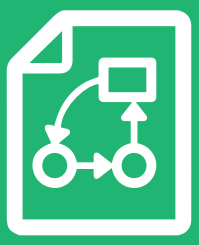

Environmental Sustainability Report

2022-2023

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25 July 2022 Revised 2 August 2022

Lancaster University

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1. Introduction

1.1

The climate emergency is the most significant issue affecting planet Earth, our generation and potentially more dramatically, the generations that will follow us. Unless rapidly and comprehensively addressed, the long-term consequences are potentially disastrous for the ecology of the planet and much of its human and non-human population. It is our collective responsibility to meet this challenge and to address the climate emergency as individuals and as an organisation.

1.2

Environmental sustainability has been at the heart of Lancaster University since its foundation and it is a key part of our strategy to help tackle global environmental challenges, both through our teaching and research, and via the sustainable management of our own campus and operations. In December 2020 we declared a climate emergency and we have developed an ambitious goal of achieving carbon net emissions from electricity and heating by 2030, along with a net zero commitment from all other emissions by 2035. It is essential that we meet these ambitious targets for managing and reducing our carbon emissions through a practical and effective roadmap which Lancaster University's Climate Emergency Carbon Reduction Plan (CECRP) provides.

1.3

There are still uncertainties and complex challenges in front of us, but we believe that with ambition, creativity and collaborative effort we can achieve our goals. The University is fully committed to implementing the major carbon reduction projects required and to engaging its research, teaching and professional expertise to meet the challenges which lie ahead.

2. Organisation and Resource

2.1

Since the declaration of the climate emergency, a working group led by the Pro Vice Chancellor (PVC) (Global) has met 'virtually' throughout the pandemic with technical input to make progress on Scope 1 and 2 Energy, and Scope 3 Travel and Procurement targets. Green Lancaster, the partnership between the Students Union and the University has also had Terms of Reference reviewed and is now chaired by the PVC (Global). The formal and informal organisation, to report on sustainability through the University for what is an extremely broad agenda, is currently under review.

2.2

It was recognised that this University objective required further physical resource to assist with marketing and communication to spread the message both inside the Academy and externally. An additional central Communications Officer has been recruited during 2021 to assist with this activity. Further physical resource is currently being considered to support our declaration and the projects required to achieve this.

2.3

The PVC (Global) commissioned Small World Consulting to undertake a baseline review and to advise on our approach to the priorities in formulating a sustainability plan for this agenda. The report is currently being finalised.

3. Carbon and Energy Management

3.1

In recognition of the increasing urgency to respond to global warming and climate change, Lancaster University declared a climate emergency; the decision being endorsed by University Council in November 2020.
The Declaration of Climate Emergency (DCE) commits Lancaster University to two key carbon reduction targets:

- *Emission of 'net zero' carbon from Scope 1&2 sources (primarily electricity & gas) by 2030*
- *Emission of 'net zero' carbon from scope 3 sources (primarily transport and procurement) by 2035.*

3.2

To monitor progress to achieving carbon reduction targets in the DCE, Key Performance Indicators (KPIs) for scope 1&2 emissions have been established by University Council.

The Climate Emergency Carbon Reduction Plan (CECRP) has been developed to provide a strategic route map, detailing how the University proposes to reduce its carbon emissions and meet its carbon reduction targets and KPIs. The CECRP establishes the University's 'baseline' emissions and emission sources and provides details of the range of plans, projects and initiatives designed to reduce different emission sources.

Implementation of the CECRP will be guided through establishment of appropriate governance structures and verified through regular monitoring and reporting against carbon targets, budgets and KPIs to University Executive Board (UEB) and Council. It is important to note that carbon reporting will not be a linear year on year reduction and will be directly related to the investment we make, and the environmental conditions and use of energy during the reporting year. We are currently working on scientific and transparent reporting techniques that will allow us to monitor our performance up to the target year and assess whether we need to take corrective action.

Carbon Reduction Targets, KPIs & Performance

3.3

Lancaster University Carbon Reduction Targets established in the Declaration of Climate Emergency and CECRP and are set out in the table below.

