



WELLCOME GENOME CAMPUS ENVIRONMENTAL SUSTAINABILITY STRATEGY

**Incorporating environmental sustainability in all decisions
that we make across all areas of Campus**



Final Version April 2021

Approver: Sian Nash, Associate Chief Operating Officer
Author: Sarah Burgess, Campus Environmental Manager
Reviewer: Emily Boldy, Campus Environmental Sustainability Strategy support



FOREWORD – ACOO

The ambition of GRL is to progressively strengthen its well-established foundations in scientific research and discovery, and to build on them. This will develop the Wellcome Genome Campus over the forthcoming 25 years into the international centre for scientific, business, cultural and educational activities emanating from Genomes and Biodata.

As a place of learning and science, there is an innate responsibility for the impact we have on the planet, but also the opportunity for educating and influencing others to play their role in the sustainability agenda.

The Wellcome Genome Campus is already an exemplar for environmental management, having achieved external accreditation for our efforts. We have renewable energy models, an active green transport strategy and promote significant biodiversity across the campus. However, in response to the scientific argument on climate change and the global demand being placed upon our natural resources, we wish to maximise the positive impact we could have over the next ten years, both locally and globally.

This strategy sets out our sustainability roadmap over a collection of twelve themes. We have given ourselves stretching targets which support an ambition to reach carbon neutrality by 2030. This will be formerly tracked and reported upon twice a year, but as a place of learning we wish to make this an ongoing conversation and opportunity to contribute. To do this requires conscious changes in working practices, buying decisions, and cross-campus collaboration; putting sustainability outcomes at the heart of our operations. Through consultation, our campus staff have created the majority of this document and I'd like to request and champion our collective support in now supporting our community to realize our goals.

The scope of this document is currently focused on the existing Campus, but there is an opportunity on the horizon to also use this as a foundation for the Campus Expansion. That development will start with sustainability and wellbeing in mind, creating a truly unique living and working environment.

Sian Nash, Associate Chief Operating Officer



CONTENTS

Foreword – ACOO2

Introduction.....4

Scope4

Strategy, Purpose and Governance5

Monitoring and Measurement.....5

2030 Targets6

Introduction to strategy themes7

STRATEGY THEMES11

Biodiversity.....12

Carbon and Offsetting.....13

Culture Change14

Energy.....15

Procurement and Supply Chain.....16

Sustainable Construction17

Sustainable Food18

Sustainable Lab Practices19

Sustainable Work Practices.....20

Travel.....21

Waste & Recycling22

Water & Effluent.....23

Glossary24

Contributors24



INTRODUCTION

Environmental concerns are becoming increasingly important for governments, corporations and individuals alike. Over the past 18 months, individual and collective actions have brought these concerns into the mainstream media and so into our daily lives; whether this be David Attenborough's documentaries, Greta Thunberg's talks at global conferences, or local communities standing up for environmental issues in their areas. There is also global scientific consensus that we have ten years in which to change our collective behaviour drastically in order to slow the rate of climate change and the catastrophic effects these changes are already having on our planet.

The UN Sustainable Development Goals (SDGs) will be referenced throughout this document to link our strategic aims to these world leading goals. The 2030 Agenda for Sustainable Development, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 SDGs, which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.

For over 10 years, the Wellcome Genome Campus has taken environmental management very seriously by maintaining certification to ISO 14001 ensuring that it complies with environmental legislation and strives to reduce its impact where possible.

The Wellcome Genome Campus now wants to take this to the next stage by creating a strategy and vision to compliment the policy already in existence, and to ensure that there is transparency and interaction with everyone on Campus regarding measuring and reducing environmental impacts.

This focus of the Environmental Sustainability Strategy ensures that there is alignment with the Wellcome Genome Campus overall mission and strategy as well as showing leadership commitment to change and improvement related to environmental impacts. This will ensure that the Campus is resilient to these changes and the cost implications in the future.

Workshops and organisational leader engagement have highlighted that our staff truly care about, and are aware of, the current and future environmental challenges. Staff across Campus know that it is our responsibility to be accountable for our impacts, help reduce them, and improve efficiencies through best practice.

