our six-year carbon reduction target.</li> </ul>	
Water Management and Efficiency	<p><b>Context</b></p> <p>We used 320,275 m<sup>3</sup> of water across our UK campuses during the 2018/19 academic year. This volume of water contributed 117 tCO<sub>2</sub>e (0.5%) of our 2018/19 carbon footprint. To put our water usage into context, we used an average of 17.6 m<sup>3</sup> of water per student.</p> <p><b>Our Immediate Objectives / Actions</b></p>	<p>We will monitor:</p> <ul style="list-style-type: none"> <li>• Annual percentage reduction in water used (m<sup>3</sup>)</li> <li>• Annual percentage reduction in water used per total students and staff</li> </ul>

Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<ul style="list-style-type: none"> <li>• Invest around £200,000 on relevant water efficiency measures across our UK campuses to reduce the water we use by 30% by July 2025 against our 2018/19 baseline.</li> <li>• Continue to promote the benefits of water efficiency to all staff and students.</li> <li>• Integrate water efficiency into all our new-builds and refurbishment projects.</li> </ul> <p><b>Our Longer-term Ambition</b></p> <ul style="list-style-type: none"> <li>• Explore integrating rain/grey water harvesting into all new-builds and refurbishment projects.</li> <li>• Progressively reduce the volume of water we use per total number of staff and students.</li> </ul>	
Recycling and Waste Management	<p><b>Context</b></p> <p>We generated 1,588 tonnes of general wastes waste across our three main campuses during the 2018/19 academic year, costing us a total of £242,538. Recyclable materials represented 33% of the total general wastes collected across our main campuses.</p> <p>We have some very good examples of waste reduction: we use the Too-Good-to-go app to reduce food waste from our catering outlets; the Students Union have set up the ReUse scheme to ensure items used by departing students are donated for reuse by incoming students, and have organised leftover food donations to the Hackney</p>	<p>We will monitor:</p> <ul style="list-style-type: none"> <li>• Annual percentage of general waste disposed on landfill</li> <li>• Annual percentage increase in recyclable materials collected across our main campuses</li> <li>• Annual percentage reduction in food waste</li> </ul>

Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<p>Winter Shelter. There is currently a collaboration between QM students and the Roman Road Trust to explore and reduce use of single-use plastics on Roman Road.</p> <p><b>Immediate Objectives / Actions</b></p> <ul style="list-style-type: none"> <li>• We will continue to ensure that so far as possible general waste generated from our main UK campuses is not disposed on landfill</li> <li>• We will continue to implement measures to increase the proportion of recyclable materials collected from our main UK campuses.</li> <li>• We will continue to promote the economic and environmental benefits of minimising waste and appropriately segregating recyclable materials from general waste across all our campuses.</li> </ul> <p><b>Longer-term Ambition</b></p> <ul style="list-style-type: none"> <li>• We will reduce the total annual operational waste produced by the university and ensure that no general waste is disposed of on landfill.</li> <li>• We will recycle at least 50% of the general waste generated from our main UK campuses by 2030.</li> </ul>	<ul style="list-style-type: none"> <li>• Annual kg of materials donated (ReUse events)</li> <li>• Annual total number of used books donated</li> </ul>
Construction: Refurbishment and New-builds	<p><b>Context</b></p> <p>The materials and processes associated with construction and refurbishment projects have the potential to adversely impact on our local environment. However, embedding good environmental practices into construction, new build and</p>	<p>We will monitor:</p> <ul style="list-style-type: none"> <li>• Annual proportion of major refurbishment projects that attain BREEAM Very Good</li> </ul>

Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<p>refurbishment projects could positively contribute to the delivery of good environmental outcomes.</p> <p><b>Our Immediate Objectives / Actions</b></p> <ul style="list-style-type: none"> <li>• We aim to achieve ‘Excellent’ and ‘Very Good’ ratings from the Building Research Establishment Environmental Assessment Method (BREEAM) for all our major new builds and refurbishment projects respectively.</li> <li>• We will monitor the contribution of all prospective refurbishment projects towards our target of achieving 30% carbon reduction over six years.</li> <li>• Improve the DEC scores of our existing buildings during refurbishment</li> </ul> <p><b>Our Longer- term ambition</b></p> <ul style="list-style-type: none"> <li>• We aim to integrate innovative building energy efficiency technologies into all our new builds and refurbishment projects.</li> </ul>	<ul style="list-style-type: none"> <li>• Annual proportion of major new-builds that attain BREEAM Excellent</li> </ul>
Sustainable Procurement	<p><b>Context</b></p> <p>The goods and services we procure have varying level of impacts on the environment. Including environmental specifications into relevant aspects of our procurement and commissioning processes will therefore influence our supply chain, suppliers, and contractors to reduce the environmental impacts of their operations.</p> <p><b>Our Immediate Objectives / Actions</b></p>	<p>We will monitor:</p> <ul style="list-style-type: none"> <li>• Proportion of major current suppliers / contractors with certified EMS</li> <li>• Percentage of major contracts that sustainability have been included as one of the SLAs</li> </ul>

Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<ul style="list-style-type: none"> <li>We will develop our sustainable procurement guide. This guide will be used to embed the principles of sustainable development and CSR into all relevant aspects of our procurement processes.</li> <li>We will include relevant environmental sustainability and CSR specifications in our procurement and commissioning processes.</li> </ul> <p><b>Our Longer-term Ambition</b></p> <ul style="list-style-type: none"> <li>We aim to have environmental sustainability and climate change specifications performance indicators in all the service level agreements (SLAs) we have with our major contractors.</li> </ul>	<ul style="list-style-type: none"> <li>Proportion of major contracts in which environmental specifications were included</li> <li>Proportion of major contracts in which CSR specifications were included</li> </ul>
Sustainable food and catering	<p><b>Context</b></p> <p>Embedding good environmental practices into the way we source, prepare and process food has the potential to enhance our environmental performance and reduce the environment impacts of the food we serve across our campuses. Further benefits associated with sustainable food and catering are waste minimisation and water and energy reduction.</p> <p><b>Our Immediate Objectives / Actions</b></p> <ul style="list-style-type: none"> <li>We will continue to implement initiatives that reduces food waste from our catering outlets.</li> </ul>	<p>We will monitor:</p> <ul style="list-style-type: none"> <li>Proportion of catering outlets that offer vegetarian and vegan meal options</li> <li>Proportion of catering outlets, which offer access to free water</li> <li>Annual percentage reduction in food wastes</li> <li>Compliance with relevant ethical food and catering standards</li> <li>Proportion of major suppliers with certified EMS</li> </ul>



Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<ul style="list-style-type: none"> <li>• We will continue to ensure that all our major catering and food suppliers have a certified EMS.</li> <li>• We will continue to exclude fish species classified as “at risk” by the Marine Conservation Society and only accept fish from sustainable sources.</li> <li>• We will continue to use food and services from responsible and ethical sources</li> <li>• We will continue to increase the proportion of meals rich in fruit, vegetables, pulses, and nuts, while reducing foods of animal origin, because livestock farming is one of the significant contributors to climate change</li> </ul> <p><b>Our Longer- term Ambition</b></p> <ul style="list-style-type: none"> <li>• We aim to significantly increase our sustainable food and menu offerings.</li> <li>• We aim to significantly reduce the energy used to process food across our catering outlets.</li> </ul>	
Biodiversity and ecological enhancement	<p><b>Context</b></p> <p>Biodiversity maintains a functional and beautiful environment as well as resource for food, shelter, clothing and other materials. Our economy relies on biodiversity since it provides renewable economic resources and ecosystem services, medical and scientific benefits, and is priceless in term of cultural and aesthetic values. In response to the fact that over 58% of global species that have been lost and approximately 30% of UK species becoming extinct since 1970, we actively promote the benefits of biodiversity conservation and enhancement.</p>	<p>We will monitor:</p> <ul style="list-style-type: none"> <li>• Proportion of major new build projects in which biodiversity enhancement / conservation have been integrated into the project design and implementation.</li> <li>• Upkeep and continuous access to the medicinal and sensory gardens.</li> </ul>

Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<p>We have a Green Mary medicinal and sensory garden at our Mile End campus, as well as 19 allotments tended by staff and students. Students also contribute significantly through volunteering to sustainability activities eg canal clean-up, and local wildflower and bulb planting.</p> <p><b>Our Immediate Objectives / Actions</b></p> <ul style="list-style-type: none"> <li>• We will continue to engage with and support the London Borough of Tower Hamlets commitment to enhance biodiversity across the Borough (see the Tower Hamlets Local Biodiversity Action Plan 2019-24) alongside local partners.</li> <li>• Over the next five-years, we will aim to increase the number of native species such as Black Poplars across our Mile End Campus</li> <li>• We will continue to improve the biodiversity of the Regent’s Canal.</li> <li>• We will continue to support the Regent’s Canal clean-up events coordinated by the Students Union.</li> </ul> <p><b>Our Longer-term ambition</b></p> <ul style="list-style-type: none"> <li>• We will continue to promote the benefits of biodiversity, ecological conservation and enhancement and look for opportunities/projects across all our campuses, working with students, staff and our local communities.</li> </ul>	<ul style="list-style-type: none"> <li>• Designated allotment (for educational purposes) to our Nursery.</li> <li>• Annual number of clean-up events of the Regent Canal.</li> </ul>

Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<ul style="list-style-type: none"> <li>We will continue to share research outputs on biodiversity and ecological enhancement.</li> </ul>	
<p>Embedding good environmental practices</p>	<p><b>Context</b></p> <p>We are committed to embedding good environmental practices and the principles of sustainable development into all aspects of our operations.</p> <p>We are currently a Corporate Member of the Institute of Environmental Management and Assessment (IEMA). We are using our current IEMA's membership to embed good environmental practices across our operations and enhance our resilience to numerous sustainability and climate risks.</p> <p>One of the actions that we have implemented to support the delivery of the above objective, is that we are currently delivering a certified Continue professional development (CPD) course on environmental sustainability skills for the workforce to all interested staff.</p> <p>Our involvement in the Laboratory Efficiency Assessment Framework (LEAF) is one of our responses to the reducing the environmental risks associated with laboratory activities across our campuses. We are currently using the LEAF tool to improve the environmental performances of our laboratories as well as assist users to</p>	<p>We will monitor:</p> <ul style="list-style-type: none"> <li>Annual number of environmental engagement and awareness events</li> <li>Annual number of coordinated national / international environmental campaigns</li> <li>Proportion of courses / schools that environmental sustainability has been integrated into the curriculum.</li> <li>Annual number of students that have completed and passed the certified CPD sustainable development course</li> <li>Annual number of staff that completed the CPD certified course on environmental sustainability skills for the workforce</li> </ul>

Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<p>appropriately explore opportunities to reduce the environmental impacts of laboratory activities.</p> <p>Our participation in the EcoCampus programme is currently being used to offer all our students the opportunity to access an online course designed to provide insight into sustainable development and how they can embed the principles of good environmental practices into all activities that they are involved in. This course is one of our initiatives to embed sustainable development into our academic activities and to raise awareness of the benefits of good environmental practices.</p> <p><b>Our Immediate Objectives / Actions</b></p> <ul style="list-style-type: none"> <li>• We will continue to include an overview of the principles and application of good environmental management practices into our staff welcome events. These sessions will be used to encourage all new colleagues to join our environmental sustainability journey (see Appendix 5).</li> <li>• We will continue to recruit and support environmental sustainability champions across all operational areas.</li> <li>• We will continue to promote the benefits of environmental sustainability and climate change responses across all relevant media, such as via our website and events.</li> </ul>	

Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<ul style="list-style-type: none"> <li>• Work with careers to deliver content on sustainable and environmentally-focused jobs and careers.</li> </ul> <p><b>Our Longer-term ambition</b></p> <ul style="list-style-type: none"> <li>• We aim to ensure that sustainability is a key feature of working and studying at Queen Mary, integrated into the curriculum (through the forthcoming Curriculum Review), our academic activities and our ways of working.</li> <li>• We aim to integrate the principles of sustainable development into all aspects of our operations.</li> </ul>	
Civic University, community and public engagement, and UN SDGs	<p>We are a socially responsible university. Our ethos and values underpin the way we engage with all relevant stakeholders and partners, and our role in our local communities. We are proud to have been a London Living Wage employer since 2006, and a founding partner of the Living Wage Foundation. We have a dedicated Centre for Public Engagement, which helps to facilitate staff and students engage with the public in important conversations about our education and research, including sustainability. We have an Athena Swan Silver Award in recognition of our commitment to advancing women’s careers in Science and Medicine. We are a founding partner in the Civic University Network, and will be developing our civic university agreement with our local area over the next year.</p> <p><b>Our Immediate Objectives / Actions</b></p>	



Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<p>The principles of CSR will continue to be embedded into all aspects of our operations and we will continue to use the Sustainability Leadership Scorecard to monitor our performance against the UN SDGs.</p> <p><b>Our Longer-term ambition</b></p> <ul style="list-style-type: none"> <li>• We aim to promote the benefits of CSR and UN SDGs to all our relevant partners and stakeholders.</li> <li>• We will share our research outputs in the areas of CSR and UN SDGs.</li> </ul>	
Environmental Management	<p>We are aware of the benefits of monitoring, managing, and reporting all significant areas in which we interact with the environment will be an integral aspect of our environmental sustainability strategy. As part of our environmental priorities, we will continue to improve our environmental performance and comply with all relevant environmental regulations.</p> <p><b>Our Immediate Objectives / Actions</b></p> <ul style="list-style-type: none"> <li>• We will, over the next two years, attain ISO 14001:2015 EMS certification so that we have a structured approach to manage our environmental performance.</li> <li>• We will use our environmental auditing programme to provide assurance of our environmental compliance and monitor our environmental performance.</li> <li>• We will continue to periodically review and check that our environmental management system is fit for purpose.</li> </ul>	<p>We will monitor:</p> <ul style="list-style-type: none"> <li>• Up to date environmental risk register</li> <li>• Up to date environmental legal register</li> <li>• Up to date environmental impact and aspect registers</li> <li>• Number of completed environmental audit with zero non-compliance</li> <li>• Published annual environmental performance reports and Annual sustainability report</li> </ul>

Aspects	Immediate Objectives and longer-term ambition	Monitoring and KPIs
	<ul style="list-style-type: none"> <li>• We will periodically review our environmental objectives and targets.</li> </ul> <p><b>Our Longer-term ambition</b></p> <ul style="list-style-type: none"> <li>• We aim to maintain ISO 14001:2015 EMS certification.</li> <li>• We aim to continue to improve our environmental performance and exceed regulatory compliance requirements where appropriate.</li> </ul>	
Ethical investment and fossil fuel divestment	<p><b>Context</b></p> <p>Queen Mary agreed and published an Ethical Investment Policy in December 2017 stating that we will not directly invest in companies whose business activity in armaments exceeds 25%, or companies which derive over 33% of its turnover from fossil fuel industries. We also do not invest in the tobacco industry. Our financial advisers have been instructed accordingly.</p>	<p>We will monitor:</p> <ul style="list-style-type: none"> <li>• Annual update from the Finance and Investment Committee on our investments.</li> </ul>

