

CARBON MANAGEMENT PLAN

2024 – 2029

SUMMARY



A FOREWORD FROM

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for the Faculty of Science and strategic lead for Liverpool John Moores University's Climate Action Plan



As the university's representative for the LJMU Climate Action Plan on our Executive Leadership Team, I am delighted to introduce our Carbon Management Plan 2024-2029. The university declared a climate emergency in 2020 and created a Climate Action Plan in early 2022. The stated aim of the plan was for the university to achieve net zero carbon in scope 1 and 2 emissions by the ambitious target of 2035.... a date which will soon be upon us. This Carbon Management Plan represents a strong commitment to reduce the university's total carbon footprint over the next five years, in line with the pledge made in the Climate Action Plan and with other Higher Education Institutions and represents significant work towards the achievement of our goal to be a sustainable and responsible university.

In this summary, we set out our current carbon footprint, our key targets to reduce it over the next five years and the actions by which we aim to achieve this.

Our full Carbon Management Plan can be found HERE

If you have any questions or would like to discuss any aspect of decarbonisation or sustainability please contact our Environmental Sustainability and Energy Team: sustainability@ljmu.ac.uk





One analysis shows that one-third of the world's biggest publicly traded companies have net zero goals and over 1,000 universities globally have committed to net zero carbon deadlines

OUR EMISSIONS

Where do our Greenhouse Gas (GHG) emissions currently come from?

SCOPE 1 Direct GHG Emissions

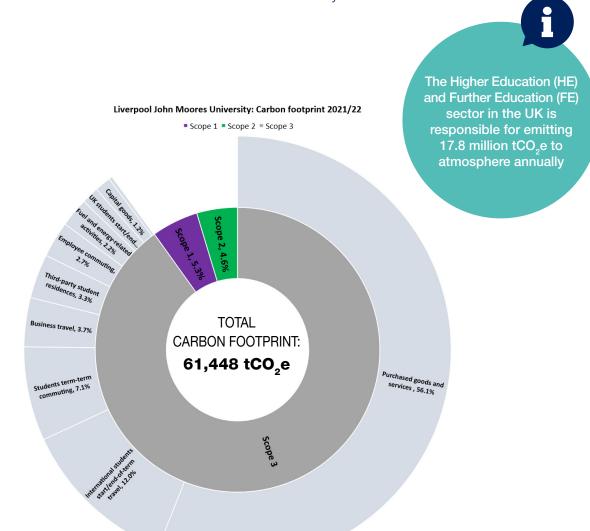
From gas combustion in boilers, emissions from university-owned fleet and emissions from refrigerant leaks in air conditioning units.

SCOPE 2 Indirect GHG Emissions - Electricity

From the generation of purchased electricity.

SCOPE 3 Other Indirect GHG Emissions

All other indirect emissions which are a consequence of the activities of the university but occur from sources not owned or controlled by LJMU.



HOW WE WILL REDUCE LJMU'S CARBON EMISSIONS BY 2029

Decarbonisation Plan

In 2023 LJMU commissioned a Decarbonisation Plan and undertook a comprehensive programme of site surveys, best-practice building modelling and a detailed costing exercise to identify a pathway to net zero carbon for scope 1 and 2 emissions. A core finding was that the electrification of heat is a priority (such as replacing gas boilers with air source heat pumps to benefit from grid decarbonisation).



We have already replaced the gas boilers at Henry Cotton Building with an air source heat pump – carbon emissions have reduced by over 50% or over 120 tonnes per annum

Carbon Management Plan

The Carbon Management Plan (CMP) sets out how the university can approach and target its decarbonisation activity over the next five years to deliver steady progress towards its goal. It prioritises the installation of air source heat pumps alongside a broader programme of photovoltaic panels, LED lighting and building fabric upgrades. This will be supported by a programme of submetering, monitoring, building optimisation and the implementation of soft measures such as the establishment of an ISO50001 Energy Management System, accessing renewable energy Power Purchase Agreements, embedding stronger policies and procedures that will reduce carbon emissions, and ensuring a continuous programme of communication and engagement activity to increase institutional visibility and understanding.

TARGETS AND GOALS

LJMU's carbon reduction targets

We're already making good progress, in 2022/23 we reduced gas consumption by 20% and total consumption by 10%



No	KPI Metric	Baseline 2021/22 (tonnes)	Target Reduction	Year
1	Scope 1 and 2 CO₂e	6,104	44%	2028/29
2	Operational Energy Use Intensity	207	35%	2028/29
3	Scope 3 CO₂e	55,344		
3a	Scope 3 Waste	14	5%	2028/29
3b	Scope 3 Water	19	5%	2028/29
3c	Scope 3 Procurement	34,464	5%	2028/29
3d	Scope 3 Staff and student business trips e.g., flights to conferences and field trips	2,284	5%	2028/29
3e	Scope 3 Staff and students commuting to university	6,044	5%	2028/29