SCOPE

The scope of the Wellcome Genome Campus Environmental Sustainability Strategy includes all environmental activities controlled by Genome Research Limited (GRL) through the management of operations and facilities to support the science research on site, the conference centre and other partners on Campus. The Campus boundary is the physical boundary of this strategy.

The areas not directly within the scope of this strategy are EMBL-EBI managed buildings and other tenanted areas, including the BIC building. These areas will be included within the strategy to provide influence and support only but will not be included within targets.



STRATEGY, PURPOSE AND GOVERNANCE

The purpose of this strategy is to formalise the Campus' commitment to incorporating environmental sustainability into all decisions that we make across all areas of Campus. The final strategy will be both internal and external, focussing on a 10-year period (2021-2031).

The overarching goals of the strategy are to

- Minimise our environmental impact, including the reduction of pollution and mitigation against climate change
- Adopt environmental approaches and practices that maximise energy efficiency, waste and water management
- Promote sustainability and improve local biodiversity
- Maximise positive impacts through changing practices, values and choices
- Engage and influence external stakeholders to be more sustainable

The strategy will be overseen by the Campus Operations Board, who will be accountable for its progress and success.

Responsibility for the implementation of the strategy will sit with the Campus Estates and Facilities team. A named lead will be appointed as responsible for each theme, with Sarah Burgess, Campus Environmental Manager, as the overall lead. The Director of Estates and Facilities, David Dodd, will report regularly on progress to the Campus Operations Board.

It is sponsored and championed by Sian Nash, Associate Chief Operating Officer and Mark Blaxter, Head of the Tree of Life Programme.

This document sets out the strategic ambition. The methodology of implementation will follow as a programme of interventions. The strategy has been split into 12 themes and a single high-level target identified for each one.

MONITORING AND MEASUREMENT

Twice a year the 12 strategic targets will be reported to Campus Operation Board to review progress, determine any risks and decisions on the mitigation needed.

Quarterly key operational leads from each of the 12 themes will meet to discuss progress and update relevant actions plans and risk registers.

Where possible accurate and up to date data will be used to monitor progress against each target.

Due to the COVID-19 pandemic the baseline year is 2018-19 FY which represents a full normal working financial year unless otherwise stated within the theme.



2030 TARGETS

Proposed 2030 targets

<p>Biodiversity</p> <p>25% net biodiversity gain</p>	<p>Carbon & Offsetting</p> <p>Net carbon zero</p>	<p>Culture Change</p> <p>90% environmental awareness</p>	<p>Energy</p> <p>20% relative energy reduction</p>
<p>Procurement & Supply Chain</p> <p>TBC% suppliers with sustainability criteria used</p>	<p>Sustainable Construction</p> <p>TBC% projects with BREEAM Excellent or above</p>	<p>Sustainable Food</p> <p>25% reduction in relative food waste</p>	<p>Sustainable Lab Practices</p> <p>25% reduction in relative lab waste</p>
<p>Sustainable Work Practices</p> <p>50% reduction in paper use</p>	<p>Travel</p> <p>50% carbon emissions reduction in commuter and business travel</p>	<p>Waste & Recycling</p> <p>50% reduction in general waste disposal</p>	<p>Water & Effluent</p> <p>25% reduction in water use</p>



INTRODUCTION TO STRATEGY THEMES

BIODIVERSITY

Campus is fortunate to have a rural setting with a number of different ecosystems that help improve biodiversity. This theme focuses on how improving the local biodiversity on Campus can have a positive impact to the environment.

Biodiversity is essential for a healthy environment, not just for humans, for all species. Plants and bacteria produce oxygen for us to breath and food for us to eat, and animals ensure that plants and bacteria continue to thrive in all the different ecosystems on Earth. The UN Sustainable Development Goals support this through their [Life on Land](#) goal (to 'protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss').

CARBON AND OFFSETTING

The GRL baseline carbon footprint (financial year (FY) 2018-19), includes energy, waste, water, paper and transport, is 16,723 tonnes of CO₂ equivalents. By working on the different sections of the Sustainability Strategy, we will be looking to reduce the impact in many of these areas, and to offset our residual impact. The UN Sustainable Development Goal that emphasise this section is [Climate Action](#) (to 'take urgent action to combat climate change and its impacts').

