



# Leadership in Sustainability Report 2022/23



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### **About this report**

The Sustainability Report 2022/23 provides an overview of Manchester Metropolitan University's (Manchester Met's) progress towards implementing its <u>Leadership in</u> <u>Sustainability Strategy 2022-2026</u>, which includes a set of key performance indicators (KPIs) and targets up to 2026/27<sup>1</sup>.

In this report for the 2022/23 academic year, we:

- detail our performance against these KPIs
- set out our Scope 1, 2 and 3 carbon emissions
- publish our financial investments
- demonstrate our progress towards implementing our Carbon Management Plan for Scope 1 and 2 carbon emissions.

The NOA, a leading provider of environmental auditing, inspection, and certification services, has independently verified the reported KPI data.

### **Sustainable Development**



In 2015, the United Nations set out 17 Sustainable Development Goals (UN SDGs) up to 2030 to address many of the world's greatest challenges. Together, they are known as the world's agenda for sustainable development.

Through their size and influence in the towns, cities and regions in which they are based, universities are uniquely positioned to help support the UN SDGs and global sustainable development beyond 2030.

Manchester Met aims to make a difference in every aspect of its operations and interactions, from its education, research and campus environment to its practices and partnerships.

1 Except the scope 1 and 2 carbon emissions reduction target, which is -44% by 2025/26

Our role is to equip students, employees and partners to develop the skills, knowledge, and capabilities to respond to global challenges. And our internationally renowned research helps shape policy, set standards and pioneer new solutions that positively contribute to the world.

This report highlights which of the UN SDGs our strategic priorities and activities contribute towards.

### Assurance and verification

#### Scope

NOA has independently verified Manchester Met's Sustainability Report 2022/23. The scope of NQA's verification covers the data, information. and Key Performance Indicators (KPIs) associated with the University's sustainability performance from 1 August 2022 to 31 July 2023.

The KPIs cover the University's progress towards the aims and objectives of the Leadership in Sustainability Strategy 2022-2026.

### Level of assurance and methodology

NQA's evidence-gathering process was designed to obtain a limited level of assurance to ensure the data and information provided are accurate, reliable, and comparable. Manchester Met's process for compiling the key information in the report was discussed as part of the ISO 14001:2015 certification process.

NOA verified the systems and processes for collecting, collating, and reporting sustainability performance data. This included reviewing relevant documentation, interviewing personnel responsible and accountable for preparing the data, and authenticating a selected representative sample of KPI data.

#### Independence

NOA was not involved in calculating, compiling, or developing the Leadership in Sustainability Strategy KPIs, and its verification activities were entirely independent of Manchester Met.

R. Walsh

Richard Walsh MIEMA, CEnv Principal Assessor Energy and Environment



### **Deputy Vice-Chancellor's statement**

Manchester Met has a longstanding commitment to embedding sustainability across all that we do, and this is now more important than ever. Our core goals of excellent education and research with impact address the grand challenges of our time - delivering local, national and global benefits.

Our greatest impacts are through the work that we do as a Higher Education institution, where we are uniquely positioned to harness our strengths for the good of the world's sustainable development agenda.

Our ambition is to be a beacon of sustainable development practice by 2030. This report sets out how our people and partnerships are working to deliver that purpose.

I'm proud of our progress to date, including a top ranking in the People and Planet University League for over a decade<sup>1</sup>. In the reporting year, we were also recognised as a global top 5% University in the prestigious Times Higher Education Impact Rankings 2023 for the value of our contributions towards reaching the United Nations Sustainable Development Goals.

We are helping the city region establish itself as a global centre for hydrogen technology by leading a consortium focused on accelerating development and adoption by attracting investment and creating highly skilled jobs locally.

At the same time, our ground-breaking research is leading the development of emissions standards for new aircraft designs that will reduce aviation emissions by an estimated 785 megatonnes of CO,e between 2020 and 2040, around 2.5% of aviation emissions over this period.

In education, almost eight in 10 students now indicate their course prepares them with knowledge and skills to play their part in sustainable development through initiatives such as our Teach Carbon Literacy programme, part of our broader award-winning Carbon Literacy programme<sup>2</sup>.

Of course, we also practice what we preach. Under our Estates Strategy, our net zero pathway will enable us to decarbonise, and we are on track to transition to be a zero-carbon<sup>3</sup> institution by 2038 in a financially viable way.

I would like to thank students, staff and our partners for their contribution to our successes and progress to date, and I reaffirm our commitment to realising a more sustainable future.

#### **Professor Steve Rothberg**

Provost and Deputy Vice-Chancellor Chair of the Environment Strategy Group



<sup>1</sup> Ranked in the top 3 every year since 2013

EAUC Green Gown Award winner (2019)

<sup>3</sup> Including scope 1 and 2 carbon emissions, as defined defined by the Tyndall Centre's proposed science-based targets and definition of zero carbon for Manchester

### **Our performance highlights**

We are proud of our performance, achievements and awards. Here is an at-a-glance overview for 2022/23.



79.3% of students gaining sustainability knowledge and skills<sup>1</sup>



Our research is shaping international aviation carbon emissions standards



21.1% reduction in scope 1 and 2 carbon  $emissions^{6}$ 



Created 2,176<sup>2</sup> Carbon Literacy certified employees and students since 2012



A top 5% place in global Times Higher Education (THE) Impact Rankings<sup>4</sup>



Leading UK sustainable university<sup>3</sup>, achieving top 3 every year since 2013



Commenced major project to decarbonise heating systems at Birley Energy Centre and reduce gas use by 27% annually<sup>5</sup>



Generating more renewable electricity on-campus. Installed solar arrays on 11 roof spaces<sup>7</sup>



Planted UK native wildflower turf, converting 98m<sup>2</sup> of amenity grass into biodiverse habitats



Launched a fully electric vehicle salary sacrifice scheme for employees

1 Data source: Student enrolment survey 2022/23 (returning student responses)

- 2 Cumulative number of certified employees and students since 2012
- 3 Ranked third in the People and Planet University League 2022/23
- 4 Achieving 66th place in the 2023 THE Impact Rankings
- 5 Based on 2021/22 energy consumption data
- 6 Towards a target of 44% by 2025/26 against 2018/19 baseline
- 7 Including Birley student accommodation and the Union buildings

### Measuring our success

We developed 16 Key Performance Indicators (KPI) with 22 associated targets to track our progress towards our Leadership in Sustainability Strategy objectives.