Lancaster University Carbon Reduction Targets
• Scope 1&2 carbon emissions reduced to 'net zero' by 2030/31
• Scope 3 carbon emissions target of 'net zero' by 2035/36

3.4

Key Performance Indicators for scope 1&2 carbon emissions have been established by University Council and are set out in the table below:

Lancaster University Carbon Emission KPIs (Scope 1&2 – Energy)	2019-2020	2020 -2021	Change
Scope 1&2 annual carbon emissions (Energy) as reported to HESA* (tCO2e). *Carbon emissions reported to HESA are calculated using UK Government GHG Conversion Factors for Company Reporting for the relevant year.*	16368	16855	+2.97%
Scope 1&2 annual Carbon emissions (Energy) incorporating site grid electricity supply Carbon Emission Factor (tCO2e). *Carbon Emissions reported for other internal and external communications use the carbon emission factor (for grid electricity only) of our grid electricity supplier – EDF. The carbon emission factor of EDF supplied grid electricity is currently lower than the 'grid average' carbon emission factor, resulting in lower University carbon emissions.*	11648	15214	+34.5%
Total renewable energy generated annually onsite (or offsite) as reported to HESA (MWh).	4418	4135	-6.4%

3.5

In respect of performance against KPIs, scope 1&2 Carbon Emissions in 2020-21 are indicated to have increased by 34% compared to 2019-20. This emissions increase is due to a significant rise is gas is by the Combined Heat & Power (CHP) engine in the Energy Centre. The rise in consumption being a result of the CHP operating for 75% longer in 2020-21 than 2019-20. Total renewable energy generation in 2020-21 fell slightly due to variations in wind speeds and fault outages.

3.6

Carbon emission KPIs for scope 3 emissions have been established in the CECRP and are set out in the table below.

Lancaster University Carbon Emission KPIs (Scope 3 Travel & Procurement).	2019-2020	2020 -2021	Change
Scope 3 carbon emissions (travel) from staff & student commuting as reported to HESA (tCO2e).	4305	1710	-60%
Scope 3 carbon emissions (travel) from Business & academic travel as reported to HESA (tCO2e).	2242	88	-97%
Scope 3 carbon emissions (travel) from other travel (tCO2e).	13302	7064	-47%
Scope 3 carbon emissions from supply chain (procurement) as reported to HESA (tCO2e).	41898	26607	-36.5%
Variance of Scope 1,2 & 3 carbon emissions in relation to emissions budgets (tCO2e).	0	-15046	-22%

3.7

Performance against Scope 3 emission KPIs indicates very significant reductions in scope 3 Travel and Procurement emissions recorded in 2020-21, compared to 2019-20. The reductions are entirely due to the impact of COVID-19 in reducing travel and procurement activities.

Scope 1&2 Carbon Emissions - Energy

3.8

Carbon emissions from Lancaster University energy consumption in 2020-21 comprised 1,144 tCO2e from grid electricity and 14,062 tCO2e from gas.

3.9

Whilst electricity purchased from the grid is decarbonising rapidly, natural gas is not, and will not be decarbonised by 2030. With the majority of University energy related carbon emissions resulting from gas consumption, the decarbonisation efforts of the University for energy related emissions are focused reducing and eliminating gas use. To achieve this, electricity must be used to generate heat for hot water and heating buildings.

Scope 1&2 Carbon Emissions - Carbon Reduction Plan

3.10

The University's plan to reduce carbon emissions from energy to 'Net Zero' by 2030 consists of four principal elements:

- *Electrification of heat demand*. Heat pumps will be used instead of existing gas boilers, and these will provide virtually all the University's heat requirements via the district heating system. A second Energy Centre will be required to house the heat pumps.
- *Major extensions of the district heating system*, to include areas such as Alex Park, County Main, InfoLab & Fylde & Furness residences. District heating is an effective method of providing heat to end-users, and it enables the large-scale decarbonisation of heat provision.
- *Increased Renewable Energy generation*. A Photovoltaic (PV) Solar Farm is under development at Forrest Hills, which will provide green electricity for use on campus and for the heat pumps. Further renewable energy generation systems are being evaluated and may be required to fully achieve the 'Net Zero' target for energy.
- *Energy Efficiency Improvements*. Continued improvements in energy efficiency will reduce the electricity and heat demands of campus, and will help to ensure that the heat pumps will operate efficiently via the district heating system.