Offsetting can be used as a tool for organisations to work towards carbon neutrality. Offsetting is the final step in an annual carbon cycle: measure, manage, reduce and offset. Offsetting can be done in a number of ways, including investment in on-site or off-site renewable energy, planting trees/improving carbon sequestration of onsite ecosystems, and buying verified offsetting credits that are invested in a socio-enviro-economic projects. This theme will look to decide what types of project(s) we would want to invest in as a Campus, commensurate with our charitable status.

CULTURE CHANGE

This theme of the Sustainability Strategy focuses on how changing behaviours can support the Campus' long-term sustainability goals and objectives as well as wider environmental improvements in our lives. Culture change underpins the success of all of the other themes, with communication and awareness being at the heart of accomplishing change.

ENERGY

On Campus, energy has by far the biggest carbon impact: the Campus baseline energy consumption in 2018-19 was 91 million kWh, which includes electricity, natural gas, and fuels. This is the equivalent to energy consumption from approximately 2,700 homes. Energy is 86% of the Campus' carbon impact.



This theme is a key focus for the strategy, building on the clean energy opportunities (renewables and low-carbon technology), improved efficiencies, and reduction opportunities (lighting and motor management).

Energy consumption affects a number of UN Sustainable Development Goals including [Affordable and Clean Energy](#) (to ensure access to affordable, reliable, sustainable and modern energy for all) and [Climate Action](#).

PROCUREMENT AND SUPPLY CHAIN

Suppliers come in all shapes and sizes, with different attitudes and morals. Responsible procurement leads to a responsible supply chain. The UN Sustainable Development Goals that emphasises this are [Responsible Consumption and Production](#) (to ensure sustainable consumption and production patterns) and [Partnerships for the Goals](#) (to strengthen the means of implementation and revitalize the global partnership for sustainable development).

This theme focuses on understanding how sustainable our suppliers, and the products we receive from them are, and how they can support us in reaching our Sustainable Strategy goals.

SUSTAINABLE CONSTRUCTION

Creating new buildings has an impact on the local environment and produces carbon emissions. The UN Sustainable Development Goals emphasise the importance of this area with [Sustainable Cities and Communities](#) (to make cities and human settlements inclusive, safe, resilient and sustainable), and [Industry, Innovation and Infrastructure](#) (to build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation).

.A focus for this theme is working with our design and construction contractors to ensure best practice frameworks and sustainable initiatives are in place.

SUSTAINABLE FOOD

Food is one of the most important and emotive areas of human life. The UN Sustainable Development Goals include [Zero Hunger](#) (to end hunger, achieve food security and improved nutrition and promote sustainable agriculture), and [Good Health and Well-Being](#) (to ensure healthy lives and promote well-being for all at all ages). Food comes from all over the world in hundreds of different forms to provide the different nutrients that humans need to survive.

On Campus, our catering providers take great pride in being sustainable and we are working with them to improve the situation further. We know that food can have a large carbon footprint, and we are now working out what that footprint is for Campus.

A focus for this theme will be improving the knowledge that consumers need to make sustainable purchasing choices in the food outlet areas on Campus.



SUSTAINABLE LAB PRACTICES

How we work, and what we use in the lab, has an impact on the environment. Every chemical and consumable that is used goes through the lab waste stream or consumes energy if it is stored in freezers.

The Scientific Facilities and Scientific Operations teams support the lab scientists to maintain compliance and provide efficiencies within certain practices. We are constantly looking at new ways to become more efficient.

This theme will look to focus on areas such as reducing lab waste, reducing freezer usage, and reducing consumables.

SUSTAINABLE WORK PRACTICES

How we work has an impact on the environment, through the energy, paper, and other items used. We all work differently and also all have the capacity to change. The focus for this theme is around the offices and what working practices can be changed to reduce the impact of paper use, waste, stationery, travel, and energy use.

On Campus, we used 5,000 reams of paper during the financial year of 2017-18. This is the equivalent to 124 tonnes of paper, the same weight as 21 African bush elephants, and we disposed of 28 tonnes of paper, or 5 African bush elephants. The difference here is primarily due to archives and files of paperwork kept in offices but also leaflets and handouts given to staff, visitors and delegates to take away with them.

TRAVEL

This covers business, conference, and commuting travel to and from Campus.