Our performance is summarised across each of the KPIs shown as: achieved, progressing, off target with active recovery plan, off target or setting off.

Details about our performance for each KPI is available in the strategic performance metrics section (page 28).

Key Performance Indicator	2022/23	Progress	Target	Status
People and Planet		- 10 91 000		
University League	3 <sup>rd</sup> place		Top 3 annually	Achieved
Environmental management system	Certified		Certified annually	Achieved
Responsible Futures accreditation	Accredited		Accredited biennially	Achieved
Students gaining relevant skills and knowledge	79.3%		90% by 2026/27	Progressing
ESD in all courses	42.3%		100% by 2026/27	Progressing
Climate change education in all courses	18.8%		100% by 2026/27	Progressing
ESD and climate change education in all courses	18.5%		100% by 2026/27	Progressing
UNAI membership	Membership		Membership annually	Achieved
Carbon reduction (scope 1 and 2)	-21.1% reduction		-38.2% reduction by 22/23	Off target with active recovery plan <sup>1</sup>
Carbon reduction (scope 3)	81,814 tCO <sub>2</sub> e		Net zero before 2038	Setting off
New building sustainability ratings	Zero buildings completed in reporting year		BREEAM Excellent	Progressing
Refurbished building sustainability ratings	No relevant projects completed in reporting year		SKA Silver rating	Progressing
Sustainability building targets	Zero buildings completed in reporting year		At least 80% targets	Progressing
Conversion projects to biodiverse habitats	98m²		100m <sup>2</sup> converted annually	Achieved
Sustainable food targets	77%		80% targets by 2026/27	Progressing
Business travel policy	Policy in development		Develop and maintain compliance by 2026/27	Progressing
Reuse and recycling	45%		60% by 2026/27	Off target with active recovery plan <sup>2</sup>
Water reduction	-0.45% reduction		-10% by 2026/27	Progressing
Sustainability as key criterion in tendered projects	In development		100% by 26/27	Setting off
Modern slavery compliance amongst suppliers	100%		100% by 2023	Achieved
Ethical investment policy	Compliant		Maintain compliance	Achieved
Climate change adaptation risks	In development		Identify risks by 2026/27	Setting off
Co-created sustainability projects	3		10 projects delivered by 2026/27	Progressing

1 Further detail available in the 'strategic performance metrics' section, page 26

2 Further detail available in the 'strategic performance metrics' section, page 26

## **Strong leadership for sustained** high performance

We are committed to being a sustainable university, embedding it in everything we do.

In November 2022, we launched our Leadership in Sustainability Strategy 2022-2026, one of Manchester Met's key enabling strategies supporting our core strategies for excellent education and research with impact.

Through our education, research, partnerships and campus, our ambition is to be a beacon of sustainable development practice, making a positive difference to climate change, society, and the environment. And our strong leadership is evident through our national and international performance rankings.

Every year since 2013, we have achieved a top 3 ranking in the People and Planet University League, the only UK university to have maintained such high performance for a decade.

This year, we ranked in the top 5% of all universities globally in the prestigious Times Higher Education Impact Rankings, recognising the value of our contributions to the United Nations Sustainable Development Goals. With over 1,700 Universities in the ranking, we were placed third in the world for Responsible Consumption and Production and seventh in the world for Partnerships for the Goals, celebrating our joint work with other organisations and education initiatives.



**People and Planet University League - our performance** 

\* The University League did not take place in 2014, 2018 and 2020.

"Top 5% of all universities globally in the Times Higher **Education Impact Rankings**"



### **Innovation in education**

We are committed to embedding Education for Sustainable Development (ESD) and climate change education in all our taught courses by 2026/27, equipping students with the skills and knowledge to make a difference.

We are making good progress towards this goal, with almost eight in 10 students (79.3%)<sup>1</sup> in the University's enrolment student survey indicating their course prepares them with knowledge and skills to play their part in sustainable development considering environmental integrity, economic viability and creating or maintaining just societies. And almost threequarters of students surveyed (74.9%)<sup>2</sup> expressed a strong interest in learning about sustainable development as part of their studies.

To help colleagues from across the University integrate relevant topics with sustainability into their courses, we started developing a new Education for Sustainable Development learning resource. We also gathered data to measure the extent to which ESD and climate change education are currently embedded in courses. In addition, we continued to extend our award-winning and sector-leading Carbon Literacy (CL) initiatives, which equip our staff, students, and partners with an awareness of climate change and the climate impacts of everyday actions. Our Teach Carbon Programme concentrates on embedding CL into taught courses and equips students with the knowledge to reduce carbon emissions and apply what they have learned on an individual, community and organisational basis. "Our courses prepare almost 8 in 10 students with knowledge and skills to play their part in sustainable development."

(Constant)

1 Data source: Manchester Met enrolment survey 2022/23 returning student responses

2 Data source: Manchester Met enrolment survey 2022/23 new student responses

### Sector-leading work in climate change education

Manchester Met has continued to build on its sector-leading work in climate change education, specifically Carbon Literacy.

Carbon Literacy training empowers people to understand and act on climate change. Since its inception in 2012, we have pioneered CL, developing a cascading train-the-trainer model for staff and students. We now have a strategic commitment to embed CL in all taught programmes by 2026/27.

Since 2012, 2,176 of our students and staff have been certified Carbon Literate, with 499 in 2022/23 alone. Outcomes show that participants significantly improve their understanding of climate change and are more confident conversing, presenting or writing about it.