## Appendix 2: Recently Commissioned Energy Efficiency Projects

Project Title / Description	Campus	Projected Savings / Increase (-)	
		Electricity (kWh)	Gas (kWh)
Graduate School Combine Heat and Power (CHP). Cogeneration Plant	Mile End	621,601	-2,683,245
Arts 2 - Ground Source Heat Pump (GSHP)	Mile End	34,533	133,200
Francis Bancroft Building Refurbishment	Mile End	484,039	181,680
Abernethy Building Refurbishment	Whitechapel	80,330	79,639
Maynard House BMS and Lighting Upgrade	Mile End	98,752	34,919
Varey House BMS and Lighting Upgrade	Mile End	95,500	34,919
Computer Science Building Management System (BMS)	Mile End	99,972	124,740
Richard Feilden House BMS and Lighting Upgrade	Mile End	41,977	34,919
Lindop House BMS and Lighting Upgrade	Mile End	35,726	52,113
Pooley House BMS and Lighting Upgrade	Mile End	48,772	317,998
Beaumont Court BMS and Lighting Upgrade	Mile End	33,949	79,665
Drapers Hall & Qmotion Lighting Upgrade	Mile End	78,262	NA
Geography Pipework Insulation	Mile End	NA	53,626
Charterhouse Building Management System (BMS) Upgrade	Charterhouse	1,612,604	6,904,126
Dawson Hall Combine Heat and Power (CHP). Cogeneration Plant	Charterhouse	1,770,700	-1,818,650
John Vane Combine Heat and Power (CHP) Cogeneration Plant	Charterhouse	1,770,700	-1,818,650
<b>Total Savings (kWh)</b>		<b>6,907,417</b>	<b>1,710,999</b>

### Appendix 3: Secured and Funded Energy Efficiency Projects (£2,465,509)

Project Title / Description	Campus	Project Cost (£)	Projected Savings	
			Electricity (kWh)	Gas (kWh)
Joseph Priestley: Plate Heat Exchanger	Mile End	£397,907	105,780	1,763,680
BMS Upgrade: Whitechapel Campus	Whitechapel	£602,946	727,382	1,358,785
BMS Upgrade: Arts Two Building	Mile End	£32,573	34,526	39,742
BMS Upgrade: Computer Science Building	Mile End	£16,629	56,325	100,627
BMS Upgrade: Engineering Building	Mile End	£83,025	201,279	400,434
BMS Upgrade: G. E. Fogg Building	Mile End	£48,783	164,607	37,477
BMS Upgrade: G. O. Jones Building	Mile End	£8,629	31,010	21,069
BMS Upgrade: Peoples Palace Building	Mile End	£105,017	85,970	435,906
Lighting Upgrade and Controls: Whitechapel Campus	Whitechapel	£1,170,000	914,929	NA
<b>Total</b>		<b>£2,465,509</b>	<b>2,321,808</b>	<b>4,157,720</b>

#### Appendix 4: Business Travel Template

1	Date Travel Booked	DD/MM/YYYY
2	Date of Travel	DD/MM/YYYY
3	Date of Return	DD/MM/YYYY
4	Travel Description	
5	Number of Passengers	
6	Mode of Travel	Train/EuroStar/EuroRail/Flight/Road/Coach/Taxi
7	Flight (If No go to 13)	Y/N
8	Flight (Domestic)	Y/N
9	Flight (Economy)	Y/N
10	Flight (Premium Economy)	Y/N
11	Flight (Business)	Y/N
12	Flight (First Class)	Y/N
13	Return	Y/N
14	Start / From	
15	Through / Via	
16	To / Destination	
17	Comment	

## Appendix 5: Environmental Sustainability Staff Induction Template



# Staff Environmental Sustainability Induction

You are welcome to Queen Mary, University of London (QMUL). We are aware that current and emerging environmental changes and risks affect all aspects of our operations. In responses to these risks, we are actively exploring opportunities and implementing initiatives that enhances our resilience to these environmental risks and challenges.

In conjunction with the above statement, we are committed to embed good environmental practices into all aspects of our operation and we are inviting you to be involved in our journey to significantly reduce our environmental impact.

Aspects	Further Information	Action	Date Completed
Environmental Policy	QMUL's environmental sustainability policy sets out its environmental objectives and commitment to continue to reduce its environmental impacts.	Electronic version of QMUL's environmental sustainability policy sent to new employee.	

Aspects	Further Information	Action	Date Completed
Environmental sustainability management plan	QMUL's environmental sustainability management plan is the framework on which it delivers its environmental objectives and commitment to continue to comply with all relevant regulations.	Electronic version of QMUL's environmental sustainability management plan sent to new employee.	
GreenMary Programme	The GreenMary is a structured programme developed to support staff groups to embed good environmental practices across their area of work.	New employee is invited to join an existing GreenMary Team or to contact the Sustainability Team at <a href="mailto:sustainability@qmul.ac.uk">sustainability@qmul.ac.uk</a> for support to set-up a GreenMary Team.	
Environmental sustainability champions	We encourage all staff members to take action to reduce their personal as well as QMUL's environmental impacts.	New employee is informed to contact the Sustainability Team at <a href="mailto:sustainability@qmul.ac.uk">sustainability@qmul.ac.uk</a> for further information and support.	
Good energy practices	We As part of our commitment to reduce our carbon footprint and our response to climate change emergency. We expect all staff to strictly observe good energy practices.	New employee is informed of some good energy practices: <ul style="list-style-type: none"> <li>• To switch-off lights if they are the last to leave the office.</li> <li>• To switch-off lights in empty offices</li> <li>• To switch-off stand-alone air conditioning unit in empty offices</li> </ul>	

Aspects	Further Information	Action	Date Completed
		<ul style="list-style-type: none"> <li>• To switch-off monitors whenever not required.</li> <li>• Where applicable to use valves on heating radiators to adjust room temperatures.</li> <li>• To ensure kettles are filled with the quantity of water required.</li> </ul>	
Single use plastics and water bottles	As part of our commitment to reduce single use plastic and water bottles we have installed water dispensers and fountains across our campuses.	New employee should be made aware of the locations of all water dispensers and fountains as well as encouraged to use these rather than single use water bottles.	
Waste reduction	QMUL's catering outlets offer 15% discount for all hot beverages bought with a keep-cup.	New employee should be informed of this discount initiative and encouraged to use their keep-cup whenever they visit any QMUL's catering outlets.	
Recycling	QMUL is committed to segregating all recyclable materials from general wastes.	New employee should be informed of all materials that should be segregated as recyclable materials as well as location of recyclable bins / storage receptacles.	
Department specific waste streams	QMUL is committed to comply with all relevant waste management regulations.	New employee should be informed of the appropriate procedure of handling,	



Aspects	Further Information	Action	Date Completed
		segregating, and storing all other waste streams.	

