UNIVERSITY OF LEEDS

CLIMATE PLAN

We're taking action on climate change

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Climate Principles

- Our Climate Plan shapes how we, as a University community, will contribute to tackling the climate crisis, backed by our largest single investment of over £174m over 10 years.

The University of Leeds Climate Plan

Delivering net zero by 2030

Achieving sustainable travel

Supporting a net zero city

Providing a sustainable curriculum

Reorienting research and teaching

Enabling responsible investment

Shaping institutional decision making

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Delivering our Climate Plan

- The seven principles that make up the Climate Plan have been combined into a wide ranging Climate Principles Programme
- Each individual principle has its own programme delivery group(s) responsible for its delivery, and reporting into the Climate Principles Programme Board
- Delivering the ambition of our Climate Plan will need us to trial new solutions and learn by doing, informed by academic practice
- Success will require commitment, agility, and collaboration across our whole University community

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Delivering net zero by 2030

Delivering net zero by 2030
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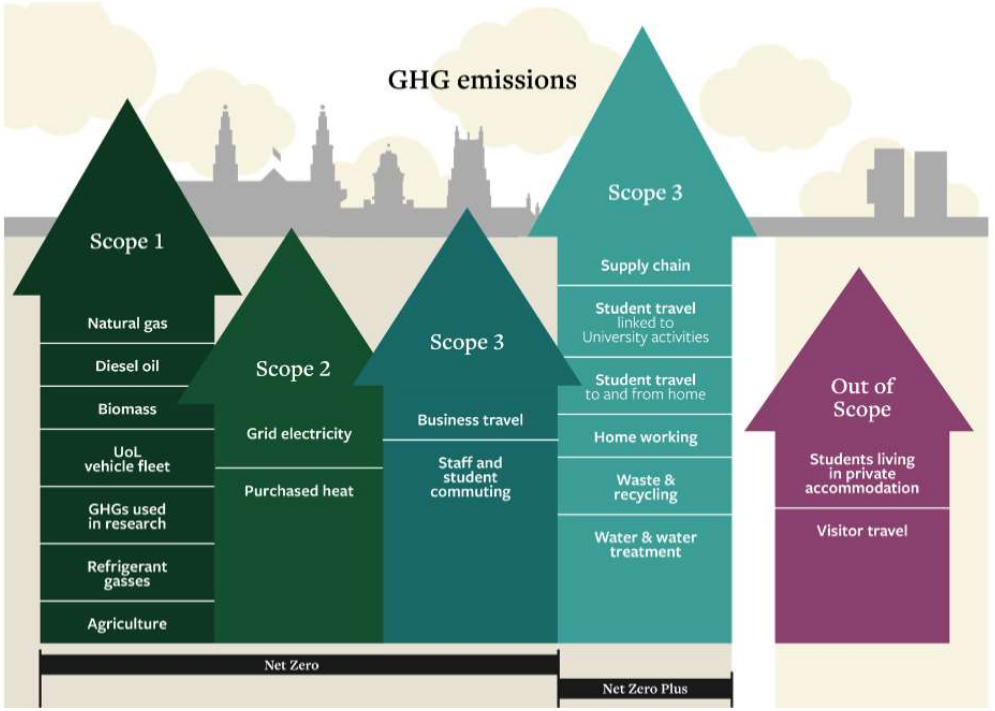
Delivering our Climate Plan

- Our net zero target includes all scope 1 and 2 emissions, as well as business travel and commuting (staff and student).

- Other scope 3 emissions are not currently included in our target for delivering net zero by 2030, but are included in our 'net zero plus' programme – the first priority here is to develop accurate measurement.

- Students living in private accommodation and visitor travel are considered out of scope, however we have a responsibility to influence emissions reductions where appropriate.



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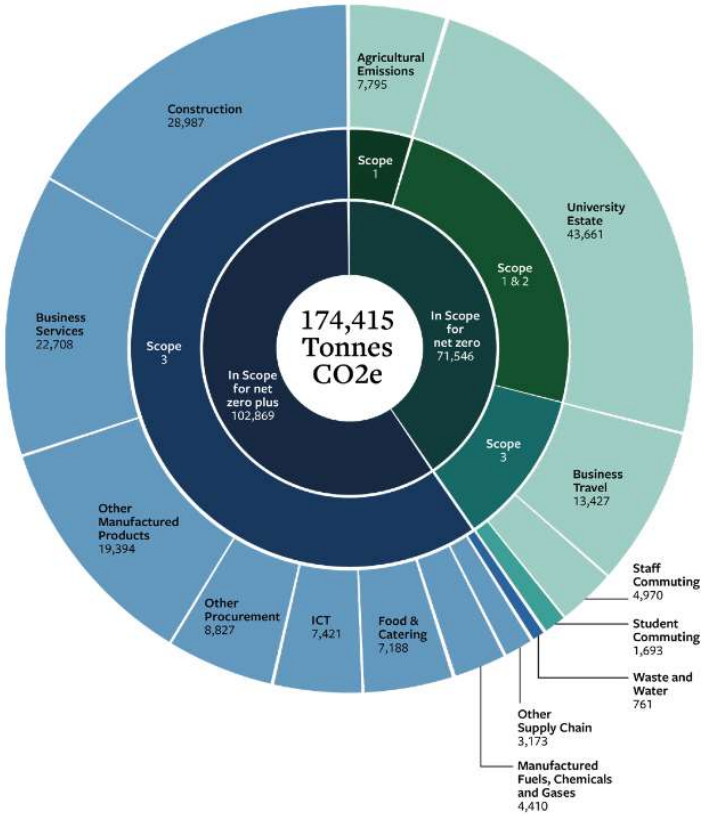
The University of Leeds carbon footprint



- Our total emissions are 174,415 tonnes of CO^2 equivalent gases.
- 71,546 tonnes of emissions are included in our target for delivering net zero by 2030 (shown in green on the chart).
- Within our net zero target, 60% of emissions are associated with the University estate - such as heating, power and lighting.
- Business travel and staff commuting emissions make up a further 25% of our net zero target.
- Supply chain emissions – which are not included in our target for net zero by 2030 - make up an estimated 59% of total emissions demonstrating how important these are to address.