The CL team is working with over 140 departmental CL Champions to ensure training suits the needs of each programme and student. And we are building a community of practice around CL, working with staff across disciplines, and recruiting students as CL trainers – a key part of our success over the years.

Encouragingly, we are inspiring other institutions, with many looking to replicate our success. We have shared our free-to-use Higher Education/Further Education toolkits with over 200 organisations in the UK and internationally. More than 100 are actively delivering courses, including sector-wide bodies, and as a result, over 5,600 people have been trained using the Manchester Met HE/FE toolkits.

### **Research and impact**

Our ambition is for Manchester Met to play a role in addressing the grand challenges of our time. Our research is already making a difference in areas such as greener fuels, aviation, sustainable consumption, and nature-based solutions to climate change.

The United Nations Sustainable Development Goals (SDGs) align with the key themes outlined in our 'Road to 2030' Strategy and will be a focus of many of our research priorities across the University.

Our University has been a United Nations Academic Impact (UNAI) member since 2020. UNAI has created a vibrant and diverse network of around 1,600 member institutions in more than 150 countries working with the United Nations to promote global priorities. These include peace, human rights, and sustainable development.

Indicative projects, developments and highlights from 2022/23 include:

#### **Tackling climate change through** effective land management

Research from Manchester Met has shown that organisations and farmers managing land can effectively help increase biodiversity and cut carbon emissions across the UK.

As part of an EU-funded project, our teams are helping to find innovative solutions for peatland restoration, involving local and regional stakeholders. These peatlands are important habitats for specialised wildlife and can play a significant role in the fight against climate change.

Our researchers are also working with the National Farmers Union (NFU), surveying farmers to understand their perceptions of climate change and how altered land management practices, particularly on peat, can help to tackle climate change.

#### Voices of the future

Voices of the Future, part of a broader UK Treescapes programme, is an inter-university project led by Manchester Met, involving various national and regional partners specialising in education and the environment, including climatology and the arts.

The aim is to develop new methods of engaging young people, particularly those living in areas where trees are scarce, in designing, creating, and caring for treescapes, including natural woodlands and urban parks.

The research examines how treescapes can be expanded and how trees and society can benefit each other, shape environmental planning and tackle future climate change pressures.

#### Addressing the impacts of aviation globally

Ground-breaking research from Manchester Met is shaping measures and helping set standards to mitigate aviation's climate change effects and reduce carbon emissions.

Modelling aircraft emissions and the resulting impact on climate has helped shape the International Civil Aviation Organisation's (ICAO) carbon emissions standard for new aircraft designs. It has also informed the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), which airline operators from over 100 countries use to offset carbon emissions.

Our research into aircraft particulate emissions has also contributed to a new ICAO regulation on exhaust emissions for all new engines from 2023.

It is estimated that the emissions standards for new aircraft designs will save 785 megatonnes of carbon emissions between 2020 and 2040, accounting for around 2.5% of aviation emissions. The ICAO exhaust emissions regulations will reduce landing and take-off emissions by approximately 20-30% between 2025-2040.

Find out more about the **research** 



#### Innovative wastewater 'printfrastrucure' project underway

A new £1.7 million scheme is investigating 3D printing techniques in repairing and upgrading wastewater treatment and network assets across the UK.

United Utilities is working with Manchester Met, home to **PrintCity** innovation hub for 3D additive and digital manufacturing, ChangeMaker3D, and Scottish Water, to develop a 'Water Industry Printfrastructure'.

Manchester Met researchers are developing 3D scanning models and printing replacement parts to help manage and upgrade key equipment, creating vital parts on demand.

The project aims to tackle the environmental and logistical challenges of maintaining and upgrading wastewater assets, strengthen climate adaptation capabilities and contribute to the sector's net zero carbon ambition.

The partnership, taking experience from recent innovations in both water and rail sectors, will create a toolbox of options for 3D printing that will help the UK water industry to sustainably maintain its infrastructure and operational assets.

The partnership was announced as part of the Ofwat Innovation Fund, a pioneering £200 million programme supporting innovation in the water sector to tackle major challenges and benefit customers, society and the environment.

United Utilities is leading the project, with Manchester Met and other partners providing technologies and ways of working. The objective is to support the wider adoption of both concrete and polymer 3D printing, harnessing the development of digital construction and maintenance techniques to benefit water sector customers.

The project commenced in 2023 and will include creating a skills programme to set the blueprint for upskilling the water sector workforce in 3D printing technologies.

## **Sustainable campus and practices**

Our vision is for our campus to be a working model of sustainability. We want it to be an innovative, solutions-focused environment that contributes positively to people's health and wellbeing, the planet, and the economy.

We have set targets and monitor our performance against nine related dimensions: carbon emissions reduction, sustainable buildings, biodiversity value, sustainable food, reuse and recycling, water efficiency, sustainable procurement, ethical investment, and climate change adaptation and resilience.

Indicative projects, developments and highlights from 2022/23 include:

- Starting work on a major £7.2m heat decarbonisation project at the Birley Energy Centre to replace gas-fired boilers with energy-efficient electrified heat pumps, heating and providing hot water for the Brooks building and student accommodation.
- Trialling a new food waste reduction initiative called 'Too Fresh to Throw' to sell students and staff short-dated retail food products at low cost.
- Launching a zero-emissions electric car offering for employees and replacing 18 charge points with new up-to-date systems to improve charging provision on campus.
- Increasing the individual financial threshold for our cycle-to-work scheme, providing employees with even more bike and electric bike options.
- Installing solar panels on eleven roof spaces across Birley student accommodation and the Student Union building, with a peak installed capacity of 215 kWp. Electricity generated from on-site solar panels across the University in 2022/23 was 266,003 kWh, enough to provide electricity to nearly 100 typical UK households<sup>1</sup>.