DRAFT



## Queen Mary Students' Union Sustainability Summary 2019-20 & 2020-21 Plans

<b>Outcome requested:</b>	Sustainability Committee is asked to note the attached paper. Comments on the proposed projects for 2020-21 to identify further priorities and opportunities for collaboration are welcomed.
<b>Executive Summary:</b>	A summary of activities undertaken by the Students' Union in 2019-20 with the aim of improving the sustainability of our activities and operations. Detail of anticipated sustainability engagement plans for 2020-21.
<b>Alignment with:</b> <ul style="list-style-type: none"> <li>• QMUL Strategy</li> <li>• Internal Policies/Regulations</li> <li>• External Statutory Requirements</li> </ul>	Not Applicable
<b>Consideration of Strategic Risks:</b>	Not Applicable
<b>Subject to Prior and Onward Consideration by:</b>	Not Applicable
<b>Confidentiality and Distribution:</b>	<i>Non-restricted</i>
<b>Equality Impact Assessment:</b>	<i>Not applicable</i>
<b>Author(s) :</b>	Thomas Stockton, Sustainability Coordinator, Queen Mary Student's Union
<b>Date:</b>	22.07.2020

# Students' Union Sustainability Overview 2019/20

## Policy and Strategy

[The Students' Union overarching strategy](#) addresses sustainability in the below sections;

- Theme 4: We will empower students to shape their own future.
  - 4.2: Provide a platform for students to make an impact on local, national and global communities
    - KPI: 75% of student group committee members feel they've had a positive impact on their community.
  - 4.3: Be recognised as a sustainable and ethical Students' Union
    - KPI: 75% of students feel the Students' Union takes sustainability and its social impact seriously.
  - The strategy also includes KPIs for 2019/20 on;
    - 6% of drinks sold in reusable cups.
    - <1% of food waste in Students' Union cafes and shops.

## Students' Union [Sustainability Action Plan 2019/20](#)

- The action plan is covered in the activities identified in the above section. The full document is available via the link above.
- The Students' Union Sustainability Committee (composed of staff and student representatives) is responsible for delivering the action plan.

## Green Impact Accreditation Scheme

- Each year the Students' Union compiles and submits a workbook as part of the National Union of Students Green Impact scheme to assess environmental performance. In 2018/19 we achieved the highest score available of 'excellent'. Our 2019/20 data was submitted in May and will be audited in June/July. You can view the criteria for the 2019/20 award [here](#).

## Student Voice

- To ensure student voice on sustainability is represented in Union decision making, each year we elect a part-time Sustainability Officer who takes on this role to field student queries, run initiatives and sit on student council alongside their studies. This

year's Officer was Lizzie Hunter and the newly elected Officer Grace will take over from her on 1<sup>st</sup> August 2020.

- As well as the Officer post, sustainability has been a priority this year for all of the Students' Union Executive Officers. Responsibility for sustainability has also been formally added to the job description of the Union's President.
- As a student-led organisation, recent motions to have been passed by Student council relating to sustainability include;
  - **Climate Emergency-** That the Students' Union declare a Climate Emergency and create a sustainability strategy looking at removing all single use plastics from outlets. Lobby the University to declare a Climate Emergency, create a sustainability strategy and policy which commit to becoming carbon neutral by 2025, embedding sustainability in all course curricula and working to support local action within Tower Hamlets.  
<https://www.qmsu.org/pageassets/policy/2019-11-November-7.3.i.pdf>
  - **Recycling-** Ensure recycling facilities exist in all Students' Union buildings and venues <https://www.qmsu.org/pageassets/policy/7.4.7.pdf>
  - **Sustainable food-** The Students' Union should diversify the food choice on campus
  - **Sustainable food 2-** The Students' Union should clearly label vegetarian and vegan food in all its outlets
- As part of a democratic review undertaken this year, it was decided that from 2020/21 there will be a specific sustainability board made up of 6 student representatives to devolve relevant decision making from Student Council. These positions will be elected in September 2020.

## Sustainable Food

QMSU commercial staff visited [King's College London zero waste shop](#) and met with ethical supplier [Suma](#). Plans for placing an order for an increased range of sustainable and zero waste products are currently on hold owing to the closure of outlets.

Discounts and initiatives

- 20% Meat Free Monday discount available in all SU venues for meat-free options every Monday.

- Use of Too Good to Go app grew
  - QMSU outlets saved 658 meals Sept 2019- March 2020 compared to All QMUL & QMSU sites Sept 2018-Aug 2019 saved 797 meals.
- Fairtrade products (including clothing, chocolate, tea and wine) offered in SU outlets and promoted during Fairtrade fortnight in Feb/March 2020.
- Jan-March 2020 leftover packaged sandwiches collected by student volunteers and donated to Hackney Winter Night Shelter every Friday evening. From February onwards collaborated with QMUL staff from the Curve to also collect their donations.

## **Staff and Student Engagement**

### Sustainability Volunteering

The University's volunteering service is run by the Students' Union and following comments from students in the end of year survey last year we have sought to expand the sustainability and environmental volunteering offering, this has included;

- Over 20 sustainability related volunteering opportunities organised by the SU or offered by external organisations through the SU's brokerage service;
- Of those opportunities arranged by the SU these included;
  - Bulb & wildflower planting with Tower Hamlets Cemetery Park,
  - Canal Clean-Ups (subsequently led by students and open to QMUL staff)
  - Transporting food donations to Hackney Winter Night Shelter
  - Lunchtime Gardening in the Green Mary Garden
  - Volunteering at Bow Foodbank to sort donations and support customers
  - Helping run the Reuse Scheme by sorting donations
  - These were attended by 63 individual student volunteers who contributed 196.75 total volunteering hours.

## Staff Inductions

All new Students' Union staff are currently briefed on sustainability in an informal induction with the sustainability coordinator. The sustainability coordinator was also able to present on sustainability at a QMUL induction event in Sem B. We hope to be able to work with the University on developing uniform online training on sustainability as part of the HR induction process for QMSU and QMUL staff alike.

## Communications

The following efforts were made to increase the level to which sustainability was embedded in Students' Union communications channels.

- Increased focus on consistent content through the joint QMUL/QMSU sustainability social media channels- @QMULSustain on Facebook, Twitter and Instagram as well as the @QMSU Instagram.
- Improved signage in outlets and on tv screens highlighting vegetarian and vegan food, Too Good to Go as well as Meat Free Monday and Reusable Cup discounts.
- More focus on sustainability in Students' Union weekly emails and efforts to increase sustainability content of items submitted for QMUL bulletins via the University comms team. Some highlights include; [a video for the global climate strike](#) and a [profile of our Sustainability Officer Lizzie](#) on the QMUL website.

## Student Groups

The Students' Union has a number of active sustainability related student groups and also saw sustainability initiatives undertaken by non-sustainability specific groups.

The sustainability specific groups include;

- Green Mary Group: run sustainability campaigns and events on campus and are co-run and supported by the sustainability coordinator and sustainability officer. Approximately 20 students involved in 2019/20. Activities included participating in environmental volunteering

opportunities, running a clothes swap, supporting the Reuse scheme and preparing social media content.

- Sustain@BL: Led independently by students based in Whitechapel. Approximately 10 students involved. Activities have included weekly lectures and climate clinics on environmental topics as well as a climate change themed drag performance as part of LGBT+ month.
- Environment Society: This will be a new sustainability themed society in 2020/21 run by 4 students.

Other student groups to have championed sustainability this year include;

- BL Hockey & Netball: championed and implemented a bring your own reusable cup initiative for sports clubs at events in Whitechapel.
- BL Drama: have commitments to sustainability in reusing costumes and deposits system for reusable cups at performances.
- Boat Club: held a food drive for Bow Foodbank at one of the sports club nights.
- Music Society: raised money for the Climate Coalition through donations at their monthly performance nights.

### **Other initiatives**

- This year we revamped the criteria of our Society Excellence Awards (where students compete to gain Gold, Silver or Bronze) to include criteria on running their societies in a sustainable way.
- The Students' Union Sustainability Awards were held virtually in March 2020 alongside the volunteering and fundraising awards. The categories were; Sustainability Champion of the Year, Sustainable Student Group of the Year and Sustainability Idea of the Year.

## **Waste and Recycling**

Reuse Scheme

- 1156kg (end of Sem 2 2018/19) & 706kg (end of Sem 1 2019/20) donated to students. Nearly double the total from previous 2 Reuse schemes. Saving 50kgCO<sub>2</sub>e.
- Attended by 400 students over Reuse Fairs in Sept 2019 and Jan 2020.
- 94% of attendees felt that events such as the Reuse Fair shows the Students Union takes sustainability seriously & 97% of attendees reported that the scheme saved them money (survey of 32 participants Sept 2019).
- 15 student volunteers helped to sort donations and run the fair. Nearly £100 raised for SU charities from voluntary donations at the Fair events.