The GRL business and commuting travel carbon impact during our baseline year was 2,500 tonnes CO₂ equivalents. The majority of this includes flights for business travel and commuting by car. This excludes the impacts of conference visitors on site and other institutes.

The focus for this theme will be looking at improving the transport connections to Campus for visitors, delegates, and staff, as well as identifying opportunities to reduce air travel, both by staff to external conferences and conference delegates to Campus.

WASTE AND RECYCLING

We all have a responsibility to reduce pollution, and part of how we do this is by managing waste and recycling. This links to the UN Sustainable Development Goal of [Responsible Consumption and Production](#) (to ensure sustainable consumption and production patterns).



On Campus, we manage all of our waste streams responsibly to ensure there is no pollution to the environment and we work with our contractors to improve recycling rates. We also segregate a large proportion of our waste to ensure that we can recycle as well as possible.

The campus waste segregation baseline is 221 tonnes (all streams) and 45 tonnes of general waste, which means 80% of our waste is correctly segregated. In 2018, the UK government statistics for Waste from Households being recycled was 45%, with our EU target by 2020 being 50%.

The focus for this theme will be reduction of waste and the use of emerging technologies to improve how waste is recycled.

WATER AND EFFLUENT

Water is a key resource for all life on Earth and it makes up approximately 60% of the human adult body. Ensuring we have enough clean water and carefully managing wastewater are essential for our survival. This links to the UN Sustainable Development Goals of [Clean Water and Sanitation](#) (to ensure availability and sustainable management of water and sanitation for all), and [Life Below Water](#) (to conserve and sustainably use the oceans, seas and marine resources for sustainable development).

The Campus water consumption baseline year of 2018-19 was 100,138 m³. This is equivalent to 20 million flushes of the toilet or the annual water consumption of 780 households (based on 350 litres per day).

The focus for this theme is reducing water consumption and managing the composition of our wastewater (effluent).



STRATEGY THEMES

<p>Biodiversity</p> 	<p>Carbon & Offsetting</p> 	<p>Culture Change</p> 	<p>Energy</p> 
<p>Procurement & Supply Chain</p> 	<p>Sustainable Construction</p> 	<p>Sustainable Food</p> 	<p>Sustainable Lab Practices</p> 
<p>Sustainable Work Practices</p> 	<p>Travel</p> 	<p>Waste & Recycling</p> 	<p>Water & Effluent</p> 



Biodiversity



BIODIVERSITY

INCREASE THE CAMPUS BIODIVERSITY NET GAIN BY 25% BY 2030

KPIs

- Biodiversity Value (factored hectares)
- New habitats established

SCOPE

The boundary of the Wellcome Genome Campus as of December 2020.

BASELINE

2018-19 habitats on site included 15-acre wetlands, 2,700 trees and 60 acres of grassland, absorbing and storing approximately 150 tCO₂e per year.

STRATEGIC DIRECTION

- Improving our local biodiversity will support our corporate social responsibility of working with our local neighbours and communities
- Support wellbeing and health on site through greener areas and better quality air

OPERATIONAL OBJECTIVES

1. Calculate the Biodiversity Value of Campus annually
2. Complete biodiversity surveys of current Campus and investigate potential improvements
3. Improve access, awareness, and knowledge of the different habitats across Campus
4. Set Biodiversity enhancement target for development projects at 25% net gain

SUPPORTING INFO

Natural England “Carbon storage by habitat” report; Wildlife Trust collaborations.

Biodiversity Value metric using DEFRA Biodiversity New Gain method will be used in future once published – currently in BETA format.



Carbon & offsetting



CARBON AND OFFSETTING

STRIVE TO BE NET CARBON ZERO BY 2030

KPIs

- Annual carbon footprint calculation
- Carbon footprint per floor area
- Residual offset %

SCOPE

Includes carbon footprint scope 1 and 2 emissions that are GRL. EBI and tenants excluded. Scope 3 business travel emissions for GRL is included. Other scope 3 emissions will be monitored but not part of the current target.

