

Oxford University Environmental Sustainability Strategy and our plans to reach Net Zero Carbon by 2035

Harriet Waters, Head of Environmental Sustainability

Tom Yearley, Head of Energy and Carbon

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Environmental Sustainability Strategy



Environmental Sustainability Strategy

Two Targets

Net zero
carbon

Net gain in
biodiversity

Both by
2035

Four Enablers

Governance

Reporting

Funding

Offsetting

Ten Priorities

Research

Curriculum

Carbon emissions
from buildings

Biodiversity

Sustainable food

Sustainable resource
use

International travel

Local travel

Investments

Learning from the
pandemic

OUR PURPOSE

The Environmental Sustainability team advises, enables and supports the University community to achieve its environmental strategic goals of net zero carbon and biodiversity net gain.

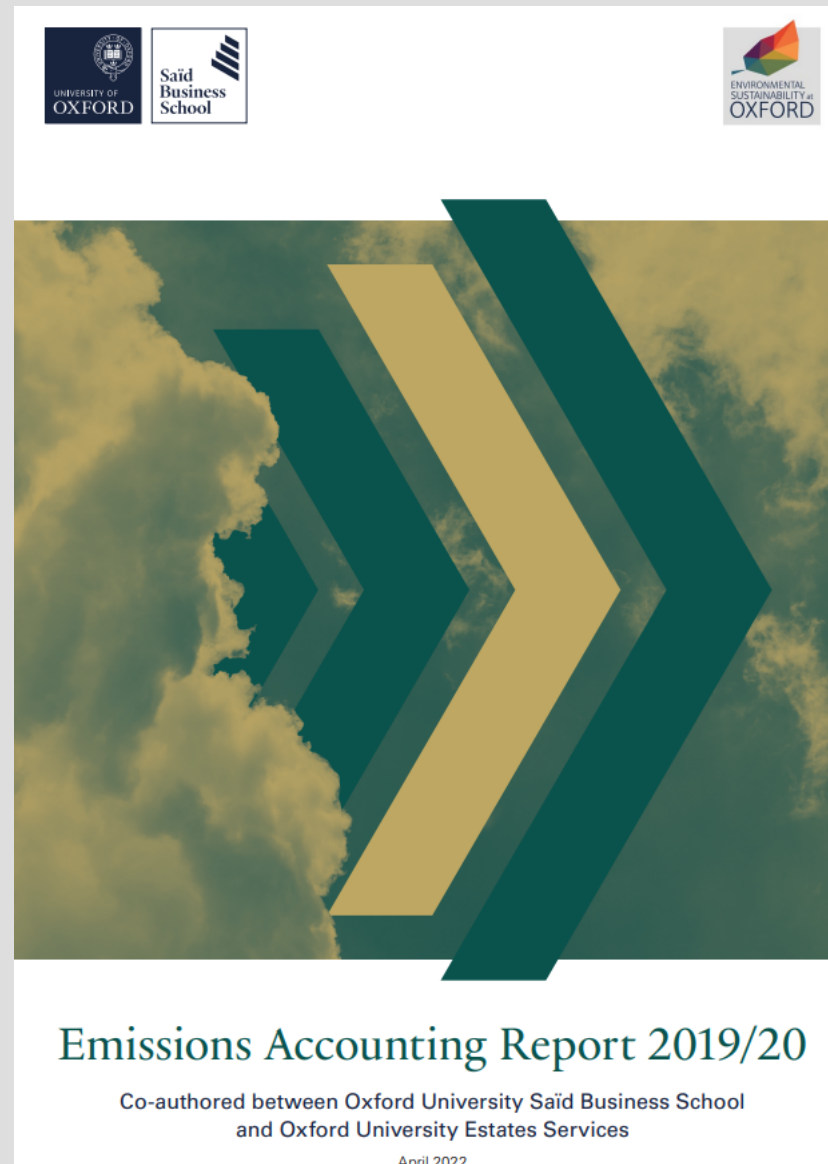


Implementing the Environmental Sustainability Strategy

- Environmental Sustainability Sub Committee (ESSC) meets regularly, along with focused sub-committees
- Regular measuring and reporting on carbon emissions and biodiversity impact
- Oxford Sustainability Fund
- Offsetting conversations