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Ten sub-programmes deliver our pathway to net zero

Building Retrofit
Increasing the energy efficiency of our buildings themselves

Offsite Renewables
Building our renewable energy supply

Sustainable Travel
Reducing emissions from business travel and commuting

Energy Management
Reducing energy use across the University

Climate Resilience
Protecting our estates from the climate change impacts

Net Zero Plus
Reducing emissions from our supply chain

Energy Infrastructure
Electrification of heat across campus

Balancing Emissions
Academically verified GHG removal and offsetting initiatives

Net Zero Farm
Developing and testing solutions for reducing emissions in agriculture

Communications and Engagement
Embedding sustainable practices across the University community

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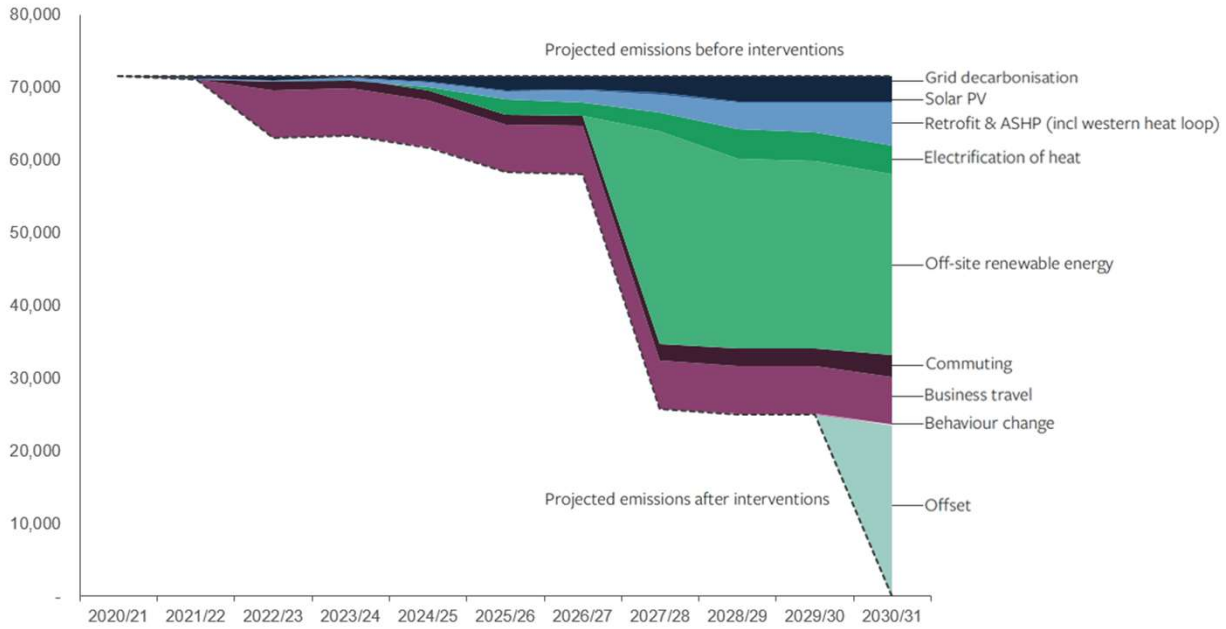
Our net zero pathway by intervention



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Setting the carbon budgets: spend by area to 2030

- Demand reduction: £112m
- Decarbonisation of energy supply: £34.2m
- Onsite renewable energy: £1m
- Better building use: £4.6m
- Zero carbon fleet: £0.5m
- Sustainable travel infrastructure: £0.5m
- **Total: £152.8m**

- Demand reduction- retrofit and ASHP and heat loop
- Decarbonisation- electrification of heat and enabling infrastructure
- Onsite renewable- roof top PV
- Better building use- deeper use of Building Energy Management Systems (BEMS)
- Zero carbon fleet- investment to enable end of life vehicle replacement to be EV
- Sustainable travel infrastructure- charging points and infrastructure to support cycling, walking etc to work

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Monitoring & reporting carbon efficiency delivery: process

- Based on real time metered actual consumption of heat and electricity, at 3 levels
  - Power station (GSC)
  - Network (eg substations)
  - Building: all are metered
- Consumption converted into carbon emissions using carbon intensity factors
  - Standard factors for grid imported
  - Power station is output consumption metered converted back to input commodities
  - Using conversion and carbon intensity calculations provided by **Arup**
- Numbers reported subject to
  - internal scrutiny: challenge Board, including expert academics
  - **PWC** audit annually
- Comparison of actual performance at building level against externally modelled impacts of interventions
  - For Retrofit, LED, PV : **Couch Perry Wilkes, Ramboll, Buro Happold**
  - For Infrastructure it is Buro Happold

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Key Messages, FD view

- Significant commitment before detailed plans
- Different way of working
- Different levels of maturity for different workstreams/technologies
- Emerging and re-iterating

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Additional materials

Delivering net zero by 2030
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Other Resources

- Progress reporting and updates: https://spotlight.leeds.ac.uk/climate-plan-update-november-2021-to-may-2022/index.html

- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1035417/Net_Zero_Estate_Playbook__1_.pdf

- https://unfccc.int/about-us/un-climate-change-partnerships