BASELINE

GRL carbon footprint for 2018-19 was scope 1: 9,100 tCO₂e, scope 2: 7,000 tCO₂e, scope 3 business travel only: 623 tCO₂e

STRATEGIC DIRECTION

- Offsetting to be used to mitigate impact of unavoidable carbon impact from Campus operations, but reduction should be prioritised
- Offsetting projects meet the strategic direction and mission of the Campus as well as commensurate with our charitable status

OPERATIONAL OBJECTIVES

1. Define carbon offsetting policy and budget
2. Define targets and scope for carbon emissions monitoring and appropriate individuals from working group themes
3. Feasibility of options for sustainable energy source collaborations

SUPPORTING INFO

Annual carbon footprint calculations; Different project portfolios for offsetting; Science-based targets setting tool used for target of 50% by 2030



Culture change



CULTURE CHANGE

INCREASE AWARENESS OF ENVIRONMENTAL IMPACT TO 90% BY 2030

KPIs

- Great Place to Work survey result
- Number of Empower portal log ins

SCOPE

All GRL employees recognised by GRL HR

BASELINE

80% of GRL staff think that the Campus is working to reduce its environmental impact (Great Place to Work 2019 survey results)

STRATEGIC DIRECTION

- Organisation leaders are aware, and understand the relevance, of Corporate Social Responsibility and Environment Sustainability on Campus and that HR plays important role in influencing and implementing change
- Incorporation of environmental matters into Behavioural Competency Framework to be considered as commitment to this theme at all levels
- Organisational leaders agree to support operational change necessary to enable culture change and to support innovative and efficient solutions to contribute to long term goals; default options in all areas should reflect our commitment to the strategy
- Staff and stakeholders empowered to achieve environmental sustainability objectives

OPERATIONAL OBJECTIVES

1. Improve senior leadership visibility and active support of culture change actions through commitment and innovation to reduce the environmental impact of Campus
2. Improve internal and external awareness about current environmental impact reduction activities
3. New dedicated communications channels to improve awareness amongst all staff of what can be done to reduce our environmental impact further and contribute to wider societal goals; Empower portal
4. Create a network of like-minded staff members to support behaviour change to reduce impact within their peer networks
5. Ensure that staff responsible for procurement are aware of resources already procured before obtaining more, for example cold storage equipment

SUPPORTING INFO

Great Place to Work survey
Empower portal



Energy



ENERGY

REDUCE RELATIVE ENERGY CONSUMPTION BY 20% BY 2030

ALL ENERGY USE ON CAMPUS TO BE GREEN BY 2030

KPIs

- Gas: MWh/Heating degree day/floor area
- Electricity: MWh/floor area
- % renewable electricity generation onsite/floor area
- % renewable electricity procurement

SCOPE

GRL electricity, gas and fuel use on Campus. Reduction of energy consumption.

BASELINE

Energy is 80% of the Campus carbon footprint. 2018-19 gas import from grid was 61,000 MWh. 2018-19 electricity import from grid was 30,000 MWh.

STRATEGIC DIRECTION

- Investment in short- and long-term energy infrastructure and efficiency projects business cases
- Independent and security of supply decisions
- Investment in long-term low-carbon and renewable projects
- Decision making on direction of high energy using buildings and infrastructure: Data Centre/IT, RSF, Sulston, CCHP and cold storage

OPERATIONAL OBJECTIVES

1. Invest in large-scale renewables and low-carbon energy sources
2. Increase awareness through communication campaign and staff inductions
3. Improve lighting types and controls Campus wide
4. Increased competence of specific building energy knowledge for key stakeholders
5. IT working practices to reduce energy use
6. Procurement, location, and operations of cold storage

SUPPORTING INFO

Monthly metering of buildings for gas and electricity; EON energy mix in the grid



Procurement & supply chain



PROCUREMENT AND SUPPLY CHAIN

SUSTAINABILITY CRITERIA USED FOR HIGH-VALUE/VOLUME SUPPLIERS/PRODUCTS BY 2030

KPIs

- Evaluation process with criteria sent annually to all suppliers; supplier environmental sustainability index
- Key requirements questionnaire used to evaluate suppliers

SCOPE

GRL and HHL procurement only.

BASELINE

High risk/high value assessments on ethics and sustainability (£50k+). Energy consumption is a common criteria used to evaluate sustainability.