Reporting – Carbon Accounting



Biodiversity Net Gain











Analysis: the biodiversity footprint of the University of Oxford

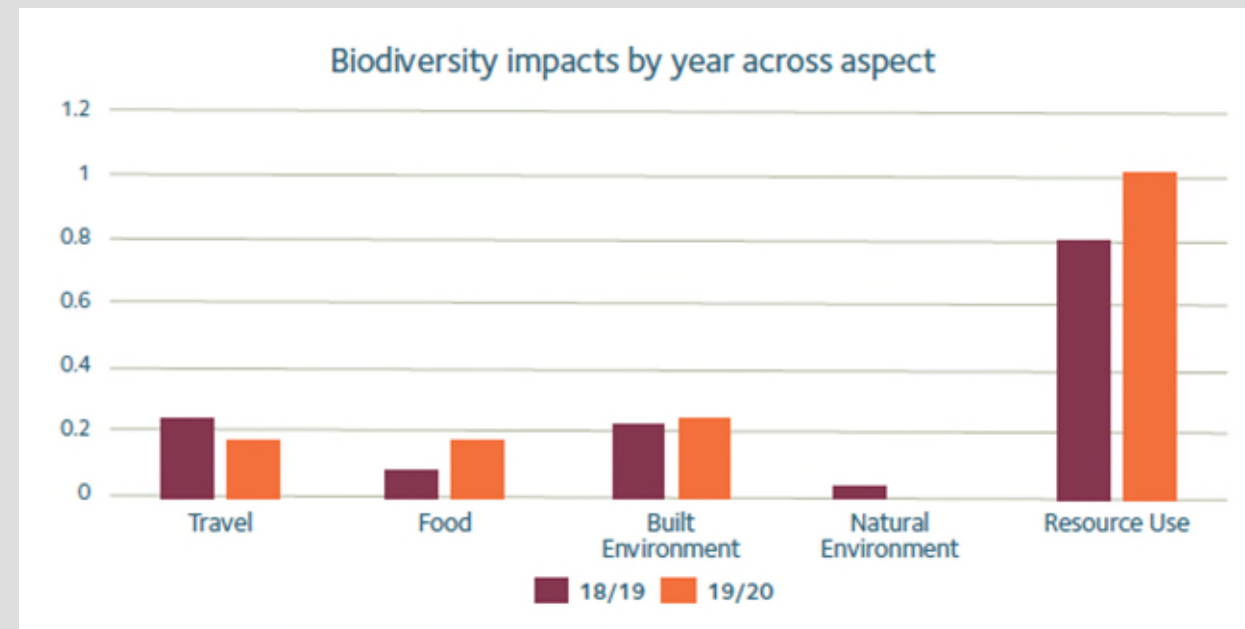
Every large organization should plot a path to net gain in biodiversity – here's how.

[Joseph William Bull](#) , [Isobel Taylor](#), [Elizabeth Biggs](#), [Henry M. J. Grub](#), [Tom Yearley](#), [Harriet Waters](#) & [E. J. Milner-Gulland](#)



Biodiversity impact

<i>Biodiversity loss (local species/yr)</i>	Tier I	Tier II	Tier III
Travel			
Food			
Built environment		[0]	
Natural environment	[0]	[0]	
Resource Use & Waste	[0]	[0]	



Ten priorities

Priority	Examples of action
Research	Support interdisciplinary sustainability research teams in responding to major funding opportunities
Curriculum	Support new interdisciplinary environmental courses
Carbon emissions from energy consumption	Introduce a building retrofit programme to maximise energy efficiency
Biodiversity	Measure, report and compensate for the damage to biodiversity caused by the University's operations and supply chain
Sustainable Food	End the use of bottled water and ensure tap water is freely available to all staff, students and visitors.
Sustainable Resource Use	Set a target to increase the recycling rate, potentially using a building recycling league table
International Travel	Develop and implement a Travel Policy which incorporates a Travel Hierarchy
Local Travel	Reduce the need for staff to travel by supporting remote and agile working
Investments	Actively engage with fund managers using the Oxford Martin Principles for Climate-Conscious Investment
Learning from the pandemic	Support the New Ways of Working group with data and recommendations for more flexible ways of working and estate efficiency

International Travel



TRAVEL HIERARCHY

1



Avoid Travel

Consider whether travel is necessary. Is virtual attendance a viable option?



When travel is unavoidable

2



Reduce Travel

Consider these possibilities:

- Combine trips
- Take fewer trips
- Choose less distant conference locations
- Minimise group size

3



Travel without Flying

Consider alternatives for travel within the UK/Europe:

- Rail (including sleeper trains)
- Coach
- Ferry
- Car(share)

4



Fly

When alternatives are not possible, direct economy class flights are the least carbon intensive.