- Planting UK native wildflower turf at Birley site, converting 98m<sup>2</sup> of amenity grass into biodiverse habitats.
- Developing a sustainable travel plan outlining the actions we will take to minimise the impact of journeys and encourage using low carbon and active modes of travel.
- Investing in electric vehicles to replace our existing diesel and petrol fleet and procuring an electric cargo bike fleet to provide a sustainable alternative to car and van use when transporting goods between sites.
- Achieving the SKA<sup>2</sup> Smarter Working Pilot Silver Rating for small refurbishment projects<sup>3</sup>.

#### Too Fresh to Throw

Tackling food waste on campus by piloting our own food distribution initiative for shortdated packaged food.

We aim to improve our processes and systems to prevent food waste in the first place, but, in reality, not all products in our outlets are sold by their 'used by' or 'best before' dates. Where food products are nearing their 'best before' date, we've created a low-cost 'Too Fresh to Throw' offer to encourage our students and staff to buy them and save them from being binned.

In April 2023, the Manchester Met Food and Drink team piloted Too Fresh to Throw as a 'click and collect' offer through the Mcr Met Food app, allowing students and staff to purchase £2 bags of food that would otherwise be thrown away.



<sup>1</sup> Based on Ofgem estimations of a typical household electricity consumption in England, Scotland, and Wales of 2,700kWh

- 2 Refer to the key definitions and glossary section, page 41
- 3 SKA Smarter Working Pilot Silver rating achieved for Brooks building room 3.11 and Business School 2.01

Our next steps are to launch Too Fresh to Throw across campus, allowing students and staff to click and collect food bags containing packaged items from our café outlets. The initiative has the potential to save the equivalent of up to 1,000 meals going to waste each year. We will also look to develop an offering for hot food to reduce end-of-day food waste and provide affordable meals to our communities.

#### Towards net zero carbon

Manchester Met aims to be a net zero carbon university before 2038 for scope 1, 2 and scope 3 emissions.

We are progressing key strategic energy and carbon reduction projects, including installing solar panels on campus, and have begun a major heat decarbonisation project at Birley Energy Centre. These all contribute to delivering our Carbon Management Plan to 2025/26, outlining what we must do to achieve our ambitious carbon reduction targets for scope 1 and 2 emissions.

For 2022/23, our total scope 1 and 2 emissions were 9,062 tCO<sub>2</sub>e, a reduction of 21.1% compared to 2018/19 levels. However, we fell short of our in-year reduction target, and current projections suggest we could miss our 2025/26 target by 12.1 percentage points.

#### Scope 1 and 2 carbon emissions



There were two main contributing factors to the

Energy Centre is later than initially anticipated, and the carbon intensity of the electricity the

increased compared to the Carbon Management

emissions to zero before 2038. To bring use back

build-out of new renewable energy capacity that

may not otherwise be developed, such as off-site

renewable energy to the University. We are also

planning a range of strategic renewable and

shortfall in the reporting year. The completion

of the heat decarbonisation project at Birley

National Grid supplied to the University has

We remain committed to reducing our carbon

secure Corporate Power Purchase Agreements

on track, we are exploring opportunities to

(CPPA). Such agreements will facilitate the

solar or wind farms, which will supply

low-carbon energy projects.

Plan projections.

1 As defined by the Tyndall Centre's proposed science-based targets and definition of zero carbon for Manchester



# Sustainable construction and refurbishment

Manchester Met is committed to maintaining and building an estate that meets high sustainability and energy efficiency standards.

Our ambitious Estates Strategy to 2030 outlines our plan to invest in and redevelop campus buildings and spaces. It embraces our commitment to sustainability and supports the delivery of our Leadership in Sustainability Strategy and Carbon Management Plan.

It is imperative to embed sustainability principles across all stages of a building's lifecycle. Through our new sustainability tracker, currently being piloted through the Library Transformation Project, we set high sustainability standards and challenging targets for new and refurbished building projects. Aligning to the World Green Building Council's advancing net zero initiative, the tracker considers our route to zero carbon, climate adaptation and resilience, resource use and circular economy, biodiversity and green space, and health and wellbeing.

We are also committed to delivering at least BREEAM<sup>1</sup> Excellent rating for new building projects, SKA<sup>2</sup> Silver rating for refurbishment projects, and adopting best practice building standards promoting health and wellbeing. Key projects in planning or delivery include:

- Dalton building a state-of-the-art facility for the Faculty of Science and Engineering on track to achieve BREEAM Excellent and WELL Building Standard (2024 completion)
- Public realm developing a pedestrianised public realm at the heart of our city-centre campus (2024 completion)
- Birley Energy Centre heat decarbonisation project (2024 completion)
- Grosvenor West refurbishment project on target to achieve at least SKA Silver rating (2024 completion)
- Library Transformation Project piloting a new sustainability tracker for net zero building projects (2028/29 completion).

#### **Decarbonising the Birley Energy Centre**

We are making significant strides towards a more sustainable campus, with plans to decarbonise the Birley Energy Centre.

This ambitious project is a key step in our commitment to meet our own carbon reduction targets and to help support the broader climate change challenge.

The Birley Energy Centre provides heating and electricity to various campus buildings and student accommodation. This project's primary focus is to transition the energy centre from gas-fired heat generation to energy-efficient electrified ground and water-source heat pumps, which will reduce carbon emissions across campus and improve air quality.

The work will improve the resilience of the Birley Energy Centre, delivering more reliable and secure heating and hot water to the Brooks building and our accommodation.

Preliminary work on the project began in 2023, with an expected completion date of December 2024.

The project will reduce our gas use by 27%<sup>3</sup>, delivering an estimated carbon emission saving of 800 tonnes in the first year. This will increase to more than 1,500 tonnes as the electricity supply decarbonises.

