



Net Zero Carbon 2030 Plan

Estates / May 2023

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Introduction

The Net Zero Carbon 2030 Plan supports the Net Zero Carbon policy and provides the roadmap to how the OU will deliver the Net Zero 2030 commitment.

Scope

The OU operates sites across the four nations, England, Ireland, Scotland and Wales. The Net Zero Carbon 2030 policy and Net Zero 2030 Plan applies to all OU sites.

The Net Zero Carbon 2030 target includes all scope 1 and 2 emissions. All other scope 3 indirect emissions will be included in the Net Zero 2050 target. Activities to monitor and reduce scope 1 and 2 emissions are relatively mature, however, our scope 3 emissions are still in its infancy where our priority is to develop an accurate scope 3 baseline.

- Scope 1: direct emissions from carbon-based fuel combustion, fleet vehicles and fugitive emissions.
- Scope 2: in-direct emissions which arise from purchased electricity
- Scope 3: all other emissions in the University supply/value chain, notably arising from; staff working from home, purchased good and services, business travel, employee commuting, waste disposal, transportation and distribution (up- and downstream), leased assets and franchises and investments.

Carbon Reduction Progress

The OU has a long history of carbon reduction with its first plan adopted in 2007. The 2014 Carbon Reduction Plan targeted absolute reduction in carbon emissions of 36% by 2020 relative to a 2005 baseline. This target was not only achieved but exceeded with a total reduction of 9,894 tCO₂e or 64%.

Table 1 shows our historic scope 1 and 2 emissions in relation to our targets from 2005/06 to 2021/22.

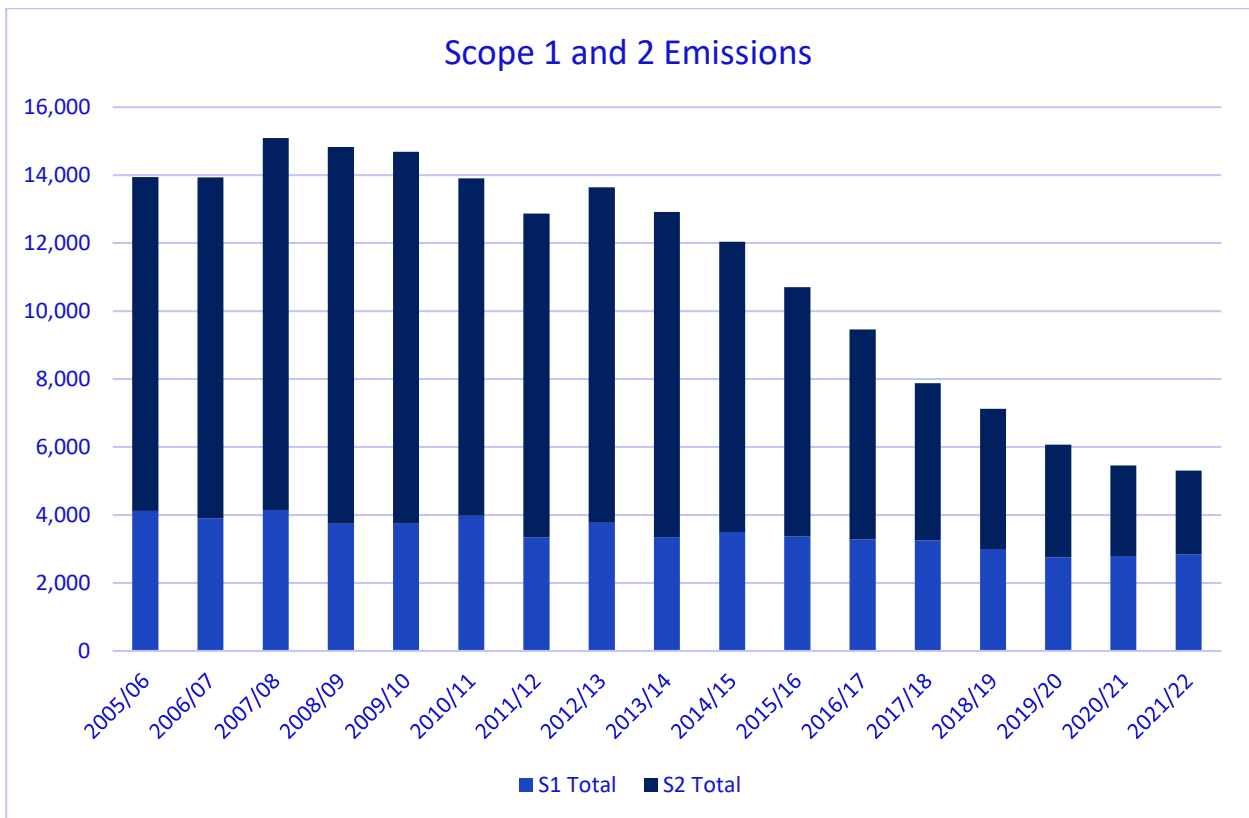


Table 1: Scope 1 and 2 emissions performance

Net Zero Carbon 2030 Roadmap

The Net Zero Carbon 2030 Plan sets the baseline year at 2020/21. The new baseline aligns with the OU Live and Learn Strategic Plan and because we broadly anticipate this to be our new post-covid business as usual profile where the University has adopted the hybrid working model. The new baseline year will make our carbon reduction tracking more realistic and ambitious as we will not be taking the carbon savings related to the covid affected years.