LEARN MORE

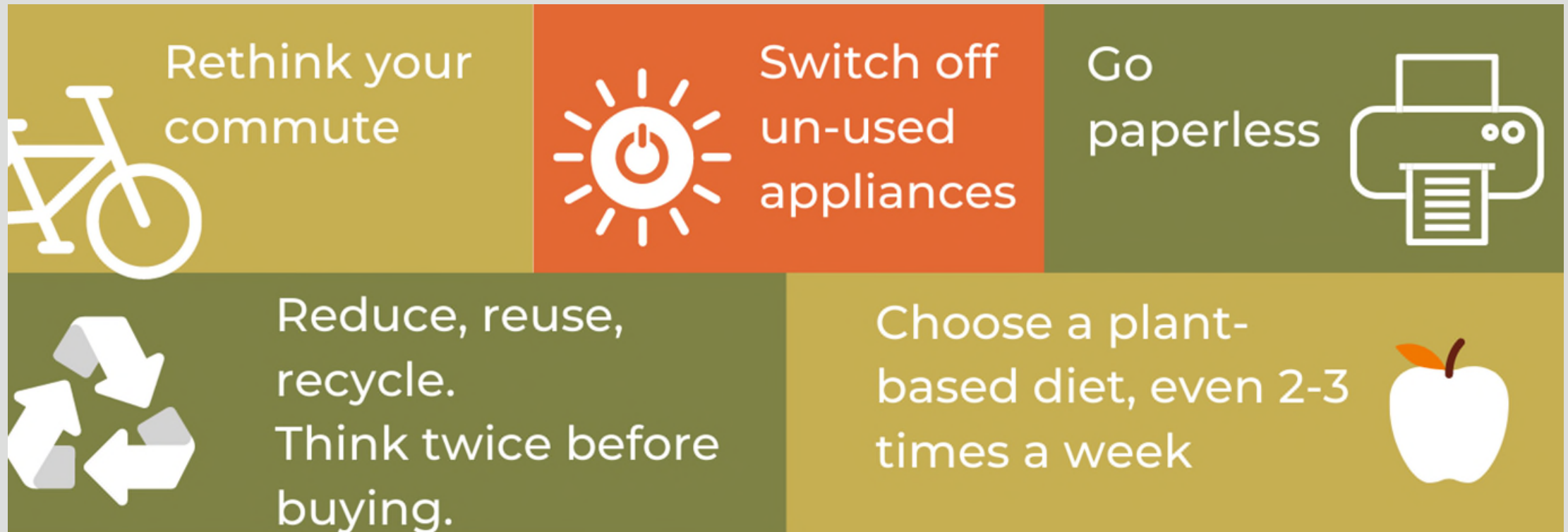
<https://staff.admin.ox.ac.uk/travelling-for-work>

Sustainable Resources



Everyone has a personal contribution to make (staff)

With 24,000 students and 14,000 staff members, our small daily acts make a big difference:



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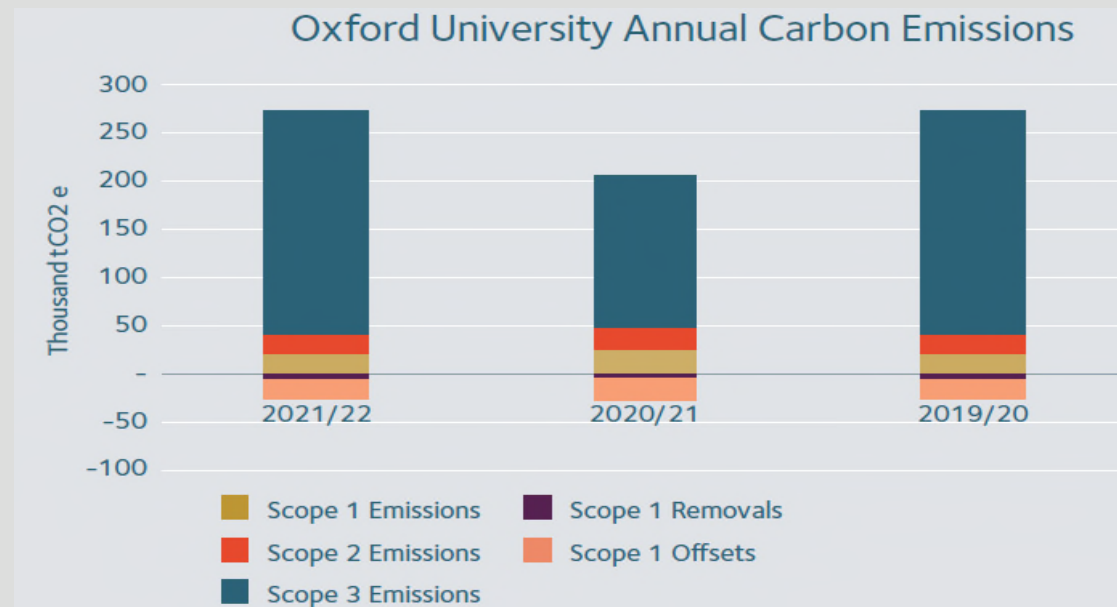
Local travel