- 1 Refer to the key definitions and glossary section, page 41
- 2 Refer to the key definitions and glossary section, page 41
- 3 Based on 2021/22 consumption data



## **Engagement and partnerships**

We work with partners to boost our environmental and social impact locally, nationally, and internationally. In 2022/23 we:

- Continued to help establish Greater Manchester as a global centre for hydrogen technology development. As part of the government-funded Innovation Accelerator programme, Manchester Met is leading the Greater Manchester Electrochemical Hydrogen Cluster (GMEHC), a consortium that builds on the work of the University's Fuel Cell Innovation Centre. GMEHC is accelerating the development and adoption of clean, efficient electrochemical (green) hydrogen technologies. It supports our, and the UK's, Net Zero ambitions, attracting investment and creating highly skilled jobs locally.
- Entered a new partnership with a celebrated climate-tech start-up, Oaktree Power, enabling us to help companies reduce their carbon footprint using cloud-based artificial intelligence (AI) solutions.<sup>1</sup>
- Reached a significant landmark in our work with industry partners and Greater Manchester Combined Authority on the region's first low-carbon hydrogen hub. Planning permission was granted in October 2022, paving the way for the facility to produce green hydrogen at scale, with the capacity to generate enough energy to power 200,000 homes.

- Partnered with Manchester City Council's neighbourhood management teams to improve sustainability, health and wellbeing, and community safety. Our community engagement officers were involved in submitting a joint air quality research bid, contributing to the Hulme Climate Action plan, delivering sustainable food recipes, and greening and cleaning the local area, including planting and litter picking.
- Attracted 200 participants to our midsummer sustainability festival in June 2023. The festival was developed with students, residents, businesses and NGOs, and offered our local community a space to share knowledge, collaborate and have conversations around climate change and social justice, with a view to taking positive action. Activities included workshops, gardening and bee-keeping sessions.
- Continued to be an active member of the Manchester Climate Change Partnership. In October 2022, we were a headline sponsor of the Greater Manchester Green Summit, which focused on skills development to help the city region meet its environmental and sustainability targets. The University hosted activity sessions on the climate crisis, the future of energy, 3D printing for repair and recycling, and sustainable fashion.



## **Strategic performance metrics**

The following pages provide an overview of our performance against 16 Key Performance Indicators (KPIs) and 22 associated targets in our Leadership in Sustainability Strategy 2022-2026. They highlight which of the United Nations Sustainable Development Goals (UN SDGs) our strategic priorities and activities contribute towards.

Our performance is summarised across each of the KPIs shown as achieved, progressing, off target with active recovery plan or setting off. Where performance is off target, we summarise why and outline how we are addressing performance.

#### Leadership in sustainability

United Nations Sustainable Development Goals contributed towards: SDG4, SDG5, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG16, SDG17

Issue	Metric	Target	2022/23 performance	2021/22 performance	Assessment of progress
Environment and ethical performance	People and Planet University League ranking	Maintain top three position	3 <sup>rd</sup> Place	1 <sup>st</sup> place	Achieved
Environmental management	mental ISO 14001:2015 Maintain certification certification		Certified	Certified	Achieved
Institutional approach to embedding sustainability and social responsibility	Responsible Futures Accreditation	Accreditation achieved	Accredited	Accredited <sup>1</sup>	Achieved

#### Academic innovation and impact

United Nations Sustainable Development Goals contributed towards: SDG1, SDG2, SDG3, SDG4, SDG5, SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG14, SDG15, SDG16, SDG17

Issue	Metric		Target	2022/23 performance	2021/22 performance	Assessment of progress	
Education for	Students satisfied they have opportunities to gain sustainable development skills and knowledge		At least 90%	79.3%²	73.9%³	Progressing	
Sustainable	Inclusion of ESD and climate change	ESD		42.3%		Progressing	
Development (ESD)		Climate change	100%	18.8%	Being		
	education in ESD and climate change			18.5%	established		
Research	United Nations Academic Nations Impact (UNAI)		Membership	Maintained membership	Maintained membership	Achieved	



#### THE GLOBAL GOALS For Sustainable Development



<sup>1</sup> Responsible Futures accreditation achieved May 2022

<sup>2</sup> Data source: University online enrolment survey 2022/23 (returning student responses)

<sup>3</sup> Data source: University Internal Student Survey 2021/22

<sup>4</sup> Data source: ESD and climate change survey for Programmes Leaders (Apr – Jun 2023)

#### Sustainable campus and practices

United Nations Sustainable Development Goals contributed towards: SDG6, SDG7, SDG8, SDG9, SDG10, SDG11, SDG12, SDG13, SDG14, SDG15, SDG16, SDG17

Issue	Metric	Target	2022/23 performance	2021/22 performance	Assessment of progress
	Graps 1 and 2 corbon amiggions	44% reduction by	-21.1% <sup>1</sup>	-26%	Off target with
Carbon reduction	Scope 1 and 2 carbon emissions	before 2038	9,062 tCO <sub>2</sub> e	8,497 tCO <sub>2</sub> e	active recovery plan
	Scope 3 carbon emissions	Net zero before 2038	81,814 tCO <sub>2</sub> e	85,522 tCO <sub>2</sub> e	Setting off
	BREEAM rating new buildings	Excellent rating (with aspiration of outstanding)	Zero buildings completed in reporting year	Not applicable	Progressing
Sustainable	SKA rating for major refurbishment projects <sup>2</sup>	Silver rating (with aspiration of gold)	No relevant projects completed in reporting year	Not applicable	Progressing
buildings	Sustainability tracker for new building and major refurbishment projects	At least 80% targets achieved	On track to achieve >80% of targets at planning and construction stages of all projects <sup>3</sup>	Not applicable	Progressing
Biodiversity value	Amenity grass converted to biodiverse habitat	100 <sup>2</sup> m annually	1 project delivered 98m <sup>2</sup>	First project planned	Achieved
Sustainable food	Sustainable food policy targets	80% targets achieved by 2026/27	77% <sup>4</sup>	Policy reviewed in 2022	Progressing
Reuse and recycling	Reuse and recycling rate	60% by 2026/27	45%	53%	Off target with active recovery plan
Sustainable travel	Business travel policy	Develop and maintain	Policy in development	Not commenced	Progressing
Water	Water consumption $(m^3)$ per $m^2$	10% reduction (0.49 water	-0.45% reduction	0.544m <sup>3</sup> /m <sup>2</sup>	Progressing
efficiency		m <sup>3</sup> / m <sup>2</sup> ) by 2026/27	0.542m <sup>3</sup> /m <sup>2</sup>	Amended⁵	
	Tendered projects over £30k include environmental sustainability and social value as key contract criteria	100% by 2026/27	In development	To be reported in 22/23	Setting off
Sustainable procurement	Tier 1 supply chain partners compliant with Modern Slavery Act (where applicable) and identify risks for modern slavery in their own supply chains	100% by 2023, onwards to 2026	100% contracted large and enterprise organisations <sup>6</sup> compliant	To be reported in 22/23	Achieved
Ethical investment	Ethical investment policy	Full compliance annually	Compliant	Compliant	Achieved
Climate change adaptation and resilience	Climate change business risks	Identify risks by 2026/27	In development	To be reported in 2022/23	Setting off