Our forecasted emissions to 2030 have been modelled under 3 scenarios:

Scenario 1: Business as usual with static grid emissions factor, 2021/22

Scenario 2: Business as usual with projected grid decarbonisation factor

Scenario 3: Net Zero Carbon 2030 Plan

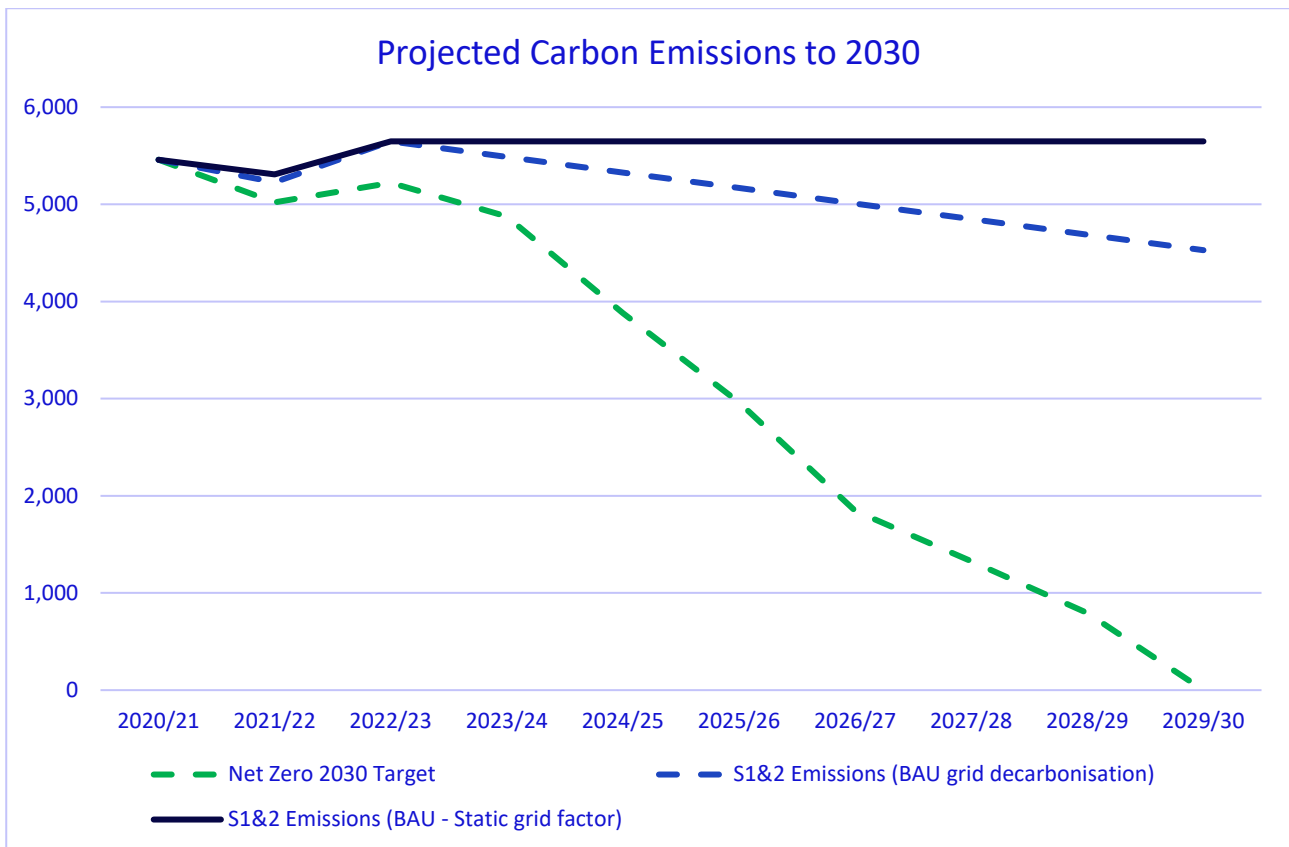


Table 2: Projected Scope 1 and 2 Emissions to 2030

Table 2 shows the projected business as usual consumption and emissions to grow marginally over the next year before stabilising. The increase in consumption is expected as more staff return to campus under the hybrid working model and additional face to face events. Scenario 2 shows the BAU emissions profile with grid decarbonisation factor, this scenario shows our scope 1 and 2 emissions will continue to reduce as the electricity grid becomes greener.

In scenario 3, the Net Zero 2030 modelling we have accounted for the grid decarbonisation factor but also recognise that further carbon reduction invention is required. The reduction targets will be achieved through the phased implementation of 5 high level programmes consisting of:

1. Estate strategy - since the pandemic, the OU has transitioned to hybrid working practices. This has seen a significant reduction in occupation of buildings and space utilisation. A review is currently underway to rationalise space to reflect future needs and working practices of the faculties and professional units. The rationalisation of the estate will result in significant reduction in the OU's Scope 1 and 2 emissions.