### **Reducing single use**

- Plastic cutlery and plastic bags phased out from QMSU shops and venues.
- Exploring feasibility of investing in larger dishwashers in venues to remove single use plastic cups from club nights following student feedback.
- Aim to increase proportion of drinks sold in reusable cups to 6%. To incentivise this, 20% discount offered in SU outlets for reusable cup.

### **Student groups**

- Trials of online paperless finance system for student groups underway.
- Clothes Swap event held by Fashion Society and SU sustainability representatives. Over 300 items of clothing donated, approximately 40 attendees.

### **Other initiatives**

- Book Swap shelf in Ground Café used by staff and students.

### **Recycling**



- Coffee cup recycling scheme with waste contractor Bywaters (vending machine and coffee cup bins) planned. Postponed due to closure of SU sites in March 2020.
- Provision of recycling facilities at SU sites in Whitechapel (previously absent) delivered just prior to lockdown.
- Access to data from Bywaters agreed for easier monitoring of recycling statistics next year.
- 2 x visits to campus from Tower Hamlets recycling representatives. Approximately 20 students engaged with recycling best practice in Tower Hamlets through an interactive game.

## **Planning for 2020-21**

In 2020-21 the Students' Union plans to deliver a number of sustainability initiatives to build on those achieved last year. These will be developed in partnership with incoming student representatives ahead of the academic year bearing in mind the degree which social distancing regulations will need to be applied to activities such as events, student group activities and volunteering.

## **Anticipated Students' Union projects 2020-21**

- Review and refresh of Sustainability Action Plan
- Officer led campaigns on sustainability in curriculum & coffee cup levy in QMUL outlets
- Online activities linked to UN Sustainable Development Goals
- Sustainability training for student representatives and societies
- Sustainability volunteering opportunities

Each year the Students' Union Sustainability Coordinator identifies and leads on a number of projects in partnership with the University towards jointly identified priorities. These projects are supported by funding from the Head of Sustainability. The following have been identified as potential projects for the next academic year.

## **Collaborative Students' Union & University projects**

## **Reuse scheme**

- Collecting donations of unwanted belongings during student move out and offering to incoming students at the start of the next term. Delivery to be informed by advice from health & safety directorate.

## **Sustainability content for student inductions**

- In partnership with students, preparing a sustainability guide to the University and local area for incoming students and induction events.

## **Delivery of an Environment Week in Semester B**

- Online/in person talks, events and volunteering opportunities. Collaboration with other University departments to be discussed.

## **Student-led sustainability project fund**

- Small pot available for students wishing to run sustainability related initiatives. To be administered by newly elected student Sustainability Board from September.

## **Biodiversity initiatives**

- Opportunities to get involved with greening campus and the local area in partnership with the Grounds team and local organisations.

## **Energy Awareness**

- Information campaign to raise awareness of how to save energy in halls, on campus and at home.



## Students' Union 2019/20 Survey Results

<b>Outcome requested:</b>	Sustainability Committee is asked to note the below. Further detail on the survey findings are available upon request.
<b>Executive Summary:</b>	The findings from sustainability questions asked in the Students' Union survey.
<b>Alignment with:</b> <ul style="list-style-type: none"> <li>• QMUL Strategy</li> <li>• Internal Policies/Regulations</li> <li>• External Statutory Requirements</li> </ul>	Not Applicable
<b>Consideration of Strategic Risks:</b>	Not Applicable
<b>Subject to Prior and Onward Consideration by:</b>	Not Applicable
<b>Confidentiality and Distribution:</b>	<i>Non-restricted</i>
<b>Equality Impact Assessment:</b>	<i>Not applicable</i>
<b>Author(s) :</b>	Thomas Stockton, Sustainability Coordinator, Queen Mary Student's Union
<b>Date:</b>	22.07.2020

# Students' Union Survey

The end of year Students' Union survey run from March-June 2020 included several questions on sustainability with which we hope to inform Students' Union plans for the year ahead and future collaborations with the University.

## Relevant findings

- 68% agree with the statement that 'the Students' Union takes sustainability seriously'.
- 44% agree with the statement that 'the University takes sustainability seriously.'
- 71% agree that the Students' Union takes its social impact seriously<sup>1</sup>
- **Recognition of sustainability initiatives;**<sup>2</sup>
  - 1 in 3 surveyed couldn't identify a sustainability initiative run by the Students' Union. The most commonly recognised were Green Mary (21%), the reusable cup discount (18%) and the Reuse scheme (10%).

## Suggestions to make the Students' Union more sustainable;

<sup>3</sup>

- **25% mentioned topic related to reusable items and removing plastic-** in particular less single-use plastic in outlets and options for reusable cups, plates and cutlery.
- **23% related to recycling and waste-** in particular more recycling bins on campus as well as information and assurances that recycling bins were collected separately.
- **13% suggested changes to food offerings on campus-** in particular more vegan options and less food packaging.
- Students' views on sustainability content in their courses of study;<sup>4</sup>
  - 58% of respondents felt that their course did not cover sustainability.
  - Conversely, 26% identified ways in which sustainability was partially covered and 9% identified ways in which it was covered substantially.

---

<sup>1</sup> Based on 489 total responses for each question.

<sup>2</sup> Based on 259 valid responses.

<sup>3</sup> Based on 207 valid responses.

<sup>4</sup> Based on 137 valid responses.

- A final 7% felt that sustainability was not relevant to their course.
- Whilst respondents were not asked which course they studied, those most frequently cited in responses acknowledging sustainability content were Geography and Engineering.

## **Big Change Survey**

Several of the conclusions from this survey echoed those from the Big Change survey conducted Jan-Feb 2019 which sought to inform work on Going for Gold and Sticky Campus projects. In particular, increased litter and recycling bins outdoors and outdoor seating areas alongside green spaces on campus.

## **Questions in full**

*For the questions below please rate your agreements/disagreement with the statements shown.*

10a. 'The Students' Union takes sustainability seriously'

10b. 'The University takes Sustainability seriously'

10c. 'The Students' Union takes its social impact seriously'

20. Are you aware of any sustainability initiatives run by the Students' Union. If so, please name any you can think of

21. What one change would you want to see to make the Students' Union more sustainable?

22. How does your course cover Sustainability? Is what is covered relevant to your course? (for example, are you learning general sustainability or how your field is reducing its impact) Are there other opportunities to cover sustainability on your course?

Please leave us any comments, ideas or concerns you have here.



## Embedding Environmental Sustainability

<b>Outcome requested:</b>	That the Sustainability Committee should: <ul style="list-style-type: none"> <li>• Take assurance of this report</li> <li>• Consider issues that should be escalated</li> </ul>
<b>Executive Summary:</b>	This report contain an overview of the initiatives that we are implementing to embed good environmental practices across all aspects of our operations.
<b>Alignment with:</b> <ul style="list-style-type: none"> <li>• QMUL Strategy</li> <li>• Internal Policies/Regulations</li> <li>• External Statutory Requirements</li> </ul>	<ul style="list-style-type: none"> <li>• The Environmental Protection Act 1990</li> <li>• Environmental Sustainability Policy (Draft)</li> </ul>
<b>Consideration of Strategic Risks:</b>	Not Applicable
<b>Subject to Prior and Onward Approval by:</b>	Estate Strategy Board (ESB)
<b>Confidentiality and Distribution:</b>	<i>Non-restricted</i>
<b>Equality Impact Assessment:</b>	<i>Not Applicable</i>
<b>Author(s) :</b>	Jamal Mohammed & Philip Tamuno
<b>Date:</b>	<i>22 July 2020</i>

## **Embedding Environmental Sustainability**

### **Overview**

This report presents an overview of three of the initiatives that we have recently implemented to support our environmental objective to integrate the principles of sustainable development across all areas of our operations. In addition, these three initiatives were part of our commitment to promote the benefits of good environmental practices and environmental protection.