- 4 Data source: Sustainable Food Policy Review 2023; 44% of food policy actions implemented and 33% of food policy actions actively being progressed
- 5 The 2021/22 figure was previously reported as 0.49 which has since been amended due to changes to water consumption and Gross Internal Area (GIA) data
- 6 Defined as suppliers with a turnover of >f36m where the University have a spend >f100,000 in the reporting year 2022/23

### Explanation of performance where behind target

#### Scope 1 and 2 carbon emissions

For 2022/23, our total scope 1 and 2 emissions increased by 6.6% compared to the previous year and fell short of our in-year 22/23 carbon reduction target (as outlined in our Carbon Management Plan). This was due to a delay in starting the Birley Energy Centre heat decarbonisation project (due for completion in December 2024) and a 21% increase in the carbon intensity of the electricity supplied to the University from the National Grid compared to the Carbon Management Plan projections.

#### **Reuse and Recycling**

For 2022/23, our reuse and recycling rate decreased by 8% compared to the previous year. Our annual waste data analysis indicates this is primarily due to three main factors:

- Green wastes produced from grounds activities were more accurately accounted for in the reporting year, which led to a significant reduction in the total volume of green composting waste compared to the previous year's estimate.
- Opportunities to donate clothing and unwanted homewares were focused across Student Living only, which led to an overall reduction in the total volume of items donated.
- A reduced segregation rate of wastes from across University buildings and residences.

We will examine these issues and take action to improve our reuse and recycling rate towards a target of at least 60% by 2026/27.

<sup>1</sup> Full carbon emissions breakdown available in the carbon emissions reporting section on pages 31–39

<sup>2</sup> A major refurbishment project is defined as a project with a total expenditure value above £2 million

<sup>3</sup> As at RIBA stage 3 Library Transformation Project

#### **Engagement and partnerships**

United Nations Sustainable Development Goals (SDG) contributed towards: SDG 17

Issue	Metric	Target	2022/23 performance	2021/22 performance	Assessment of progress
Community Involvement	Projects co-created with local community	10 projects by 2026/27	3 projects delivered	Methodology in development	Progressing



## **Carbon emissions reporting**

We have aligned our carbon emissions reporting with the Standardised Carbon Emissions Framework (SCEF) developed by the Environmental Association of Universities and Colleges (EAUC), and with the Greenhouse gas (GHG) Protocol corporate standard for Scope 3 emissions reporting.

For Scope 1, 2 and 3 carbon emissions, we include our current reporting level to explain the accuracy of our reported data:

- Level 1: basic level, lower-accuracy calculation methodology
- Level 2: intermediate level, medium-accuracy calculation methodology
- Level 3: advanced level, best-in-class calculation methodology

#### **Total Scope 1 and 2 greenhouse gas emissions**

Emission source	Reporting Baseline <sup>1</sup> 2		2022/22	Change on bas	eline
	level (	(tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)	tCO <sub>2</sub> e	Percentage change
Total Scope 1 and 2 GHG emissions	Level 3	11,479	9,062	-2,417	-21.1%

#### Scope 1: direct GHG emissions

	Deperting	Pagalina	2022/22	Change	on baseline	Motorial	Reason for	
Emission source	level	(tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)	tCO <sub>2</sub> e	Percentage change	(Y/N)	exclusion	
Natural gas	Level 3	4,664	4,277	-387	-8.3%	Y		
Fleet (owned/ operated)	Level 3	24	13	-11	-45.8%	Y		
Refrigerants and f-gas	Level 3	113	204	91	80.5%	Y		
Other Fuels	Not reported	0	0	-	-	N	Insignificant (<1% of total emissions)	
Total Scope 1		4,801	4,494	-307	-6.4%			

<sup>1</sup> The baseline year for Scope 1 and 2 carbon emissions is 2018/19

### Scope 2: indirect GHG emissions

Emission	Bonorting	Pagalina	2022/23	Change	e on baseline	Motorial	Descen for
source	level	(tCO <sub>2</sub> e)	(tCO <sub>2</sub> e)	tCO <sub>2</sub> e Percentage (Y/N)		(Y/N)	exclusion
Purchased electricity <sup>1</sup>	Level 3	6,678	4,567	2,111	-31.6%	Y	
Total Scope 2		6,678	4,567	2,111	-31.6%		

Carbon omissions intensity data	Pagalino <sup>2</sup>	2022/22	Change on baseline		
Carbon emissions intensity data	Dasenne	2022/23	Absolute	Percentage change	
Carbon emissions intensity (Scope 1 and 2) per FTE <sup>3</sup> employee and student	0.37	0.24	-0.13	-35%	
Carbon emissions intensity (Scope 1 and 2) per $GIA^4 (m^2)^5$	0.042	0.034	-0.006	-19%	