STRATEGIC DIRECTION

- Operations Board appetite to drive the value of sustainability evaluation within procurement process and decisions
- Sustainability embedded within procurement policy with declaration of mission to be more sustainable, which should be widely communicated to both staff and suppliers

OPERATIONAL OBJECTIVES

1. Using standard sustainability requirements for Campus supplier evaluations; possibly a tiered approach with full assessments for major suppliers
2. Embedding sustainability into decision-buying processes
3. Prioritise responsible sourcing of materials and products, such as BES 6001 certification, ISO 14001 certification
4. Tracking performance of suppliers to drive continuous improvements
5. Improving partnerships with suppliers to drive innovation and design changes

SUPPORTING INFO

GRL Procurement Policy; Evaluation criteria questionnaires; Level achieved on the Flexible Framework - a self-assessment mechanism that allows organisations to measure and monitor their progress on sustainable procurement over time.



Sustainable
construction



SUSTAINABLE CONSTRUCTION

EMBED SUSTAINABLE METHODS IN CONSTRUCTION PROJECTS

KPIs

- % new buildings certified BREEAM Excellent or equivalent using the Campus Design Guide
- Environmental impact metrics specific to each construction project
- Embodied carbon

SCOPE

All construction projects within the boundary of the Campus (December 2020).

BASELINE

Capital projects are analysed against energy saving improvements for some specific identified projects

STRATEGIC DIRECTION

- Sustainability principles are given the importance, time and resource to be appropriately incorporated into infrastructure changes on Campus
- Sustainability metrics are assessed against each major infrastructure change and reported on

OPERATIONAL OBJECTIVES

1. Study feasibility, time frame, personnel resource and budgets needed to actually look at sustainability principles
2. Implement circular economy principles in construction and refurbishment works
3. Require all new buildings and refurbishments to achieve a defined BREEAM rating
4. Spend more time with stakeholders on design briefs to include environmental targets/deliverables/objectives expected at the start
5. Use Soft Landings framework to ensure that stakeholders are involved throughout the project journey from inception to post occupancy
6. Improve data reporting through projects in line with leading standards

SUPPORTING INFO

RIBA frameworks; BREEAM and LEED standards; Campus Design Guide



Sustainable food



SUSTAINABLE FOOD

REDUCE ENVIRONMENTAL IMPACT OF FOOD BY 25% BY 2030

KPIs

- Food waste per meal
- Food miles per meal

SCOPE

All catering provided on Campus.

BASELINE

Our Campus catering provider has a robust Corporate Social Responsibility report that highlights sustainable ingredients, healthy choices, circular model and thriving people and communities.

Campus food waste in 2017-18 was 55 tonnes.

STRATEGIC DIRECTION

- Catering provider for Campus supported to provide the sustainability changes needed through the contract
- Catering and hospitality provisions on Campus given the empowerment to change direction in line with sustainability guidelines

OPERATIONAL OBJECTIVES

1. Information and reduction of food impact through different menu choices
2. Improve awareness of the wider sustainability initiatives for how products are sourced
3. Reduce impact of hospitality food waste
4. Reduce other waste in catering through re-use initiatives
5. Increase number of local and seasonal products used

SUPPORTING INFO

Catering provider 2019 CSR report



Sustainable lab practices



SUSTAINABLE LAB PRACTICES

REDUCE RELATIVE ENVIRONMENTAL IMPACT OF LAB PRACTICES BY 25% BY 2030

KPIs

- Items purchased/research outcome
- Lab waste/research outcome

SCOPE

Lab buildings are identified as Sulston, West Pavilion, Morgan and Ogilvie. RSF is not included in baseline due to planned changes in operations.

BASELINE

TBC

STRATEGIC DIRECTION

- GRL Exec and faculty leads support strategy
- Empowerment given to all lab staff to make changes, enforced by Culture Change theme

OPERATIONAL OBJECTIVES

1. Reducing energy consumption on the use of equipment within labs
2. Reducing consumables usage across site
3. Updating processes to use less resources and make them more sustainable
4. Reducing waste across the labs by identifying more re-use and closed loop options
5. Collaborating with suppliers to identifying more sustainable methods of practicing in the lab using their products
6. Retrofit existing labs to more efficient specs

SUPPORTING INFO

Lab waste data; Consumables purchased



Sustainable work practices



SUSTAINABLE WORK PRACTICES

REDUCE ENVIRONMENTAL IMPACT THROUGH WORK PRACTICES BY 50% BY 2030

KPIs

- Paper use/headcount
- Paper waste/headcount

SCOPE

GRL buildings and staff only

BASELINE

During 2018-19 3,400 reams of paper were used by GRL. 2018-19 Campus paper waste was 22.2 tonnes.

