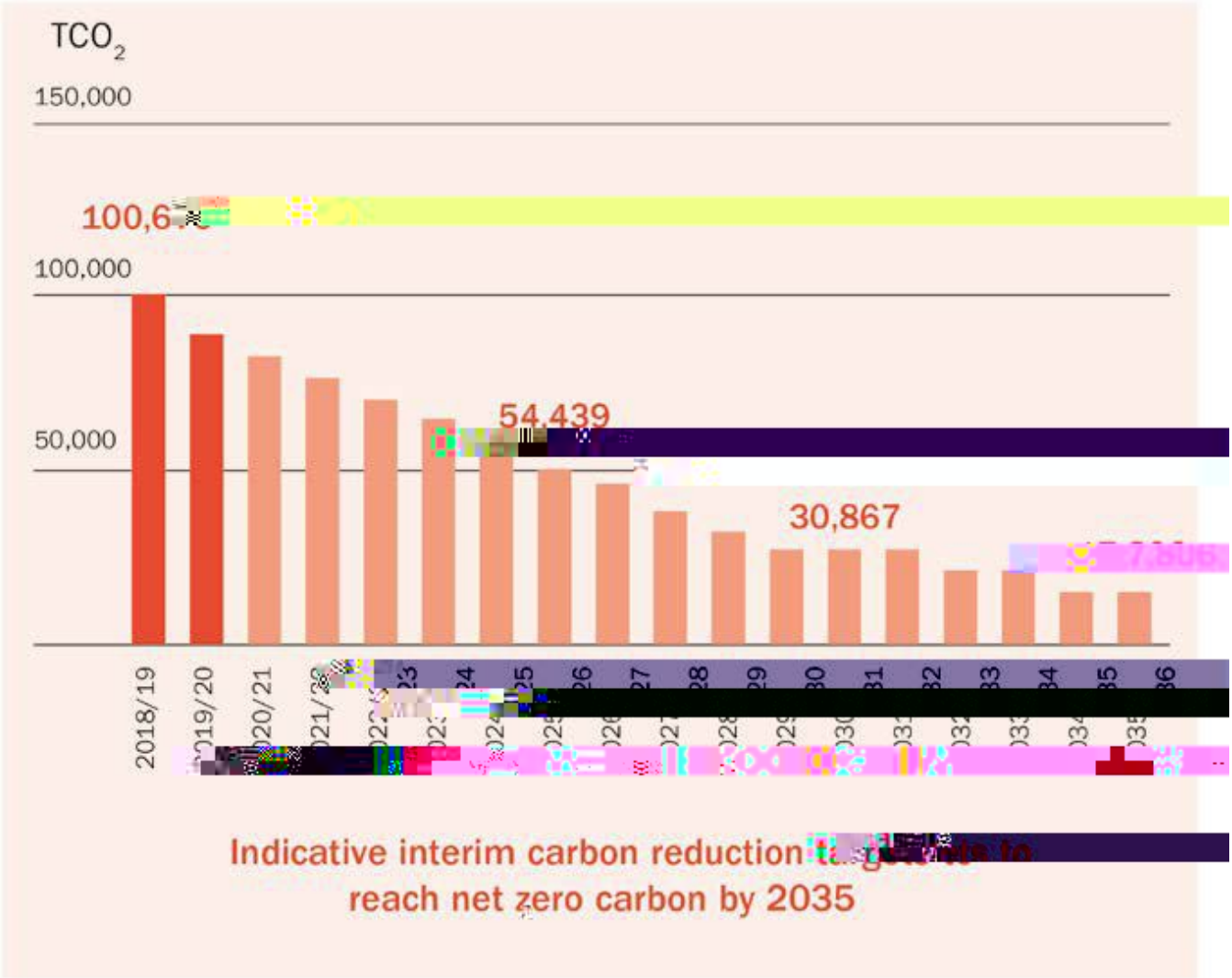
University of Sussex


TCO2
150,000
100,000
50,000
54,439
30,867
2018/19
2019/20
2020/21
Indicative interim carbon reduction
reach net zero carbon by 2035

Carbon Reduction Principles to Achieve Net Zero by 2035

To reach net zero , we need to take far reaching and transformative action We have set out 5 key principles where we need to take action.

Excellent Carbon Accounting

- The quality of our carbon accounting will only be as good as the quality of the data that we are collecting to inform it.We will put in

Carbon Reduction Action Plan

The University Sustainability Strategy was accompanied by an Action Plan that shows how we will reach net zero at a strategic level.

The following timed commitments were correct at the point of publication in June 2021. Please be aware that the target dates associated with each action are subject to review and subject to amendment annually by the University Sustainability Committee. This is to ensure that we are capitalising on opportunities to bring forward or defer progress in particular areas to maximise impact and use of resources as situations change.

Work Package 1: Energy Efficient Campus

We know that reducing overall energy consumption is usually the most cost-effective way of saving carbon and reaching net zero. That is why improving the energy efficiency of our campus is the absolute bedrock of our approach to deliver net zero.