3.11

Together, the full implementation of these four project elements should enable the university to achieve the 'Net Zero' target for Energy. Capital costs have been estimated at £54m + VAT for these projects. Additional renewable generation may be required to address 'residual' emissions, but the necessity for this will depend on the investment in, and success of, energy efficiency projects.

Carbon Reduction Plan - Photovoltaic Solar Farm Progress

3.12

The PV solar farm project to be developed at Forrest Hills currently in progress.

The full project will comprise:

- 35,932 panels over 21 hectares, resulting in 16.5MW capacity. Physically, it will cover approximately the same size as the area within the campus' ring road.
- Electrical infrastructure consisting of inverters, transformers, high-voltage cabling and ancillaries.
- Boundary treatment, including low-level fences, hedges, CCTV & communications infrastructure.
- Landscaping/biodiversity improvements, consisting of new and infill native hedge rows, mixed-species grasses between the solar arrays, and native woodland planting.

3.13

The PV solar farm is forecasted to generate 12.5m kWh of electricity per year, equivalent to 40% of campus electricity requirements. The majority of electricity generated will be utilised directly on campus, and a portion will be exported to the National Grid. Capital costs for the solar farm development are estimated to be £24m + VAT.

3.14

Planning permission for the PV solar farm was granted by Lancaster City Council in Feb 2022. The PV Solar Farm project team have commenced the tendering process for the project design in June 2022. Construction is projected to start in summer 2023, with the PV solar farm expected to be operational late autumn or early winter 2023. This completion date is being brought forward 12 months for the University to benefit from reduction in emissions and energy costs sooner.

Energy & Utility Management

3.15

Energy costs are rising quickly, from £3.3m in 2021/22, to £6.6m in 2022/23 and £9.3m in 2023/24 for the University's existing energy demands.

3.16

In addition, achieving 'Net Zero' emissions in energy consumption will increase energy costs further as the operation of heat pumps is more costly than the operation of the gas boilers they will replace. The solar farm will help to offset most, but not all, of this cost increase.

3.17

The University has implemented a rolling energy efficiency program to help address energy consumption, costs and emissions. The program is mainly focused on heating efficiency to reduce heating demands and to make the district heating system better suited to operation using heat pumps. Some electrical efficiency improvements are also being progressed.

3.18

The program includes:

- Local district heating system extensions for The Ruskin, the Pre School and Bowland Halls. (These are previously agreed local efficiency schemes separate from the major extensions described above).
- Heating control improvements.
- Building heating system improvements.
- Insulation upgrades.
- Transformer replacements.
- A rolling budget of approximately £1m per annum has been made available for the energy efficiency program.

Energy & Utility Performance

3.19

Utility consumption at Lancaster University during 2020-21 was significantly affected by the COVID-19 pandemic and other factors as indicated in 3.13 above. Electricity consumption reduced by 2% compared to 2019-20, however consumption in 2019-20 & 2020-21 is approximately 10% lower than pre COVID levels as a result of reduced site operations.

Import of grid electricity reduced by 32% in 2020-21, compared to 2019-20 and comprised 43% of electricity consumption, the remaining 57% being generated on site from the CHP and wind turbine.

3.20

Conversely, gas consumption increased significantly in 2020-21, compared to 2019-20. This was entirely due to the increased operating time (and resultant) gas consumption in the Combined Heat & Power Engine.

3.21

Total annual water consumption in 2020-21 increased by 35% compared to 2019-20. However, consumption was significantly reduced in both 2019-20 and 2020-21 due to the impact of COVID-19 on site operations. The 2020-21 consumption remains approximately 15% below pre COVID-19 levels.