<sup>1</sup> Including purchased electricity consumed by the University

<sup>2</sup> The baseline year for carbon intensity data is 2018/19

<sup>3</sup> Full Time Equivalent

<sup>4</sup> Gross Internal Area

<sup>5</sup> Based on the HESA EMR data for 2022/23 (November 2023)

#### Scope 3: other indirect GHG emissions

GHG emissions category	Emission source	Reporting level	Baseline <sup>1</sup> (tCO <sub>2</sub> e)	2022/23 (tCO <sub>2</sub> e)	2021/22 (tCO <sub>2</sub> e)	Material (Y/N)	Reason for exclusion
1	Purchased good and services	Level 1	2022/23	52,076	63,501	Y	
2	Capital goods	-	-	-	-	Currently category 1	reported in l
	Fuel and energy-related activities not included in Scope 1 or Scope 2 Upstream emissions of purchased fuels	Level 3	2022/23	710	766	Y	
3	Fuel and energy-related activities not included in Scope 1 or Scope 2 Upstream emissions of purchased electricity	Level 3	2022/23	1,100	1,044	Y	
	Fuel and energy-related activities not included in Scope 1 or Scope 2 Transmission and Distribution losses	Level 3	2022/23	395	366	Y	
4	Upstream transportation and distribution	-	-			HESCET <sup>2</sup> category 1	utilised for l supply chain
5	Waste and waste water generated in operations	Waste – level 3 and 2 Water – level 3	2022/23	70	76	Y	
	Business travel	Air travel: level 3	2022/223	1,455	427	v	
6		Land and sea: level 1	2022/23	150	84	Y	
	Business Travel Hotels (Travel Management Company only)	Level 3	2022/23	88	Not reported	Y	
	Employee commuting Transportation of employees	Level 3	2022/23	2,171 <sup>4</sup>	1,8805	Y	
7	Employee commuting Homeworking		2022/23	-	-	Y	Methodology in development
	Upstream leased assets Student accommodation	Energy consumption - Level 3	2022/23	380 <sup>6</sup>	285	Y	
8	Upstream leased assets Referral and nomination agreement student accommodation	Energy consumption - Level 3	2022/23	1,0137	990	Y	

1 For the reporting year 2021/22, a percentage reduction towards net zero carbon emissions targets has not been reported due to the baseline year being 2022/23

2 Higher Education Supply Chain Emissions Tool utilised therefore reported category 4 upstream transportation and distribution emissions is not required in line with the EAUC Standardised Carbon Emissions Framework

3 Baseline year changed from 21/22 to 22/23

4 Data source: Employee Travel Survey 2023

5 Data source: Employee Travel Survey 2020

6 In 22/23 scope 3 emissions for leased, referral and nomination student accommodation include upstream emissions from purchased fuels and electricity, and transmission and distribution losses for the first time

7 In 22/23 scope 3 emissions for leased, referral and nomination student accommodation include upstream emissions from purchased fuels and electricity, and transmission and distribution losses for the first time

Where there are substantive year-to-year changes in our scope 3 emissions, we summarise the key contributing factors.

- Emissions from overseas student travel: Overall, emissions from overseas student travel to the University and back home have increased by 106% to 10,641 tCO2e in 2022/23 from 5,176 tCO2e in 2021/22. The main contributing factors were a change in calculation methodology to accurately reflect the University's international student population, an increase in international student numbers (particularly students travelling long-distance), the inclusion of exchange students in the calculations, and the 2023 Government GHG emissions conversion factors for short and long-haul flights increasing compared to the previous year.
- Emissions from employee commuting: Emissions from commuting appear to have increased by 15% to 2,171 tCO<sub>2</sub>e in 2023 compared to 1,880 tCO<sub>2</sub>e in 2020. However, the increase is due to a change in calculation methodology. Response rates to the employee travel survey were factored up to represent the total employee headcount, compared to the 2020 travel survey, where response rates were factored up to the Full Time Equivalent (FTE) figure. Overall, hybrid working has reduced carbon emissions from commuting per staff member from 522 kgCO<sub>2</sub>e/ employee in 2020 to 479 kgCO<sub>2</sub>e in 2023.

GHG emissions category	Emission source	Reporting level	Baseline <sup>1</sup> (tCO <sub>2</sub> e)	2022/23 (tCO <sub>2</sub> e)	2021/22 (tCO <sub>2</sub> e)	Material (Y/N)	Reason for exclusion
	Downstream transportation and distribution Student commuting	Level 3	2022/23	10,274	9,953	Y	
9	Downstream transportation and distribution Student travel home – UK students	Level 3	2022/23	1,293	1,199	Y	
	Downstream transportation and distribution Student travel home – Overseas students	Level 3	2022/23	10,641	5,176	Y	
10	Processing of sold products	-	-	-	-	Ν	Not relevant
11	Use of sold products		-	-		N	Not relevant
12	End of life treatment of sold products	-	-	-		N	Not relevant
13	Downstream leased assets	-	-	-	-	Y	Not reported
14	Franchises	-	-	-	-	N	Not relevant
15	Investments <sup>1</sup>	-	-	-	-	Y	Not reported
Total Scope 3				81,814	85, 522		

#### Scope 3: other indirect greenhouse gas emissions (continued)

1 This is an emerging area, and as guidance for the sector is released through the EAUC Standardised Carbon Emissions Framework, carbon emissions will be reported by the University Where there are substantive year-to-year changes in our scope 3 emissions, we summarise the key contributing factors.

- Emissions from overseas student travel: Overall, emissions from overseas student travel to the University and back home have increased by 106% to 10,641 tCO<sub>2</sub>e in 2022/23 from 5,176 tCO<sub>2</sub>e in 2021/22. The main contributing factors were a change in calculation methodology to accurately reflect the University's international student population, an increase in international student numbers (particularly students travelling long-distance), the inclusion of exchange students in the calculations, and the 2023 Government GHG emissions conversion factors for short and long-haul flights increasing compared to the previous year.
- Emissions from purchased goods and services: An error identified in the methodology used to calculate supply chain carbon emissions led to the University over reporting these emissions prior to the reporting year 2022/23. The calculation methodology has been updated for 2022/23.