The table below sets out actions we will take:

Action	Date to be completed by
Undertake an initial high-level audit of the energy efficiency of all of	

This process requires a change in mindset from thinking about what the cheapest product to buy now in today's world as opposed to what is going to be most cost effective over the life of this strategy. It is about asking what to invest in now to prevent us from having to pay for expensive carbon offsetting and higher energy costs in the future because we did not decarbonise early enough.

The table below sets out actions we will take, but we cannot predict where technology will be by then to know all the future decarbonisation avenues available to us. However, we have identified

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Work Package 4: Sustainable Supply Chain

Over 60% of our current emissions come from our supply chain. Therefore, making our procurement more sustainable is the single biggest step that we can take to achieving our ambitious organisational target of being net zero by 2035.

The table below sets out actions we will take to address this critical area:

Action	Date to be completed by
Embed use of our Procurement Framework to select the suppliers that more closely share our sustainability values.	Ongoing
Collaborate and learn from others in relation to best sustainable procurement practices.	Ongoing
Assess the quality of our sustainable practices against the ISO 20400 Sustainable Procurement Standard.	August 2021

Work Package 5: Active and Sustainable Commuting

Promoting active travel is important because it will both reduce our emissions and contribute to our staff and students' health and wellbeing. We estimate that commuting to and from campus made up 9% of our carbon footprint in 2018/19.

The table below sets out actions we will take:

Action	

Cost of Inaction

We know from the analysis underpinning our net zero targets estimated that the cost of achieving net zero by 2035 would be approximately £13.8m cheaper than if we delayed achieving it until 2040. We also know that energy prices are only going to rise, strengthening the businesses case for greater investment in renewable energy and more efficient buildings.

In addition we predict that if we don't take action now to reduce our carbon footprint, it could increase by almost a further 50% by 2035.

We realise that urgent action needs to be taken immediately.

To support delivery of the plan we have already planned investments totalling £660,000 to complete the first stage of upgrading our Building Energy Management Systems.

Once we have completed the audit and feasibility studies (as set out in actions for Energy Efficiency and Decarbonised Energy Infrastructure Work Packages) we will make appropriate business cases to the University's Capital Programmes Committee and external funders, such as the Government's Public Sector Decarbonisation Scheme, to obtain the budget to begin to pay for the necessary capital infrastructure investments by December 2026.

In addition, the University has an Education and Research Investment Programme (ERIP), which will deliver vital investments totalling £200 million over the next five years, and a proportion of the ERIP funds will support sustainability initiatives to deliver against the commitments and actions set out in this document.

Governance

All of the actions in this plan are replicated in the University's Sustainability Strategy, and therefore are subject to the same Governance arrangements.

In summary:

- All of the actions in the strategy will be implemented in partnership between our dedicated Sustainability Team and a named Senior Leader within the University
- The University Sustainability Committee, chaired by the University Vice Chancellor at the time the Sustainability Strategy was published, will also be responsible for formally reviewing the action plan once a year in the spring term and suggesting any amendments to targets or sub-targets on an annual basis, which will be made public on our website.
- The Sustainability Committee will make recommendations to the Capital Infrastructure Programmes Board for new sustainability-related investments and infrastructure commitments based on robust business cases
- Our Council (the highest-level decision-making body at the University) will receive a report on our key performance indicator target in relation to achieving net zero each year and will hold the University to account on making good progress against the action plan

ANNEX A:

Data Methodology

To establish our initial carbon footprint, we used a mixture of both actual and estimated data.[2]

Source	Details	Methodology
Gas	HESA	Half hourly meter read data used - Kwh
Fuels	Vehicle fuel 6 vehicles)	Company Car estimated annual mileage divided by MPG to calculate fuel consumption by litre.
Electricity	HESA	Half hourly meter read data used - Kwh
Business Travel	Expensed travel and train bookings via booking partner	Obtain expensed travel (train, taxis, hotels) via Procurement Spend by category, apply Quantis conversion factors to obtain emission estimates.
Staff & Student Commuting	Commuter Travel Survey	Based upon the 2018 Sussex Estates and Facilities travel survey
Supply Chain	Procurement Spend	Estimates from supply chain spend by category vs Quantis US$ conversion factors
Waste	HESA	Waste Stream Generated by Weight - Tonnes
Water Supply	HESA	Water Bills - m3
Waste Water Treatment	Water Supplier	Water Bills - m3
Investments	Joint Ventures, Equity Investments, Associated Companies, Debt Investment, Subsiders	Investment value (UoS £) against type of investments i.e. industry classification (manufacturing, medical, real estate, etc). Application of Quantis emission factors against value vs industry.
Investments	LionTrust Investments	Investment value (UoS £) against type of investments i.e. industry classification (manufacturing, medical, real estate, etc). Application of Quantis emission factors against value vs industry.
Transmission and Distribution (HESA electricity)	Electricity Supplier	Half hourly meter read data used - KWh
East Slope Housing Development	Energy Consumption	Monthly submeter reads used - KWh

[2] The commitments set out in the Excellent Carbon Accounting section of our Sustainability Strategy set out our plans for improving our carbon management data so that we can rely on more actual data and less estimates and assumptions.