Scope 3 Carbon Emissions - Travel

3.22

Business and academic travel carbon emissions in 2020-21 reduced by 97% compared to 2019-20, due to the impact of COVID-19 essentially ceasing travel to such meetings (see 3.6). The emissions reduction was primarily due to the lack of air travel during this period, as over 90% of business and academic travel emissions are the result of air travel. Carbon emissions from business and academic travel are however, increasing significantly as COVID-19 travel restrictions ease.

3.23

The University has taken the following actions to facilitate and influence a reduction in the carbon footprint of University Business Travel:

- Promoted on-line remote attendance to reduce physical attendance at events.
- Promoted low emission travel modes and reduction in the overall number of journeys. The travel booking tool developed by our provider Key Travel provides the carbon cost of the selected journey to allow an appropriate choice to be made.
- Developed & implemented Sustainable Business Travel Guidance.
- Communication of these activities through the Staff Intranet and LU Text in addition to meetings with Departments, Divisions and Faculties.

We plan to:

- Establish specific targets and an action plan for reducing Business Travel Carbon emissions.
- Put in place a project to allocate Travel carbon budgets.
- Develop an off-setting plan.

3.24

Carbon emissions from student travel from international origin locations to Lancaster University are estimated to have reduced by 47% in 2020-21 as over 40% of international students worked remotely during the 2020-21 year. Carbon emissions from this origin represent the largest source of travel related carbon emissions.

3.25

Carbon emissions from student and staff commuting reduced substantially as a result of COVID-19. However, emissions are anticipated to increase as COVID restrictions are removed.

3.26

The Lancaster University Travel Plan (covering staff and student commuting) continued to be implemented through a range of travel initiatives and projects designed to encourage and facilitate sustainable travel modes. These included travel and parking policy changes, installation of EV (Electric vehicles) charge points, new secure and commuter cycle shelters and a continuation of the bus partnership with Stagecoach.

3.27

Whilst projects to manage travel related carbon emissions will result in long term reductions, to achieve 'net zero' carbon emissions from transport it will be necessary to implement significant carbon offset and/or carbon capture projects.

Scope 3 Carbon Emissions - Procurement

3.28

Procurement activity is the biggest contributor to our Carbon Footprint and the most challenging to control.

Over 50% of the University's emissions are produced in the supply chain through the manufacture, transport, and provision of goods, works and services (see 3.6). To tackle this, we will need a step change in how we purchase goods and services, and the control and influence we have over our suppliers. Like Travel, it will not be possible to eliminate all carbon emissions and plans to offset or capture residual emissions will be required.

Activity this year

- We have continued to report on annual carbon emissions using the Higher Education (HE) Supply Chain Emissions tool.
- New reports have been created to categorise this information into more detailed commodities, by supplier and by department.
- We have identified the highest impact commodities- Construction, Business Services, medical and precision instruments, and IT.
- We worked with suppliers in the IT category to record item-level carbon footprints.
- Assessment of supply chains to understand the drivers for the areas of expenditure with the biggest impact - Construction, Business Services, medical and precision instruments and IT. Worked with suppliers to record their carbon reduction activities.
- Published Sustainable Procurement guidance to set out how staff should purchase more sustainability.
- Developed Sustainability Impact Analyses for 'higher risk' commodities and a mandatory Sustainability Impact Checklist for all tenders.
- Communication of these activities through the Staff Intranet and LU Text in addition to meetings with Departments, Divisions and Faculties.

3.29

We plan to:

- Develop carbon budgets for integration into Faculty, Division & Departmental environmental sustainability plans
- Develop more granular commodity plans
- Develop specific plans with carbon emission targets with our suppliers

3.30

The University has invested £350m in new buildings over the last 10 years and grown its footprint by 31,000 m2 over the last 7 years. The carbon cost in scope 3 is estimated to be 175,000 tonnes of CO2 or 2.5 times the total amount emitted by the University for the year 2019/20.