STRATEGIC DIRECTION

- Instigate behaviour change by all staff through a change in organisational values in this area, supporting staff to make changes needed
- Expectations of how staff should be working sustainably on Campus to be communicated clearly

OPERATIONAL OBJECTIVES

1. Changing attitudes on conference travel if virtual options available
2. Reducing printing and lamination across site in favour of using technology; All meetings on Campus (incl. conferences) to go 'paperless'
3. Best practice sustainability learning taken from remote working to be applied on Campus
4. Ensuring use of energy-saving controls on energy-using equipment through policy and training
5. Invest in better control infrastructure for energy-using equipment

SUPPORTING INFO

Paper use data from supplier; Paper waste from waste manager



Travel



TRAVEL

REDUCE CARBON EMISSIONS FROM COMMUTER AND BUSINESS TRAVEL BY 50% BY 2030

KPIs

- Business travel carbon impact/FTE
- Commuter travel carbon impact/FTE

SCOPE

All staff commuter travel to Campus and GRL business travel.

Out of scope but beginning to monitor Connecting Science impact of conference centre and advanced courses delegates travel to Campus.

BASELINE

2019 staff commuting SOV at 41%. Conference delegates not monitored. 2018-19 FY GRL business travel carbon impact of 623 tCO₂e.

STRATEGIC DIRECTION

- Operations Board appetite to drive changing the travel behaviours within research
- Operations Board investment in local, national and global transport changes to increase public transport networks and reduce flying
- Connecting Science commitment to making courses and conferences on Campus more sustainable, with measures including reducing travel and more virtual speakers and events

OPERATIONAL OBJECTIVES

1. Improving current travel policies to incorporate appropriate sustainability solutions
2. Incorporating lessons learnt around business travel and commuting from new remote working patterns
3. Engaging and influencing local and internal planning applications related to transport improvements
4. Improve transport options for everyone needing to travel to Campus (not just staff)
5. Improve awareness of individuals' transport impact and what can be done

SUPPORTING INFO

Green Travel plan 2014-2019 (new one for 2021-2031)
Travel policies



Waste & recycling



WASTE & RECYCLING

REDUCE RELATIVE WASTE CONSUMPTION BY 50% BY 2030

KPIs

- General waste generated (tonnes)/headcount

SCOPE

All GRL waste. Lab waste is included in sustainable lab practices, food waste is included within sustainable food, paper waste is included within sustainable office practices.

BASELINE

In 2018-19 office and catering waste consumption was 306 tonnes of waste, 0.12 tonnes/headcount

STRATEGIC DIRECTION

- Investment in on-site waste management facilities across Campus for labs, offices and catering waste
- Strategic procurement and operational decisions needed around areas that affect waste streams: cold storage, plastics in labs, sequencing plastics, catering, stationery/office supplies.

OPERATIONAL OBJECTIVES

1. Increase awareness through communication campaigns and staff inductions
2. Increase understanding of specific building waste knowledge for key stakeholders to manage and reduce waste streams
3. Research feasibility and alternatives to reduce plastic and paper waste through procurement and operational options or partnerships
4. Research feasibility and alternatives for plastic waste to be more usefully diverted
5. Identify emerging technologies to process food and general waste on site

SUPPORTING INFO

Waste lift data from contractors; Cleaning and lab waste team collection data



Water & effluent



WATER & EFFLUENT

REDUCE RELATIVE WATER USE BY 25% BY 2030

KPIs

- Water use/headcount
- Water use/building
- % water sourced from rainwater harvesting

SCOPE

All GRL operations water use and effluent disposal.

BASELINE

The GRL water consumption during 2018-19 was 85,000 m3.