Over the last three months, we:

- Promoted a certified Continue Professional Development (CPD) course on sustainable development to all our students.
- Coordinated and delivered a certified CPD course on environmental sustainability skills for the workforce to 58 staff and PhD research scholars.
- Were involved in promoting the theme of the 2020 World Environment Day (celebrating biodiversity).

### **Students: CPD Course on Sustainable Development**

In May 2020, we started offering all QMUL's students opportunity to register and complete an online CPD certified course on sustainable development. Two of the intended outcomes of this course is that the participating students would become more aware of practical actions that they can take to reduce their environmental footprint as well as the benefits of good environmental practices.

As at 15 July 2020, 143 students across 13 schools have registered for this optional module. Table 1 show the number of students that have registered for this course.

**Table 1: Registered Students - Sustainable Development Course (15 July 2020)**

School	Number of Students
Institute of Population Health Sciences	1
School of Biological and Chemical Sciences	8
School of Business and Management	3
School of Economics and Finance	20
School of English and Drama	9
School of Geography	8
School of Languages, Linguistics and Film	13
School of Law	68
School of Mathematical Sciences	1
School of Medicine and Dentistry	9
School of Physics and Astronomy	1
School of politics and International Relations	1
William Harvey Research Institute	1
<b>Total</b>	<b>143</b>

The average score achieved by the 50 students that successfully completed this course in May and June 2020 was 93%. EcoCampus have issued these students their respective CPD certificates via QMUL. The feedbacks from the students that have completed this course have been positive and we will continue to promote this optional module to all undergraduate and post graduate students.

### **Staff & PhD Researcher: CPD Course on Environmental Sustainability**

QMUL is currently a corporate member of the Institute of Environmental Management and Assessment (IEMA). We currently use this opportunity to engage with organisations that are passionate about playing active roles in transforming the world for sustainability.

In addition to the above, we are currently an approved IEMA's centre to deliver CPD certified courses in environmental sustainability and environmental management. Therefore, over the last three months, we have been promoting the CPD course on environmental sustainability skills for the workforce to all staff and PhD researchers.

The environmental sustainability skills for the workforce course covers:

- The main environmental and economic risks and opportunities



- Environmental compliance obligations and business drivers for change
- The main potential impacts on environment and sustainability
- Ways to improve environmental performance

We have recently delivered the environmental sustainability skills for the workforce course to 22 and 36 colleagues across 20 departments / service areas in May and July 2020 respectively. Table 2 shows the number of participants across these 20 service areas.

**Table 2: Environmental Sustainability Skills for the Workforce Course Participants**

Department / Service Area	Number of Staff
Barts Cancer Institute	2
Blizzard Institute	3
Business and Management	1
Centre for Academic and Professional Development	1
Chief Operating Officer (Office)	1
Development and Alumni Office	1
Estates and Facilities	21
Institute of Dentistry	5
Institute of Health Sciences Education	1
IT Services	2
Marketing and Communications	2
Office of the Principal	4
Queen Mary Students' Union	1
School of Biological and Chemical Sciences	4
School of Economics and finance	2
School of Engineering and Material Science	1
School of Languages, Linguistics and Film	2
Student and Academic Services	1
Wolfson Institute of Preventive Medicine	1
<b>Total</b>	<b>58</b>

20 of the 22 participants that completed this course in May 2020 passed the assessment and have been issued their respective CPD certificates by IEMA. These certificates are jointly signed by QMUL's Principal and President and IEMA's Chief Executive. The next session of this course has been scheduled to be delivered between 7 and 15 September 2020.

One of the outcomes of the May 2020 session is that 8 of the 22 participants of this course have started a network of Environmental Sustainability Champions (ESCs). These ESCs are currently committed to become actively involved in promoting the benefits of good environmental practices within their service areas as well as across our campuses.

## **World Environment Day 2020: Celebrate Biodiversity**

The theme of the 2020 World Environment Day (WED) was “Celebrate Biodiversity”. It is well documented that over 58% of global species have been lost and approximately 30% of UK species have become extinct since 1970. Despite the partial closure of our campuses, we developed and shared three messages during the month of June 2020. These messages highlighted the relevance of ecological systems and the benefits of biodiversity.

In conjunction, with our participation in the 2020 WED, we will also be actively involved in the United Nations Decade on Biodiversity (2021 – 2030). Our involvement in the International Decade on Biodiversity will range from promoting research across QMUL on biodiversity as well as implementing ecological enhancement initiatives.

## **Recommendations**

That the Sustainability Committee should consider:

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

**Presented by: Jamal Mohammed (Sustainability Support Officer)**



## Energy Performance Report

<b>Outcome requested:</b>	That the Sustainability Committee: <ul style="list-style-type: none"> <li>• Consider our energy efficiency performance compared to budget</li> <li>• Consider issues that should be escalated</li> </ul>
<b>Executive Summary:</b>	This report details our energy efficiency performance against our budget and contain an overview of projects that have are being implemented via the recently secured Salix energy efficiency loan.
<b>Alignment with:</b> <ul style="list-style-type: none"> <li>• <b>QMUL Strategy</b></li> <li>• <b>Internal Policies/Regulations</b></li> <li>• <b>External Statutory Requirements</b></li> </ul>	<ul style="list-style-type: none"> <li>• The Environmental Protection Act 1990</li> <li>• Clean Air Act 1993</li> <li>• The Climate Change Act 2008</li> <li>• The Energy Act 2016</li> </ul>
<b>Consideration of Strategic Risks:</b>	Reducing the energy used across our Campuses will reduce our exposure to volatile energy prices and reduce our carbon footprint and contribution to climate change.
<b>Subject to Prior and Onward Approval by:</b>	Estates Strategy Board (ESB)
<b>Confidentiality and Distribution:</b>	<i>Non-restricted</i>
<b>Equality Impact Assessment:</b>	<i>Not Applicable</i>
<b>Author(s) :</b>	Philip Tamuno & Garry Pritchard
<b>Date:</b>	<i>22 July 2020</i>

## Energy Performance Report

### Overview

This report details the electricity and gas used across our campuses compared to 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.

Site and campus level monitoring the energy we use will continue to be the basis on which we develop and implement technical and non-technical initiatives that support our commitment to reduce our carbon footprint and our contribution to climate change.