3.31

The pandemic has accelerated new ways of working and a hybrid working pilot is under way with early results suggesting that Central Professional Services can reduce their desk space by c50%. Which equates to 3,000 m2

3.32

We plan to:

- Recycle, Repurpose and reduce carbon by adopting new ways of working and using the expanded existing Estate. We need to restrict space growth as much as possible
- We will consider carbon impacts as part of business cases alongside finance for new projects.
- If we build new projects, they will be required to be via low carbon construction techniques.
- We estimate the carbon over the next 5 years from refurbishment from recycling and repurposing existing space is c80% less than the last 5 years.

3.33

IT work is currently focused at a sector level: Andrew Meikle drafted terms of reference and is chairing the newly formed sustainability group in UCISA (University and Colleges Information Systems Association).

The group will:

- Challenge suppliers to have and publish appropriate sustainability goals.
- Work with procurement teams to build sustainability into procurement decisions.
- Identify how to promote IT as a low carbon alternative to travel.
- Share best practices across the sector.

As a representative of the group, Andrew Meikle has already met with Jisc (supplier of JANET) to discuss collaboration and Jisc's carbon reduction plan (as a network supplier to the university).

4.Biodiversity and Landscape

4.1

Working within the four themes of the Ecology Plan, works are progressing on actively managing the landscape of the University estate to support and improve biodiversity and habitat links. Grasslands are being managed to support pollinators, and the NoMow initiatives is bringing about positive results.

The Woodland Management Plan has supported the planting of 1,500 new trees, with a new tree marked Wellbeing Trail to commemorate the Queen's Jubilee being created later this year. To help measure the current biodiversity level of the estate, a baseline will be created this summer with the setting of targets for future improvements.

5. Waste and Recycling

5.1

A wide range of waste & recycling projects were delivered through the waste plan including completion of two contained external bin stores, improvements to the central waste compound and developments of additional recycling streams. The 'Don't Ditch it Donate it' reuse project was able to run in 2020-21 despite COVID restrictions and managed to separate 35 tonnes of items including food, electronics, books, clothing and bedding for reuse by local charities.

5.2

Overall recycling rates remained broadly similar between 2019-20 and 2020-21 at around 70%. Overall recycling rates are unlikely to significantly increase until offsite treatment and segregation processes for general waste are changed by Lancashire County Council, potentially in 2025. Annual waste disposed of to landfill however, reduced by over 20% in 2020/21. This was the result of lower levels of waste generation caused by COVID.

Lancaster University Waste & Recycling Performance	2019-2020	2020 -2021	Change
Annual recycling rate (combined reuse, recycling & recovery) %	71.1	70.4	-1%
Annual waste to landfill/staff & student FTE (Kg)	27.47	21.54	-22.4%

6. Teaching and Research

6.1

Key to our strategy is a commitment to sustainability across all our activity, including teaching and research. While we have areas of excellence in sustainability teaching and research, the broader objective is to bring this together so it is integrated into our curriculum and recognisable as an institutional research strength.

Future Sustainability Institute

6.2

Work is now underway, led by the PVC-R, to develop a new research Institute around our strengths in sustainability. This will be built bottom up, connecting our existing research expertise across the faculties. A key success indictor will be to clearly define our distinctive contribution to the sustainability agenda and to establishing a leadership model which can catalyse our cross disciplinary strengths.

Integrating Sustainability into Teaching

6.3

Work is now underway, led by the PVC-E, to review and transform our curriculum. A key objective will be to identify the optimal way to engage our students, in sustainability studies, such that awareness and expertise in the environment represents a key Lancaster graduate attribute.

Integrating sustainability into Faculty Operations

6.4

Integration of environmental sustainability into Faculty operations is at an early stage. The Faculty of Science & Technology (FST) have made substantial progress in this area, having appointed a dedicated staff resource to coordinate the process, initiated and operated a Faculty Sustainability Group and developed an FST Sustainability Strategy. Whilst initial discussions on integration of environmental sustainability into Faculty operations have taken place with FASS (Faculty of Arts and Social Sciences), FHM (Faculty of Health and Medicine) and LUMS (Lancaster University Management School) limited progress has been made to date, primarily due to the lack of internal Faculty staff resources to take forward.