### **Carbon emissions in student accommodation**

Carbon emissions by scope and source	2022/23 (tCO <sub>2</sub> e)	Proportion split (tCO <sub>2</sub> e)	Accommodation reported against
Scope 1 and 2 carbon emissions University-owned student accommodation	1,720	55%	Archway, Vine, Dale, Dunham, Naylor, Cambridge, Cavendish, Warde
Scope 3 carbon emissions (leased student accommodation)	380	12%	Briarfield, Needham, Oxford Court
Scope 3 carbon emissions (nomination agreement student accommodation)	1,013	33%	Albert Court, Artisan Heights, Medlock House, Moor Lane, New Rosamond House, Parkway Gate, Prospect Point, Rusholme Place, The Castings, Wilmslow Park

#### **Carbon emissions from student accommodation**

Our total carbon emissions from owned, leased and student accommodation where nomination agreements are in place for the reporting year 2022/23 was 3,112 tCO<sub>2</sub>e.

# Leased student accommodation 12% Owned student accommodation 55% Nomination agreement student accommodation 48%

#### Total carbon emissions and student accommodation carbon emissions

Carbon emissions from student accomodation<sup>1</sup> accounted for approximately 3.1% (3,112 tCO<sub>2</sub>e) of the University's total carbon footprint in 2022/23.



### **Our investments**

Our Ethical Investment Policy, part of the Treasury Management Policy, sets out Manchester Met's approach to ethical investment. It invests its funds with due consideration for ethical, environmental, corporate governance and social issues.

The University does not intentionally invest directly or through collective funds in fossil fuels companies, arms companies, or corporations complicit in the violation of international law.

Counterparty	Nature of investment	Investment type	Value (31 July 2023)
Aberdeen Standard	Cash deposit	Sterling Liquidity Fund (current)	£10,000,000
Aberdeen standard Capital Bridge Fund (endowment fund)	Equities, bonds, and cash	General endowment fund segregated solution (non-current)	£964,410
Barclays Bank Plc	Cash deposit (working capital)	Cash (current)	£7,860,000
Goldman Sachs	Cash deposit	Fixed-term deposit (current)	£25,000,000
HSBC	Cash deposit	ESG Sterling Liquidity Fund (current)	£15,000,000
Kingswood Wealth Management Group	Corporate bonds, cash deposits and cash	Managed portfolio (current)	£40,388,149
Yorkshire Building Society	Cash deposit	Fixed-term deposit (current)	£25,000,000

Further information about our investment practices and procedures (including where you will find our ethical investment policy, annual list of investments, list of committee members overseeing investments, meeting minutes updating on investment policy reviews, and approach to ethical banking) are available via www.mmu.ac.uk/ethical-investment

#### Institutional Data – 2022/23

Number of FTE Staff	4,0321
Number of FTE Students	33,769 <sup>2</sup>
Number of campuses	1
Total floor area (total GIA)	268,492m <sup>2</sup>
Turnover (£)	£422m

### **Key definitions and glossary**

#### BREEAM

The Building Research Establishment Environmental Assessment Method (BREEAM) is an established method of assessing, rating and certifying the sustainability of buildings.

#### **Carbon emissions**

Carbon is referred to throughout this report as the carbon dioxide equivalent unless otherwise stated.

#### Carbon dioxide equivalent (CO<sub>e</sub>)

A standard unit for measuring and comparing carbon footprints. Each greenhouse gas has a different global warming potential (GWP) and persists for a different length of time in the atmosphere.  $CO_{2}e$  expresses the impact of different Greenhouse gases (GHGs) in terms of the amount of CO<sub>2</sub> that would have the equivalent GWP.

#### **Greenhouse Gas (GHG)**

Gases that trap heat in the atmosphere, for example, carbon dioxide, methane and nitrous oxide. These gases differ in how long they stay in the atmosphere and how strongly they impact it.

#### ISO 14001:2015

The international standard that specifies requirements for an effective environmental management system (EMS). It provides a framework that an organisation can follow rather than establishing environmental performance requirements.

#### kWp

Solar panel systems are rated in kilowatts peak (kWp), which is the rate at which they generate energy at peak performance, such as on a sunny day in the afternoon.

#### Net zero carbon

Achieving net zero involves making deep reductions in greenhouse gas emissions to get as close to zero as possible, and then actively removing from the atmosphere any emissions that cannot be avoided.

#### Scope 1, 2, 3 emissions

An organisation's greenhouse gas emissions are classified in three ways:

- Scope 1 emissions are direct emissions from sources owned or controlled by the organisation, like burning natural gas to generate steam for heating and cooling.
- Scope 2 emissions are indirect emissions from the generation of purchased energy, like consuming electricity from a utility provider.
- Scope 3 emissions are indirect emissions (not included in scope 2) that occur in the value chain of the reporting organisation.

#### **SKA Rating**

An environmental assessment method, benchmark, and standard for non-domestic refurbishment projects.

#### Zero carbon

Manchester Met is working towards zero carbon for scope 1 and 2 carbon and carbon equivalent emissions before 2038, as defined by the Tyndall Centre's proposed science-based targets and definition of zero-carbon for Manchester ('Playing our full part').

<sup>1</sup> FTE and GIA figures correct as of November 2023 and based on late-stage versions of 22/23 HESA returns

<sup>2</sup> FTE and GIA figures correct as of November 2023 and based on late-stage versions of 22/23 HESA returns



#### **Contact Us**

Thanks to the commitment of our staff, students, neighbours and partners, we have made tremendous progress in reaching so many of our goals. We aim to be even bolder in the future. If you would like to find out more or share your thoughts and ideas, we would love to hear from you.

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We are committed to ensuring that all our materials are accessible. This information is available in a range of formats, such as large print, on request via **marketing@mmu.ac.uk**