

# Middlesex University Carbon Reduction Plan 2020 – 2023

## **Commitment to achieving Net Zero**

Middlesex University has set out targets in our 2031 strategy to reduce Carbon Emissions by 50% by 2031 and achieve Net Zero emissions by 2040.

This carbon reduction plan sets out our existing and planned initiatives to work towards to meet this commitment. We report our emissions clearly and transparently on an annual basis and strive to turn “knowledge into action” by finding viable energy efficient and low carbon solutions for our activities and operations.

Our Carbon Reduction Plan is designed as an annual document which meets the requirements of Procurement Policy Note 06/21: Taking account of Carbon Reduction Plans in the procurement of major government contracts and the Environmental Association of Universities and Colleagues (EAUC) Race to Zero as part of the United Nations (UN) Environment Programme. The document will be reviewed and signed off annually by the Deputy CEO on behalf of the University Executive Team (UET).

## Baseline Emissions Footprint

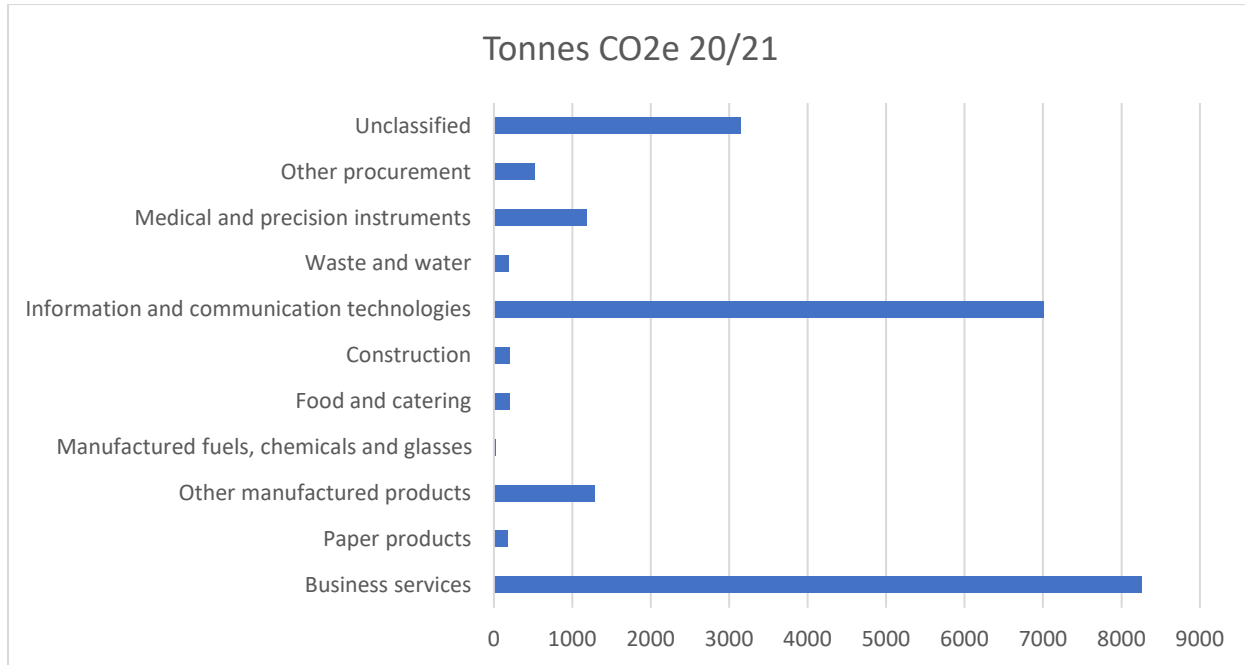
The University has chosen the 2014/2015 University Financial Year for the baseline emissions year on the basis this is the first historical year the University holds auditable records for.

<b>Baseline Year: 2014/2015 University Financial Year (1<sup>st</sup> Aug 2014 – 31<sup>st</sup> July 2015)</b>	
<b>Additional Details relating to the Baseline Emissions calculations.</b>	
<p>Middlesex University's historic carbon dioxide emissions relate to the Campus based operations and are calculated in line with the Higher Education Statistics Agency (HESA) methodology for the annual Environmental Management Return (EMR). Emissions related to halls of residence or rented premises with energy included as a service charge are not included as they are not material to our operations.</p> <p>Department for Environment Food &amp; Rural Affairs (DEFRA) Carbon Dioxide Equivalent figures are used to calculate Scope 1 and 2 emissions from the total energy used. Scope 1 and 2 emissions are reported together on the basis of Scope 1 emissions currently being <i>de minimis</i> in the absence of any material amounts of fuel being directly used by the University. The most suitable year is used as the basis of emissions.</p> <p>Scope 3 emissions are calculated directly by the University and Southern Universities Procurement Consortium (SUPC) on the University's behalf (see Figure 1). Emissions are estimated from total spend in line with the methodology set out by HESA. Emission sources are broken down and categorised to provide direct comparison with other organisations within the sector.</p>	
<b>Baseline year emissions: 2014/2015 University Financial Year</b>	
<b>EMISSIONS</b>	<b>TOTAL (tCO<sub>2</sub>e)</b>
Scope 1 and 2	5,410
Scope 3	25,364 NOTE: Figures re-stated
<b>Total Emissions</b>	<b>30,774</b>