STRATEGIC DIRECTION

- Mitigation of risk to flooding with water management across site
- Reduce water consumption and improve effluent/wastewater composition leaving Campus
- Increase greywater and rainwater storage and use on Campus

OPERATIONAL OBJECTIVES

1. Improve metering infrastructure across site, including near-time reporting and sampling
2. Improve water run off management into lakes and river
3. Protocols for best practice lab and catering water management
4. Installation of more rain water harvesting facilities across buildings
5. Best practice installation of building water usage components (taps, flushes, showers)

SUPPORTING INFO

Water meter readings; Effluent sampling results by Anglian Water



GLOSSARY

- **Carbon zero** – whilst it is not a scientifically agreed term, the UN Environment Programme defines ‘carbon neutrality’ and ‘net zero’ the following way: ‘Global carbon neutrality means that, globally, anthropogenic carbon dioxide emissions are net zero. Net zero implies that some remaining carbon dioxide emissions could be compensated by the same amount of carbon dioxide uptake (negative emissions), as long as the net input of carbon dioxide to the atmosphere due to human activities is zero’.

CONTRIBUTORS

The 12 themes were chosen via an initial consultation, and developed at a series of online workshops, which were open to everybody on Campus, over July and August 2020.

The results of these workshops were fed into the individual theme strategies, with the guidance of key stakeholders.

ARUP were also consulted on to identify and prioritise targets and KPIs, and formulate the initial action plan.

These are staff from across Campus who have contributed to the strategy so far:

Theme	Workshop attendees (where record held)	Strategy reviewers
Biodiversity	Sarah Burgess; Lee Outhwaite; Kelly Butler; Sophie Potter; Emily Boldy; Matthew Midgley; Catherine McCarthy; Emma Bowditch; Thomas Hancocks; Jenny Rees; Burcu Bronner-Anar; Michelle Starling; Fengtang Yang; Piv Gopalasingam; Iliana Bista; Steph Riach	Lee Outhwaite
Carbon and offsetting	Sarah Burgess; Manuel Carbajo; Lee Outhwaite; Yvonne Thornton; Rob Davies; Darren Hughes; Emma Bowditch; Andy Gray; Emily Boldy; Treasa Creavin; Alex Bateman	Andy Gray
Culture change	Sarah Burgess; Manuel Carbajo; Abbie Dobbs; Minal Patel; Emma Bowditch; Emily Boldy	Elaine Stasiak; Ireena Dutta; Richard Milne
Energy	Sarah Burgess; Thomas Hancocks; Sophie Potter; Martyn Kelsey; Emily Boldy; Sian Nash; Andrew Cornell; Emma Bowditch; Rob Davies; Violeta Munoz	Andy Gray



Procurement and supply chain	Sarah Burgess; Emily Boldy; Jen Waterfield; John Barron; Andrew Bone; Sian Nash	Jen Waterfield; Joe Reynolds; John Barron
Sustainable construction	Sarah Burgess; Joanna Slater-Tunstill; Peter Ellis; Luke Rudd; Emily Boldy; Alex Bateman <i>Attendance not recorded, so some may be missing – apologies!</i>	Peter Ellis
Sustainable food	Sarah Burgess; Jenny Rees; Emma Bowditch; Rebecca Loffman; Katy Taylor; Matt Jones; Meredith Willmott; Sian Nash; Laura Wyatt	Jenny Rees
Sustainable lab practices	<i>Workshop postponed due to lack of key stakeholder attendance</i>	Jon Lovell
Sustainable work practices	Sarah Burgess; Hazel Rogers; Emma Bowditch; Michelle Craske; Abbie Dobbs; Emily Boldy	Karen Cafferkey
Travel	Sarah Burgess; Debbie Rice; Alison Wood; Rob Davies; Anne Wilcockson; Anna Reed; David Dodd; Nicola Stevens; Sam Bowker; Debbie Rice; Emily Boldy; Lorraine Moore; Alison Wood; Darren Hughes; Alison King; Christoph Puethe; Emma Bowditch; Manuel Carbajo; Catherine Beaufort; Emily Sullivan; Alice Matimba; Samantha Walker	Alison King
Waste and recycling	Sarah Burgess; Andrew Cornell; Emma Bowditch; Mallory Freeberg; Jenny Rees; Jon Lovell; Donna Bowers; Alison Wood	Jenny Rees
Water and effluent	<i>Workshop cancelled due to low attendance</i>	Sarah Burgess