Faculty of Science & Technology

6.5

In 2021 the FST (Faculty of Science & Technology) announced its Environmental Sustainability Strategic Plan, setting out three core goals:

- To support the University in becoming net zero carbon by 2035;
- To produce graduates who are future global citizens;
- To deliver world leading research and business engagement, supporting the environmental sustainability agenda.

6.6

Highlights of FST activity during 2020-2021 include the following:

- Colleagues in LEC developed the Travel Decision Tree, which has since been adopted at University level to enable staff to make informed, sustainable business travel choices.
- Chemistry held a successful event on lab waste streams, following which the Faculty is now working towards achieving Lab Efficiency Assessment Framework (LEAF) accreditation across its laboratories.
- Recruitment, conversion and marketing activity has moved away from giving out single-use plastic freebies in favour of exploring alternative, sustainable options, such as planting a tree per offer holder.
- The Engineering Department has introduced a first year tutorial session for all students on ‘The Move to Net Zero and the Role of the Engineer’.
- Faculty sustainability webpages have been created and monthly updates are included in the FST ‘Your Faculty’ staff bulletin, to raise awareness and engage staff with updates on activity and opportunities to get involved.

7. Finance

Ethical

7.1

Following Lancaster University's declaration of the climate emergency, the University has taken further steps in its commitment to sustainability by transferring all its managed investment portfolios to two new funds.

7.2

The first is called the 'Responsible Multi-Asset Fund' managed by Cazenove Capital and is designed to have a positive impact on people and the planet by avoiding harm through Environmental Social and Governance (ESG) integration and exclusions, benefiting stakeholders through responsible business activities. This fund is designed specifically for charities and aims to avoid harm by active screening of investments, including for climate change, tobacco and armaments.

7.3

The second fund is called the 'Advance and Avoid Strategy Fund' managed by Brooks Macdonald. This portfolio invests in funds which provide investment exposure to businesses providing direct solutions to the sustainability challenges that the world is facing and is framed around eight core themes: cleaner energy, resource efficiency, water and waste management, sustainable transport, health and wellbeing, safety, education and financial inclusion.

7.4

Our screening criteria is based on the proportion of a company's revenue derived from fossil fuel extraction, production or power generation. For our Cazenove portfolios, companies deriving more than 10% of revenues from fossil fuel activities are flagged as fossil fuel related and we have zero exposure to fossil-fuel companies based on these criteria. For our Brooks MacDonald fund where a lower 5% threshold is set, we currently have a 2.4% exposure to fossil-fuel related companies. However, we have chosen to accommodate these companies as they have been selected only where they meet the strict screening criteria of the sustainability agenda and the Paris climate targets. For example, they supply natural gas to aid in the transitioning from fossil-fuel to renewables and has plans to phase out natural gas.

7.5

We wish to acknowledge the time and effort from the University's Finance Division, Lancaster University Extinction Rebellion (LUXR) group, Lancaster University Ethical Investments campaign group, People and Planet NGO in making this divestment a success. Many of our staff and students (both past and present) have been involved in this action. This action is a conclusion and response to the 2020 study published by the LUXR group on the amount of fossil fuel related investment by the university.

7.6

In addition to transferring all our investments to these two new portfolios, the University has also signed the COP26 declaration on climate expectations of asset management led by Students Organising for Sustainability.

7.7

Lancaster Lancaster's Pro Vice Chancellor Professor Simon Guy said: "Our teaching and research activities and our carbon reduction commitments are already well recognised as sector leading examples for supporting the challenges faced by climate change. I am therefore delighted that our investment strategies are now aligned with the University's strategic vision of delivering transformative change.

7.8

"We recognise this is a very important issue to our students and staff, past and present, and thank them for their engagement, support and encouragement in getting to this point."