## Current Emissions Reporting

<b>Reporting Year: 2020/2021 University Financial Year (1<sup>st</sup> August 2020 – 31<sup>st</sup> July 2021)</b>	
<b>EMISSIONS</b>	<b>TOTAL (tCO<sub>2</sub>e)</b>
Scope 1 and 2	3,385
Scope 3	22,161
<b>Total Emissions</b>	<b>25,546</b>

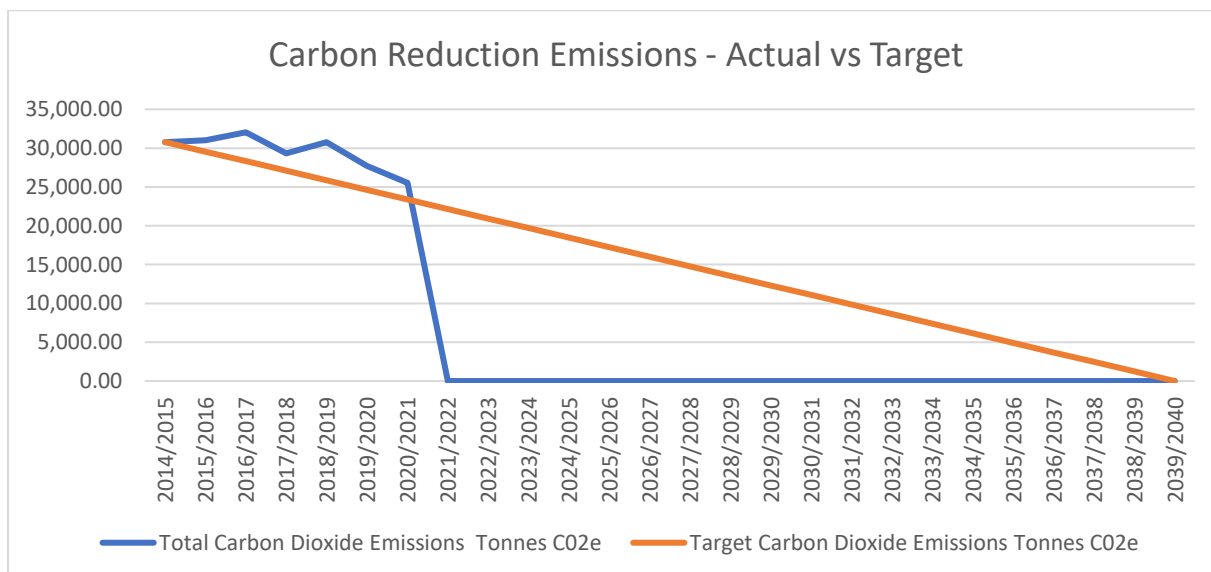
**Figure 1 – Breakdown of Scope 3 Emissions Sources (Source: SUPC)**



## Emissions reduction targets

In order to continue our progress to achieving Net Zero, we have adopted two carbon reduction targets, to reduce our carbon dioxide emissions by 50% by 2031 and Net Zero by 2040. Progress against target is outlined in Figure 2 which displays actual emissions against target. Emissions have been reducing in line with the wider movement to cleaner power sources.

**Figure 2 – Carbon Dioxide Emissions: Actual vs Target (Source HESA EMR return)**



## Carbon Reduction Projects

### Completed Carbon Reduction Initiatives

The following environmental management measures and projects have been completed or implemented since the 2014/2015 baseline. The measures listed below have been implemented by the University, remain operational and will continue for the purposes of carbon reduction.

- Upgrading our building stock, moving to modern BREEAM Excellent Energy Efficient Buildings, while significantly reducing our Campus footprint through the more efficient use of space;
- Developing induction training as part of *Welcome to Middlesex*, rolling out Carbon Literacy Training delivered in partnership with the EAUC, and engaging staff through intranet webpages and energy awareness campaigns;
- Implementing an Environmental Management System to ISO 14001 standard, reporting Carbon Data transparently in the Annual Report and Financial Statement in line with the Streamlined Energy & Carbon Reporting (SECR) as well as publishing an Annual Environmental Report;
- Upgrading existing buildings through the Building Management System (BMS) controllers to enable presence detection in specialist space, LED (light emitting diode) lighting and PIR (passive infra-red sensor) controls, and installation of Thermostatic Radiator Valves (TRVs), and voltage optimisation equipment;
- Installation of fiscal and building level Automatic Meter Readers to track energy use in real time and sub-metering installation in line with CIBSE TM39. Upgrade of Bureau Services to allow Energy Exceptions to be identified; and
- Installation of solar panels (Photo Voltaic) on key Campus building including College, Sheppard Library, Williams, Hatchcroft, Ritterman and Vine buildings.