2. Data centres – non-sensitive data services will transition to cloud-based solutions, this provides greater flexibility and speed to the IT infrastructure. Moving these services to cloud-based data centres will reduce scope 1 and 2 emissions from the estate operations, noting the emission will transfer to scope 3.
3. Building retrofit and optimised operations – to increase energy efficiency and reduce energy demand of the remaining building. Projects include energy management and monitoring, optimisation of building management systems, upgrades to LED lighting upgrades, HVAC and building fabric, etc. In parallel, close collaboration with Ways of Working to create flexible working and studying spaces to increase space utilisation.
4. Decarbonisation of heat systems – replacing gas boilers for hot water and heating systems with ground or air source heat pump technology or other electricity-driven systems, this includes the centralised heat network at Walton Hall campus.
5. Renewables – this programme has three components, increase onsite renewable generation through increasing roof top solar PV systems, feasibility study to install large scale renewable energy technology system on university owned land at Walton Hall campus and finally to procure electricity from 100% renewable source through a renewable power purchase agreement.

Table 3 illustrates the Net Zero Carbon 2030 roadmap by intervention projects. The projects providing the greatest carbon reduction potential are the estate rationalisation strategy and decarbonisation of heat systems. The residual reductions will be met by onsite renewable energy generation and purchase of 100% green electricity.

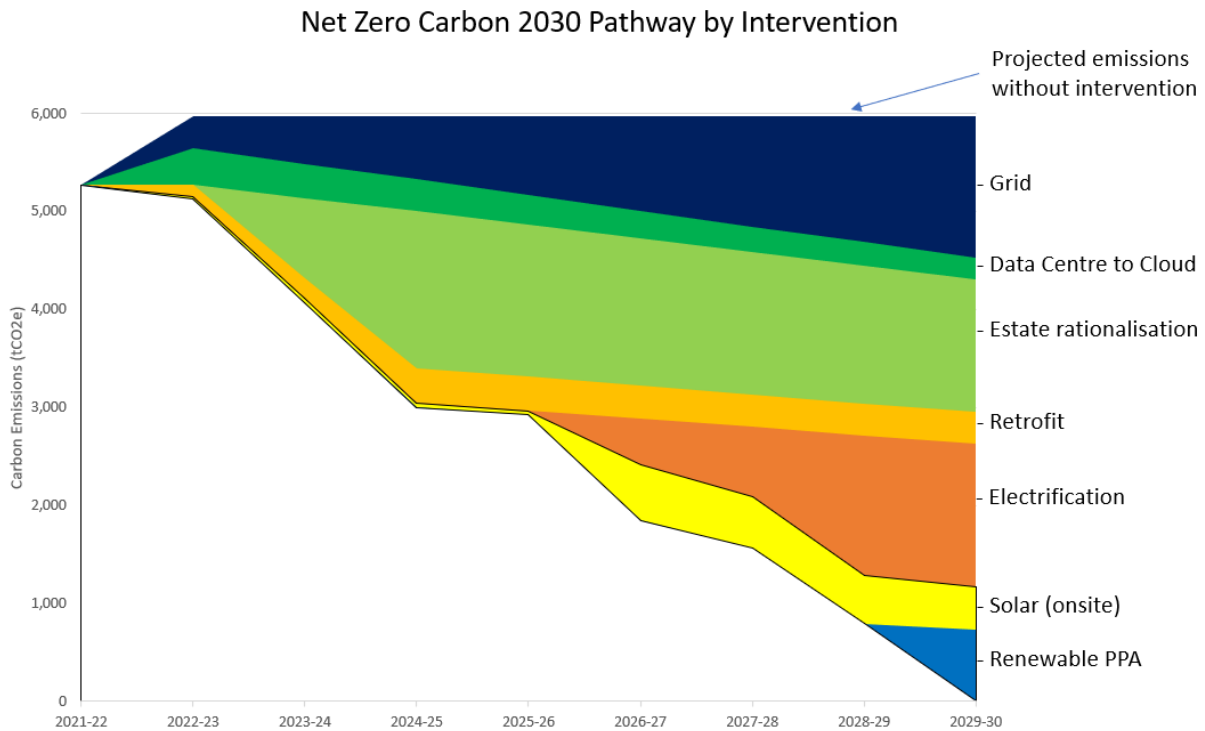


Table 3: Net Zero Carbon 2030 Roadmap

Linked policies

Policies, strategies and plans linked to The Net Zero Carbon 2030 Plan include:

- Environmental Sustainability Policy
- Net Zero Carbon 2030 Policy
- Sustainable Construction policy
- Water Policy
- Waste and Resource Policy
- Waste and Resource Management Plan
- Sustainable Food and Catering Policy

Monitoring and review

The Net Zero Carbon 2030 Policy and Plan is owned by OU Estates. The policy will be reviewed annually, and targets reported to the OU Executive Sustainability Steering committee and forms part of the Institutional Performance Measures.

Signed By

Dorian Holloway, Director of Estates

Next review date: May 2024