The University’s Net Zero Carbon Plan

University Agrees 2030 Net Zero Carbon Target

In January, the University’s Executive Board agreed to a target that will take the University to Net Zero carbon emissions by 2030. This target requires the University to reduce absolute carbon emissions by 46 per cent over the next 10 years. In 2030, the University will purchase carbon offsets to cover the remaining 54 per cent. The University will continue to reduce its carbon emissions after 2030 to reduce the amount of offsetting it must do.

The new target follows the Science Based Target Initiative methodology. This methodology allows a business to assess the annual carbon reduction it must make if it is to contribute its ‘fair share’ to limiting global warming to 1.5°C. Whilst the initiative does not accredit targets set by higher education institutions at present, the University has used external consultants with experience in creating accredited Science Based Targets to model the target on its behalf. Surrey is one of only two UK universities to use this internationally recognised methodology in setting a carbon target.

The new target will require action on a number of fronts. This will include improving the energy efficiency of buildings, more on-site renewable energy generation, the purchasing of our power from clean sources and investing in transparent and verified offsetting schemes. Our new buildings and refurbishments will also need to contribute positively to achieving this target.

Why are we doing this?

The events of the last year have shown that our climate is changing rapidly. The 2018 Intergovernmental Panel on Climate Change (IPCC) report1 shows that every effort to limit global warming to 1.5°C must be made if the most catastrophic effects of climate change are to be avoided. For example, warming of 2°C degrees would mean (worldwide) 11 million more people exposed to extreme heat, 61 million more people exposed to drought and 10 million more exposed to rising sea levels (IPPC 2018).

It is therefore crucial that we base our target on meeting this 1.5°C limit.

What does the target cover?

All the University’s Scope 1 and 2 emissions are covered by this target.

Scope 1 emissions are defined as direct emissions from the burning of fuels on-site. This includes gas for heating, plus petrol and diesel used in University-owned vehicles.

Scope 2 emissions are defined as indirect emissions. This category includes the electricity that is generated off-site but purchased by the University.

Our target also includes emissions associated with refrigerant gases used on-site (fugitive emissions).

At present our target does not include Scope 3 emissions. Scope 3 emissions are defined as emissions associated with supply chain and staff and student vehicle travel (commuting and business use in non-university-owned vehicles).

1 Intergovernmental Panel on Climate Change (2018), Special Report: Global Warming of 1.5°C
The University is committed to taking action to reduce Scope 3 emissions and will be bringing forward a revised sustainable procurement policy this year. The policy prioritises the setting of a Scope 3 baseline within the next year.

The University is already acting to reduce its scope 3 emissions. In the last year we have:

- Started to improve the processes by which we assess new and existing suppliers in terms of sustainability and carbon performance
- Begun to review the available data from our travel provider for non-owned business travel including flights
- Introduced alternative sustainable transport options to reduce the number of staff driving to site.

We recognise that Scope 3 emissions form a significant proportion of the University’s impact and will be working with suppliers to establish shared responsibility for their reduction.

What happens now?

The new target gives us a ‘carbon budget’ for each year. We must reduce our emissions to meet this budget in order to do our part in limiting warming to 1.5°C. We are already taking the following action:

- Our work to increase energy efficiency across the estate is underway. In each building we have to make an average 15 per cent reduction in our energy demand in order to meet the target. The sustainability and EFCS teams are working on optimising heating ventilation and air conditioning systems with the help of key stakeholders
- We have begun negotiations with our energy broker on a new deal that would see the University commit to the long-term purchase of electricity from a renewable energy generator. We are working to have this deal in place by early 2021
- We are preparing a funding case to significantly increase the proportion of our energy that is generated from on-site renewable sources. A case will be presented in mid-2020.

Progress against the target will be measured and our performance data will be made available to students and staff. The University published its first annual sustainability report in March this year, which included carbon performance. Progress will also be reported to the Executive Sustainability Steering Group, Infrastructure Management Board and Executive Board.