Capital Investment over the last 10 years

7.9

The last 10 years have seen investment in capital at c £350M for strategic objectives of academic expansion, student facilities, refurbishment and maintenance of the Estate. The peak occurred in 2019/20 with £70M (new build and expansion) investment including the LUMS West Pavilion, Library Extension and Sport Hall Extension. This was partially funded by additional borrowing secured from a private placement in 2018 to drive strategic growth areas.

Capital Investment over the next 5 years

7.10

The Capital Investment programme was always planned to reduce from 2021/22, with the impact of the pandemic requiring a further rapid reduction in expenditure with projects deferred such as Engineering Phase 2 and LUMS East Estate.

7.11

Based upon affordability the University has set a target of 9-11% of income for an Adjusted Net Operating Cashflow (ANOC) on a three year rolling average. This is the cash left over annually after we have received income from tuition fees, research projects and other activities and paid for all commitments to revenue payroll and non-payroll expenditure.

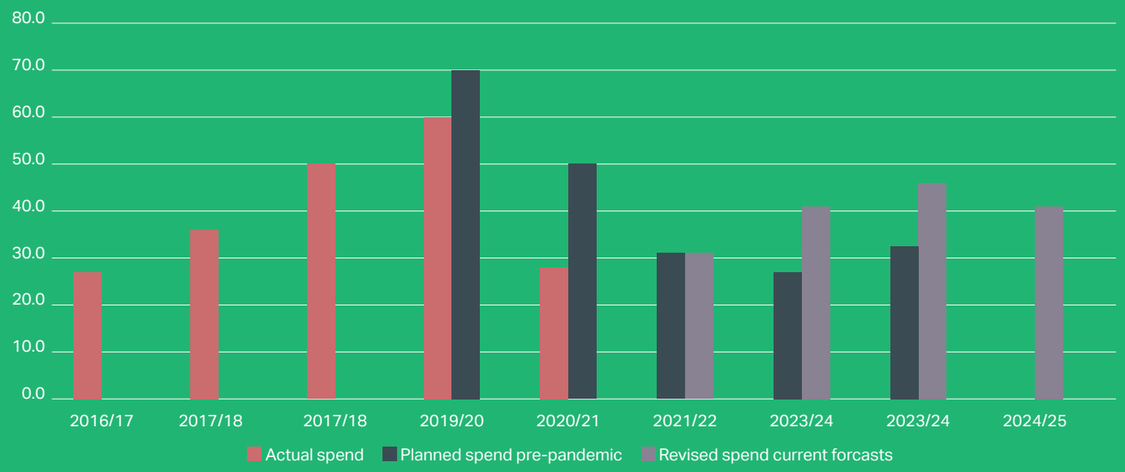
7.12

The cashflow generation is critical for our sustainability as it pays for:

- Capital Investment in our Estate and IT Infrastructure
- Debt repayment; and
- Provides flexibility for Future Strategic Investment

7.13

The annual capital investment from 2022/23 onwards is forecast to be in the range of £40-45M.



7.14

Of the annual capital investment ca. 50% is allocated to 'rolling programmes' which is investment to keep the estate and IT/Digital infrastructure in an acceptable condition meeting statutory and legislative standard.

7.15

The remaining capital is for strategic objectives that could include academic expansion research opportunities, student services and facilities and carbon reduction projects.

Climate Emergency Responsibilities

7.16

Moving forward our default will be to recycle, repurpose and reduce carbon from the existing expanded Estate. Where we must build new this will need consideration of low carbon construction that will be a higher capital cost.

7.17

The carbon impact will be a key consideration of business cases. Projects will be ranked alongside financial costs.

7.18

We are in a transition phase of updating our process and governance as well as upskilling the delivery teams and explaining the changes to the University community.

7.19

The capital programme format is also changing with projects defined as recycle and reuse, carbon zero new build and unallocated. The capital programme format will further transition so we can forecast the carbon impact at a project and programme level to act as an indicator for our KPI target of scope 1 and 2 carbon neutrality by 2030.