### Proposed and Planned Carbon Reduction Initiatives 2022/2023

The University has set itself a target of reducing the energy use associated scope 1 & 2 emissions by 10% during the 2022/2023 Academic Year. This equates to 338.5 tonnes of Carbon Dioxide.

- Further roll out of Carbon Literacy Training working with Staff Development / the Environmental Association of Universities and Colleagues (EAUC) to run a one day on Campus course for key staff;
- Taking a paper to UET with options to enhance our staff business travel policy to prioritise sustainable journey choices where practicable, and clarifying our position on offsetting, and setting out the principles of how it will be done;
- Developing and delivering focused investment in campus mechanical and electrical infrastructure to optimise the operation of energy savings features of Grove and Hatchcroft buildings;
- Improving electric vehicle (EV) charging infrastructure on Campus to facilitate low carbon travel for staff who need to drive to work while recovering costs with the installation of paid EV charging points;
- Providing an enhanced “shuttle” provision between the Campus and Stonex Park using modern low emission vehicles to remove the need for staff / students driving between locations;

- Delivering a new Mechanical and Electrical contracted service with inbuilt requirement for Energy Monitoring and Targeting on key assets to drive down out of hours energy use;
- Increased promotion of climate change and the associated UN Sustainable Development Goals through staff and student facing activities delivered in partnership with marketing; and
- Requiring suppliers to disclose whether they report on carbon emissions and have carbon reduction targets in place during the tender process as part of our procurement strategy.

## Declaration and Sign Off

This Carbon Reduction Plan has been completed in accordance with PPN 06/21 and associated guidance and reporting standard for Carbon Reduction Plans. It is also designed to meet the requirements of the EAUC's Race to Net Zero in a clear and transparent way. Any feedback can be sent to [sustainability@mdx.ac.uk](mailto:sustainability@mdx.ac.uk).

Emissions have been reported and recorded in accordance with the published reporting standard for Carbon Reduction Plans and the GHG Reporting Protocol corporate standard<sup>1</sup> and uses the appropriate Government emission conversion factors for greenhouse gas company reporting<sup>2</sup>.

Scope 1 and Scope 2 emissions have been reported in accordance with SECR requirements, and the required subset of Scope 3 emissions have been reported in accordance with the published reporting standard for Carbon Reduction Plans and the Corporate Value Chain (Scope 3) Standard<sup>3</sup>.

This Carbon Reduction Plan has been reviewed and signed off by the Deputy CEO on behalf of the University Executive Team.

### Draft Signed on behalf of the University:



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James Kennedy Deputy CEO

Date

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<sup>1</sup><https://ghgprotocol.org/corporate-standard>

<sup>2</sup><https://www.gov.uk/government/collections/government-conversion-factors-for-company-reporting>

<sup>3</sup><https://ghgprotocol.org/standards/scope-3-standard>

**Appendix 1 – Scope 3 Emissions inclusions and methodology**

<b>Scope 3 Emission Source</b>	<b>Data Source and inclusions</b>	<b>Emission Calculation methodology</b>
<b>Upstream transportation and distribution</b>	All transport related activity would be included within procurement spend (excludes vehicle life cycle emissions)	DEFRA conversion factors
<b>Waste generated in operations</b>	Waste management supplier based on actual and estimated weights (excluding transport)	DEFRA conversion factors
<b>Business travel</b>	Transport travel provider based on the mileage of all booked corporate travel (excludes vehicle lifecycle emissions)	DEFRA conversion factors
<b>Employee commuting</b>	Annual travel survey of staff and student travel to / from the main Hendon Campus (excludes emissions from employees working from home)	DEFRA conversion factors
<b>Downstream transportation and distribution</b>	All transport related activity would be included within procurement spend (excludes vehicle life cycle emissions)	DEFRA conversion factors
<b>Procurement of goods and services</b>	Annual spend report based on HESA reporting categories as calculated by SUPC (excludes associated transport emissions) <ul style="list-style-type: none"> <li>- Medical and precision instruments</li> <li>- Waste and water</li> <li>- IT and communications</li> <li>- Construction</li> <li>- Food and catering (excludes commercial outlets)</li> <li>- Fuels, chemical and glasses</li> <li>- Other manufactured products</li> <li>- Paper and paper products</li> <li>- Business services</li> </ul>	DEFRA conversion factors