

Scope 3 Emissions Report

2022/23 data





About the report

A large proportion of Manchester Met's carbon emissions are emitted outside of our direct operations; these are our scope 3 emissions. As a result, our influence over these emissions is typically linked to our business decisions and processes, and therefore presents a need to understand our scope 3 emission sources and the scale of these emissions in order to identify and take actions to reduce these emissions.

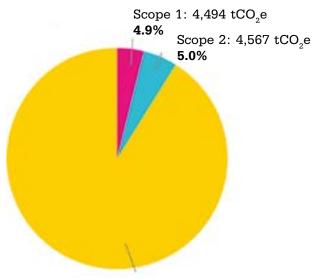
The Scope 3 Emissions Report details the University's scope 3 carbon emissions, which accounted for 90% of the University's total carbon dioxide equivalent emissions (CO₂e) in the reporting year 2022/23.

The report sets out our scope 3 emissions by source in terms of annual emissions data and targets. The report provides us with a better understanding of the scale of our carbon impacts and helps inform us of priority areas, potential efficiency opportunities across the organisation and actions needed to reduce our scope 3 emissions.

The University has set out its scope

3 reporting methodology and targets for scope 3 emissions as part of its **Leadership in Sustainability Strategy** (2022-2026). In addition, Manchester Metropolitan University has recently appointed a third party consultant to help us further develop our Scope 3 Carbon Management Plan which will detail how the University plans to reach its commitment to be net zero carbon emissions (scope 3) before 2038. As such, we have amended our baseline year to 2022/23 to align with this piece of work.

Figure 1 - Manchester Met carbon emissions by scope



Our scope 3 emissions

Progress and targets:

- Figure 1 (page 2) provides a summary of Manchester Metropolitan University's carbon emissions by scope.
- Table 1 (page 4) details the reduction target and baseline for each of the measured scope 3 emission sources. Where possible, targets have been set to align with targets set in the University's Leadership in Sustainability Strategy (2022-2026).
- Figure 2 (page 5) provides a summary of carbon emissions attributed to residential accommodation (both Manchester Met owned and externally provided accommodation).
- Table 2 (page 5) details the carbon emissions attributed to residential accommodation

Emissions summary

<u>Table 3 (page 6)</u> shows year-on-year performance comparing 2022/23 scope 3 emissions data to the 2021/22 figures. The key contributing factors to substantive year-on-year changes to our scope 3 emissions are summarised below:

- A reduction in reported emissions associated with supply chain embodied carbon largely reflect an error identified in the methodology used to calculate these carbon emissions, which led to the University over-reporting these emissions prior to the reporting year 2022/23. The calculation methodology has been updated for 2022/23.
- Overall, emissions from overseas student travel to the University and back home have increased. 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 staff commuting appear to have increased due to a change in calculation methodology. In 2022/23 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.



Table 1: Scope 3 carbon emissions baseline and reduction targets

| GHG protocol emissions category and definition | Emission source | 2022/23 emissions (and baseline) (tCO ₂ e) | Reduction target | |
|---|---|---|---|--|
| | Supply chain | 52,050 | Maintain Level 4 Flexible Framework status | |
| 1) Purchased goods and services | Water | 26 | Reduction in water related carbon emissions of 10% per m ² of GIA ¹ by 2026 | |
| 2) Capital goods | Currently reported in Category 1 | | | |
| 3) Fuel and energy- | Upstream emissions of purchased fuels | 710 | | |
| related activities not included in | Upstream emissions of purchased electricity | 1,100 | Carbon emissions reduction commensurate with a 44% reduction in scope 1 and 2 emissions by 2026 | |
| Scope 1 or Scope 2 | Transmission and distribution losses | 395 | in scope 1 and 2 emissions by 2020 | |
| 4) Upstream transportation and distribution (of purchased goods and services) | Currently reported in Category 1 | | | |
| 5) Waste generated | Management of waste from residential, non-residential, revenue/ refurbishment projects and maintenance activities | 27 | Carbon emissions reduction commensurate with a 60% operational waste recycling target by 2026 | |
| in operations | Management of waste from construction activities | 14 | | |
| | Wastewater | 29 | Reduction in wastewater related carbon emissions of 10% per m ² of GIA by 2026 | |
| 6) Business travel | Travel related emissions | 1,693 | 30% reduction in business travel related carbon emissions by 2030 | |
| 7) Employee commuting | Commuting emissions | 2,171 | 20% reduction in commuting carbon emissions per employee (383 kgCO ₂ e/employee) by 2030 | |
| 0) 77 | Emissions from student accommodation (lessee) | 380 | | |
| 8) Upstream leased assets | Emissions from referral and nomination agreement student accommodation | 1,013 | Target to be established | |
| 9) Downstream transportation and distribution | Student commuting (daily) | 10,274 | Target to be established | |
| | Student travel UK (start and end of term) | 1,293 | Target to be established | |
| | Student travel overseas (start and end of term) | 10,641 | Target to be established | |
| | Total Scope 3 | 81,814 | | |