7.20

The University is also negotiating a new revolving Credit Facility with Santander that incentivises us to meet agreed targets for Environment, Sustainability and Governance.

7.21

We have identified Carbon Reduction and Energy Efficiency as targets related to the delivery of the Estate Strategy.

8. Sustainability Engagement

COP26

8.1

Timed to coincide with the COP26 Summit in Glasgow in October/November 2021, we ran our own COP26 festival at Lancaster University. With 39 events that ran over the festival week and over 1500 people registered, there were plenty of opportunities for learning, discussing and making connections on the various aspects of climate change.

8.2

The festival started when the 'Zero Carbon Tour' pulled onto campus en route to Glasgow with the 100% electric Carbon Battle Bus. The Tour's aim was to highlight carbon-cutting initiatives from Lancashire, as well as around the rest of the country, and encourage companies to commit to going net zero ahead of COP26. The tour highlighted several Lancaster University initiatives such as the Morecambe Bay Curriculum, our renewable energy production and our sustainability research and partnerships with local and national businesses.

8.3

This was followed by a public talk 'Lancaster University and the climate emergency', that discussed the climate emergency and Lancaster's response to this – and how the University will be working with the wider Lancaster community.

8.4

Visitors also had the chance to experience The Pod of the Future by internationally renowned artist, Michael Pinsky which simulates the air pollution of our futures.

Green Lancaster 2021-22 Activities

8.5

Green Lancaster is the well established and highly recognised brand for the education and engagement partnership of the University and Students' Union. Projects, activities and campaigns focus on the Education for Sustainable Development (ESD) agenda as set out via UNESCO's 2030 roadmap for educational institutions.

8.6

The Green Lancaster 10-Year Plan [2] applies this roadmap at the local level in terms of a strategic action plan for existing and developing engagement projects at Lancaster University. Green Lancaster's engagement narrative is built around the core concepts of complexity, interconnectedness and systems-thinking; the objective being for participants to explore these core sustainability themes through experience- and nature-based learning opportunities.

8.7

Green Lancaster is delivered by a core team consisting of the Green Lancaster Manager and Green Lancaster Assistant, with a team of Student Staff project leaders and facilitators recruited annually to deliver the range of project activities. Green Lancaster supports the development of graduate attributes within the agenda of sustainability leadership for student leaders via a bespoke development programme, delivered annually for the Green Lancaster team.

8.8

Flagship projects of Green Lancaster include the ECO Hub (physical base on Alexandra Park), ECO Woods, ECO Wild and the Don't Ditch It programme. Year-to date 2021-22, the Green Lancaster team has engaged 1,523 students, staff and community members via 128 individual events across the core projects.

9. Environmental Management & Compliance

9.1

Lancaster University Facilities have been accredited to the ISO 14001 Environmental Management System (EMS) since 2014. The EMS enables Facilities to understand the environmental impacts of its activities and operations, and control and manage them through the implementation of appropriate systems, procedures, internal and external audits.

9.2

Despite COVID restrictions two external surveillance audits of the EMS were successfully undertaken by the British Standards Institute (BSi), during 2020-21. The audits identified two minor non-conformances raised, both of which were subsequently successfully closed out.

10. Conclusions and Next Steps

10.1

This report provides a summary of our collective actions since we declared the climate emergency which represents a step change in our commitment and significant progress, particularly in our plans to meet our KPIs for Scopes 1&2.

10.2

We are now developing our plans for a Scope 3 KPI and to situate our carbon reduction plans within a wider commitment to sustainability across all our activities.

10.3

It is important to note that carbon reporting will not be a linear year on year reduction and will be directly related to the investment we make, and the environmental conditions and use of energy during the reporting year. We are currently working on scientific and transparent reporting techniques that will allow us to monitor our performance up to the target year and if we need to take corrective action.

10.4

We are close to agreeing a new governance framework to oversee our carbon reduction and broader sustainability commitments.

10.5

We are working with Small World consultancy on a formative review of our progress to date and to assist in establishing priorities for the next academic year. The report is currently being finalised.