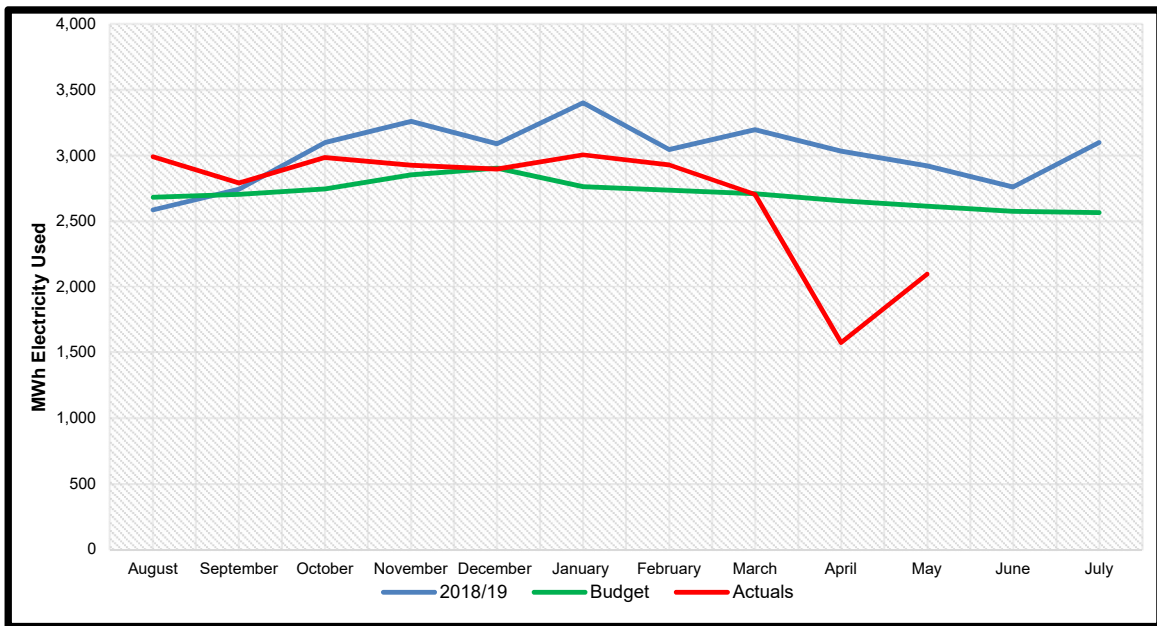
### Trend in our 2019/20 Energy Performance: YTD Month 10

Based on the electricity and gas used across our Campuses between August 2019 and May 2020, we are in line to use 406,694 kWh (1.3% lower) less electricity than projected and 758,769 kWh (2.3% lower) gas than budgeted by the end of the current academic year.

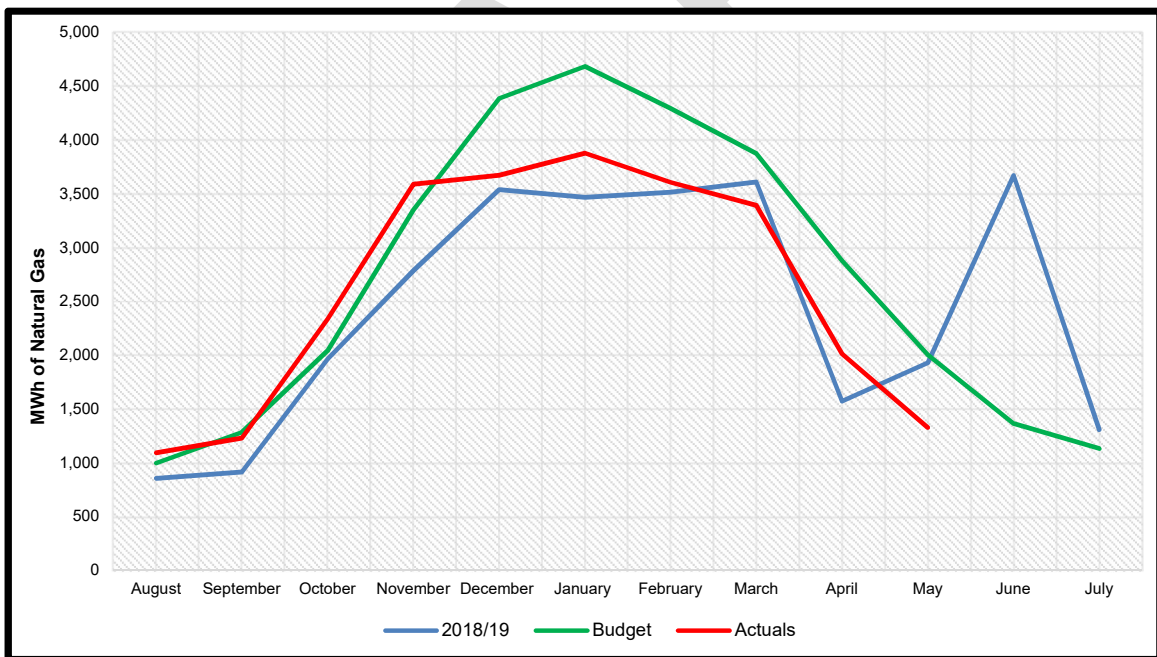
Our current energy reduction performance is due to the partial closure of our campuses as a result of COVID-19 and the energy efficiency projects we completed and commissioned during the 2018/19 academic year. We will present end of year project level performance of these commissioned energy efficiency initiatives.

The Figures 1 and 2 gives an overview of the current trend of our electricity and gas budget (MWh) performances. Appendix 1 show the comparison of our 2018/19 and the trend of our 2019/20 energy performances.

**Figure 1: Trend in Electricity Consumption Performance Compared to Budget**



**Figure 2: Trend in 2019/20 Gas Consumption Performance Compared to Budget**



**Salix Tranche 3 (£2,465,509): Project Implementation**

As part of our commitment to continue to reduce our carbon footprint, we recently secured a £2.46 Million energy efficiency funding from the Salix (see Table 1 for details of these projects). The projected 2,321,808 kWh (electricity) and 4,157,720 kWh (gas) savings from the implementation of these projects has been guaranteed by our Building Management Service (BMS) contractor.

**Table 1: Salix Tranche 3 Project Overview**

Project Title / Description	Cost (£)	Projected Savings	
		Electricity (kWh)	Gas (kWh)
Joseph Priestley: Plate Heat Exchanger	£397,907	105,780	1,763,680
BMS Upgrade: Whitechapel Campus	£602,946	727,382	1,358,785
BMS Upgrade: Arts Two Building	£32,573	34,526	39,742
BMS Upgrade: Computer Science Building	£16,629	56,325	100,627
BMS Upgrade: Engineering Building	£83,025	201,279	400,434
BMS Upgrade: G. E. Fogg Building	£48,783	164,607	37,477
BMS Upgrade: G. O. Jones Building	£8,629	31,010	21,069
BMS Upgrade: Peoples Palace Building	£105,017	85,970	435,906
Whitechapel Lighting Upgrade	£1,170,000	914,929	NA
<b>Total</b>	<b>£2,465,509</b>	<b>2,321,808</b>	<b>4,157,720</b>

The project coordinating team currently meet every other week to ensure that these projects will be commissioned as scheduled (by 31 December 2020). These 9 projects are currently being implemented as planned. The Salix Tranche 3 projects are scheduled to be completed by 31 December 2020.

As at 10 July 2020, we have spent 19% of this loan amount and we will continue to monitor the implementation of these projects against expected outcomes. Appendix 2 contain an overview of the progress of these 9 projects.