Table 2: 2022/23 student accommodation carbon emissions summary

| Carbon emissions by scope and source | 2022/23 (tCO ₂ e) | Proportion split | 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) – natural gas & electricity consumption | 380 | 12% | Briarfield, Needham, Oxford Court |
| Scope 3 carbon emissions (nomination agreement student accommodation) – natural gas & electricity consumption | 1,013 | 33% | Albert Court, Artisan Heights, Medlock House, Moor Lane, New Rosamond House, Parkway Gate, Prospect Point, Rusholme Place, The Castings, Wilmslow Park |

Figure 2: Carbon emissions from student accommodation

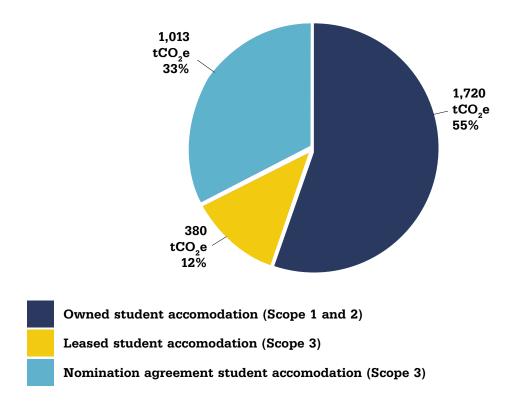


Table 3: 2021/22 - 2022/23 Scope 3 emissions comparison summary and performance discussion

| GHG protocol | Emission source | 2021/22 | 2022/23 | 22/23 | Discussion |
|---|--|-----------------------------------|-----------------------------------|---------------------------|--|
| emissions category and definition | | emissions (tCO ₂ e) | emissions (tCO ₂ e) | performance against 21/22 | |
| 1) Purchased goods and services | Supply chain | 63,481 | 52,050 | -18% | Apparent reduction in emissions associated with calculation error in reporting supply chain emissions in previous years. Calculation methodology has been updated in 2022/23. |
| | Water | 20 | 26 | +30% | Water consumption has increased year on year by c. 10,000m³ or 8%. In addition, the UK government's carbon conversion factor for water supplied has increased by 19%. |
| 2) Capital goods | Currently reported in | category 1 | | | |
| | Upstream emissions of purchased fuels | 766 | 710 | -7% | <10% change |
| 3) Fuel and Energy- related activities not included in Scope 1 or Scope 2 | Upstream emissions of purchased electricity | 1,044 | 1,100 | +5% | <10% change |
| Scope I of Scope I | Transmission and distribution losses | 366 | 395 | +8% | <10% change |
| 4) Upstream transportation and distribution (of purchased goods and services) | Currently reported in | Category 1 | | | |
| 5) Waste generated in operations | Management of waste from residential, non- residential, revenue/ refurbishment projects and activities maintenance | 21.6 | 26.9 | +25% | Under review |
| | Management of waste from construction activities | 17.6 | 13.8 | -22% | Under review |
| | Wastewater | 36.7 | 29.2 | -20% | Water consumption and, therefore, wastewater production has increased by 8% year on year. In addition, the UK government's carbon conversion factor for water supplied has decreased by 26%. |

| GHG protocol emissions category and definition | Emission source | 2021/22 emissions (tCO ₂ e) | 2022/23 emissions (tCO ₂ e) | 22/23 performance against 21/22 | Discussion |
|--|--|--|--|---------------------------------------|---|
| 6) Business travel | Travel related emissions | 511 | 1,605 | +214% | Emissions associated with business travel has increased due to return to 'business as usual' following COVID pandemic and as a result of 2023 Government GHG emissions conversion factors for flights increasing compared to the previous year. |
| | Hotel stays | Not reported | 88 | N/A | N/A |
| 7) Employee commuting | Commuting emissions | 1,880 | 2,171 | +15% | Increase in emissions associated with staff commuting due to a change in calculation methodology. |
| 8) Upstream leased assets | Emissions from student accommodation (lessee) | 285 | 380 | +33% | Under review |
| | Emissions from referral and nomination agreement student accommodation | 990 | 1,013 | +2% | <10% change |
| 9) Downstream transportation and distribution | Student commuting (daily) | 9,953 | 10,274 | +3% | <10% change in student commuting and UK student travel home emissions |
| | Student travel UK (start and end of term) | 1,199 | 1,293 | +8% | Emissions from overseas student travel between University and home have increased due to: a change in calculation methodology; an increase in international student numbers; the inclusion of exchange students in the calculations; and the 2023 Government GHG emissions conversion factors for flights increasing compared to the previous year. |
| | Student travel overseas (start and end of term) | 5,176 | 10,641 | +115% | |
| | Total scope 3 | 85,746 | 81,814 | -4% | |



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