## 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)

### Appendix 1: Trend of Energy Performance Performances

Campus	Electricity (kWh) 2018/19	Electricity (kWh) 2019/20	Difference (kWh)	Gas (kWh) 2018/19	Gas (kWh) 2019/20	Difference (kWh)
Charterhouse	6,904,126	5,916,760	987,366	6,281,653	7,091,265	809,612
Whitechapel	7,940,688	7,326,826	613,862	7,330,551	7,560,459	229,908
Mile End	21,208,363	18,585,229	2,623,133	15,449,170	16,722,343	1,273,173
West Smithfield	0	0	0	73,658	164,478	90,820
Lincoln's Inn Field	80,838	69,723	11,115	0	0	0
Chislehurst Sports Ground	50,234	39,171	11,063	0	0	0
<b>Total</b>	<b>36,184,249</b>	<b>31,184,710</b>	<b>4,246,539</b>	<b>29,135,032</b>	<b>33,193,627</b>	<b>2,403,513</b>

**Appendix 2: Salix Tranche 3 Energy Efficiency Project Delivery (Updated 10 July 2020)**

<b>Project</b>	<b>Total Loan Amount (£)</b>	<b>Total Paid (£)</b>	<b>Percentage Paid (%)</b>
Arts 2 - BMS Upgrade	£32,573.00	£720.00	2.2%
Computer Science - BMS Upgrade	£16,629.00	£480.00	2.9%
Engineering - BMS Upgrade	£83,025.00	£5,270.45	6.3%
G E Fogg - BMS Upgrade	£48,783.00	£960.00	2.0%
G O Jones - BMS Upgrade	£8,629.00	£0.00	0.0%
Joseph Priestly - Plate-heat Exchanger	£397,907.00	£4,699.56	1.2%
Peoples Palace - BMS Upgrade	£105,017.00	£28,252.21	26.9%
Whitechapel BMS Upgrade	£602,946.00	£408,836.99	67.8%
Whitechapel Lighting Upgrade	£1,170,000.00	£18,000.00	1.5%
<b>Total</b>	<b>£2,465,509.00</b>	<b>£467,219.21</b>	<b>19%</b>





## Electricity and Gas Service Contracts: Outcome

<b>Outcome requested:</b>	That the Sustainability Committee should consider this report: <ul style="list-style-type: none"> <li>• For information</li> </ul>
<b>Executive Summary:</b>	This summarises the outcome of our recent energy procurement process. The outcome of this process implies that we will realise a saving of £1.04 Million between 1 October 2020 and 30 September 2021. In addition to this saving, all our Non-Half Hour (NHH) electricity supply will be from renewable energy sources.
<b>Alignment with:</b> <ul style="list-style-type: none"> <li>• QMUL Strategy</li> <li>• Internal Policies/Regulations</li> <li>• External Statutory Requirements</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental Sustainability Objective (Draft)</li> <li>• QMUL's Efficiency Priority</li> </ul>
<b>Consideration of Strategic Risks:</b>	Efficiency and environmental objective
<b>Subject to Prior and Onward Approval by:</b>	Not Applicable
<b>Confidentiality and Distribution:</b>	<i>Non-restricted</i>
<b>Equality Impact Assessment:</b>	<i>Not Applicable</i>
<b>Author(s) :</b>	Philip Tamuno
<b>Date:</b>	<i>22 July 2020</i>

## Electricity and Gas Service Contracts: Outcome

### Overview

The recent energy procurement competition that we carried out was aligned to our efficiency priorities. The current 24 months Purchase within Period (PwP) energy procurement strategy agreement between QMUL and Laser ends on 30 September 2020.

Recently, fixed price and fixed-term (FP) energy procurement products has relatively either out performed or matched flexible energy procurement strategies (such as PwP). The average energy unit rates we paid and are paying under the PwP strategy are higher than average market rates.

We invited energy prices quotes from the following Third Party Intermediaries (TPIs):

- Major Business Sales Agent
- Carbon Numbers Limited
- Crown Commercial Services (CCS)
- Laser Energy (Kent County Council)
- The Energy Consortium (Education and Public Sector)

The outcomes 1<sup>st</sup> and 2<sup>nd</sup> rounds of the procurement rounds on 3 April and 5 and 6 May 2020 are indication of the volatility and uncertainty associated with of the energy market. Based on time constraints we were unable to accept the lowest quotes we received on 3 April 2020.

We received quotes from the Crown Commercial Service (CCS), Laser Energy and the Energy Consortium (TEC) during our 2<sup>nd</sup> round of procurement competition. The evaluation of these quotes show that we will save £1,042,807 between October 2020 and September 2021 (assuming that our electricity and gas consumption will remain unchanged) compared to our current energy spend. In addition to these savings, all our non-half hourly electricity supply service will be from renewable sources.

Tables 1 and 2 summarises the savings that will be realised by switching from purchasing energy within the delivery period to fixed energy prices from 1 October 2020.

**Table 1: Trend in Electricity Supply Service Spend and Savings**

	2018/19	2019/20	2020/21 <sup>5</sup>	2020/21 <sup>6</sup>
Unit Rates (p/kWh)	14.77	15.97	13.33	13.95
Electricity used (kWh)	36,715,200	36,715,200	36,715,200	36,715,200
Total	£5,421,752	£5,863,417	£4,894,136	£5,122,611
<b>Effective Reduction / Increase</b>	<b>£0</b>	<b>£441,665</b>	<b>£969,281</b>	<b>£740,806</b>

**Table 2: Trend in Gas Supply Service Spend and Savings**

	2018/19	2019/20	2020/21 <sup>5</sup>	2020/21 <sup>6</sup>
Unit Rates (p/kWh)	3.21	3.59	2.56	2.55
Gas used (kWh)	29,144,359	29,144,359	29,144,359	29,144,359
Total	£935,624	£1,046,282	£746,096	£744,281
<b>Effective Reduction / Increase</b>	<b>£0</b>	<b>£110,658</b>	<b>£300,187</b>	<b>£302,001</b>

As seen in Tables 1 and 2; electricity prices are more volatile than natural gas.

## Evaluation of Fixed Price Energy Quotes

The electricity quotes were evaluated based on the meter profiles:

- Non-Half Hour (NHH) meters: These are electric meters with significantly higher consumption and energy usage profiles.
- Half Hour meters: These are electric meters with significantly lower consumption and energy usage profiles.

<sup>5</sup> Lowest quote received on 3 April 2020

<sup>6</sup> Lowest quote received on 5 May 2020

## Gas Supply Service

We requested for quotes for gas supply services across all our Campuses (annual consumption based on a three year average of 29,801,818 kWh). The lowest quotes from each of the TPIs were evaluated down to meter levels

Table 3 show the comparison of the two gas supply service quotes that we received on 6 May 2020.

**Table 3: Comparison of Gas Supply Service Quotes**

Third Party Intermediary (TPI)	Quote (£)	Unit Price (p/kWh)	Difference (£)
The Energy Consortium (Corona Energy)	£812,626	2.73	£51,555
Laser (Total Gas & Power)	£878,328	2.95	£117,256
Crown Commercial Service (GazProm)	£761,071	2.55	£0

## Electricity Supply Service

We received three HH and NHH electricity 12-months fixed price quotes. The quotes from Ecotricity was for 100% renewable electricity supply services for all NHH meters.

The electricity quotes we received were evaluated based on the meter profile to ensure that we get the lowest available electricity price. The appraisal of the HH electricity supply service quotations showed that Total Gas and Power and Ecotricity quotes (via Laser Energy) offered QMUL the lowest energy prices. Table 4 contain an overview of these quotes.

**Table 4: Comparison of HH Electricity Supply Service Quotes**

Third Party Intermediary (TPI)	Quote (£)	Unit Price (p/kWh)	Difference (£)
The Energy Consortium (eDF)	£5,629,199	14.12	£65,957
Laser (Total Gas & Power and Ecotricity)	£5,563,242	13.95	£0

## Summary

The performances of these three energy service providers will be monitored against the energy and non-energy rates submitted on 5 and 6 May 2020. We are currently undergoing the contract on-boarding process to ensure smooth transition from our current energy contract.

During the delivery period (between 1 October 2020 and 30 September 2021), we will be receiving our invoices directly from each of these appointed energy service providers rather than via a 3<sup>rd</sup> party.

The above arrangement implies reduction in the time lag between the end of the energy supply period (end of the month) and when our invoices are received as well as eliminate the current 3<sup>rd</sup> party administrative charges we pay. This implies, that we will enjoy a further saving of £9,500.22 (£7,916.85 2020/21 full year effect) by removing this additional energy bureau charges.

Date: 22 July 2019

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

DRAFT