Investments

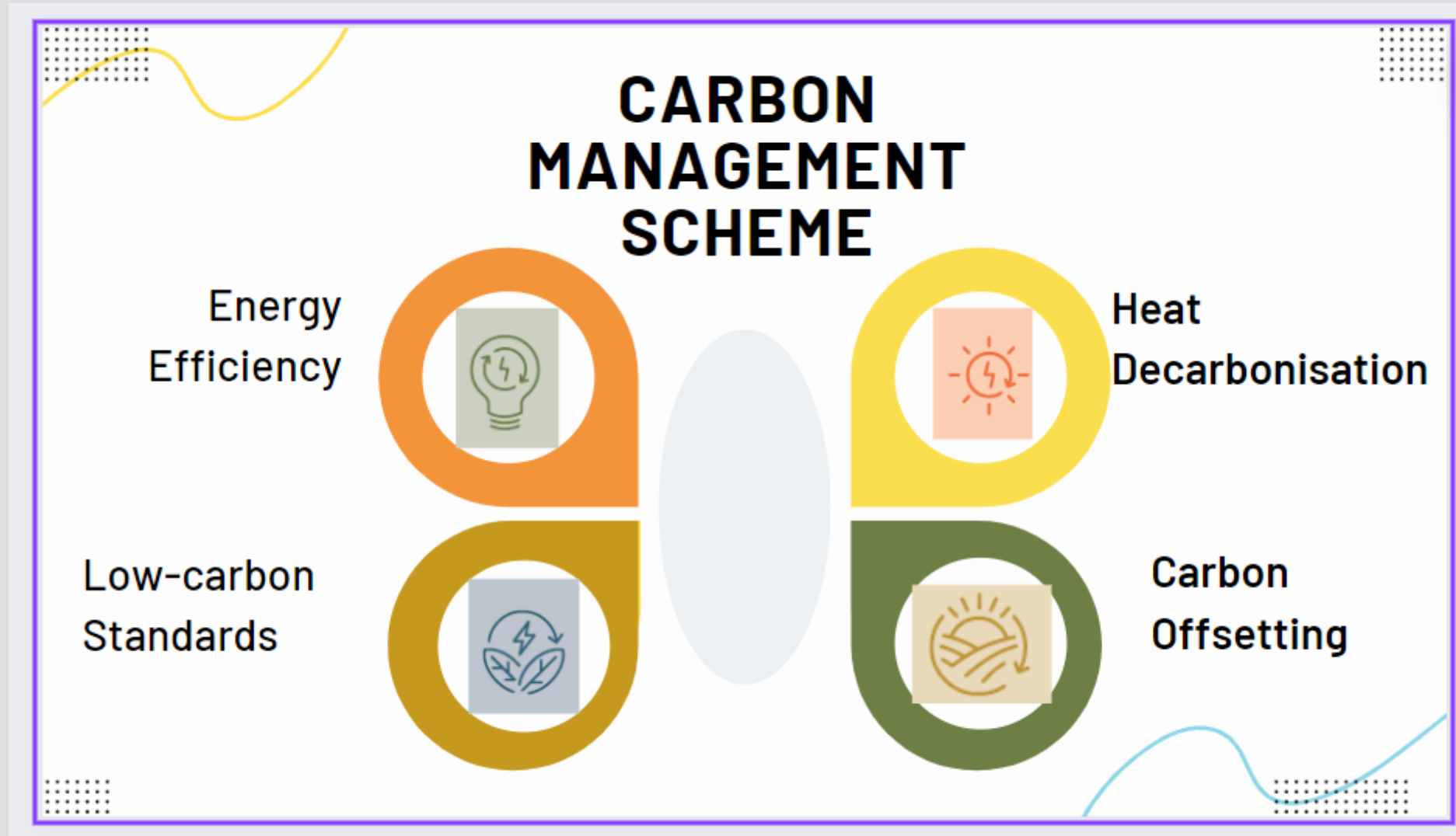
Learning from the
pandemic

Carbon reporting

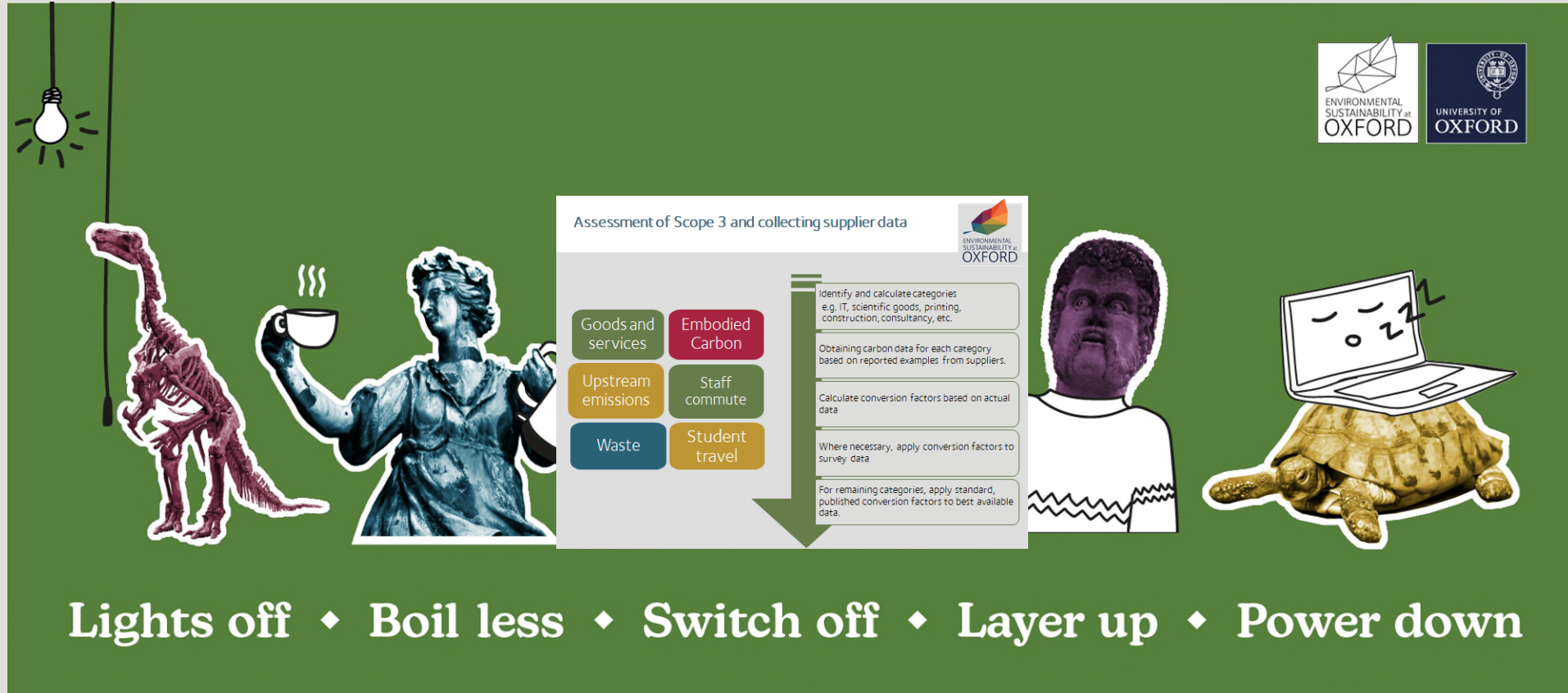
University of Oxford Carbon Emissions (tCO ₂ e)	2021/22	2020/21	2019/20
Scope 1 Emissions	19,854	25,009	18,097
Scope 1 Removals	- 4,534	- 4,534	- 4,534
Scope 2 Emissions	20,737	21,487	22,883
Scope 2 Offsets	- 20,737	- 21,487	- 22,883
Scope 3 Emissions	230,823	158,406	229,356
Total Gross	271,414	204,901	270,336
Total Net	246,143	178,881	242,919



Net Zero Carbon



Carbon Emissions from Buildings



Environmental Sustainability at OXFORD

UNIVERSITY OF OXFORD

Assessment of Scope 3 and collecting supplier data

Goods and services

Embodied Carbon

Upstream emissions

Staff commute

Waste

Student travel

Identify and calculate categories e.g. IT, scientific goods, printing, construction, consultancy, etc.

Obtaining carbon data for each category based on reported examples from suppliers.

Calculate conversion factors based on actual data

Where necessary, apply conversion factors to survey data

For remaining categories, apply standard, published conversion factors to best available data.

Lights off ♦ Boil less ♦ Switch off ♦ Layer up ♦ Power down

Be energy friendly

Save energy. Save the environment.

ox.ac.uk/energy-friendly

Energy Efficiency

The old laboratories were retrofitted, including:

- All LED lighting throughout
- Solar gain blinds on the roof



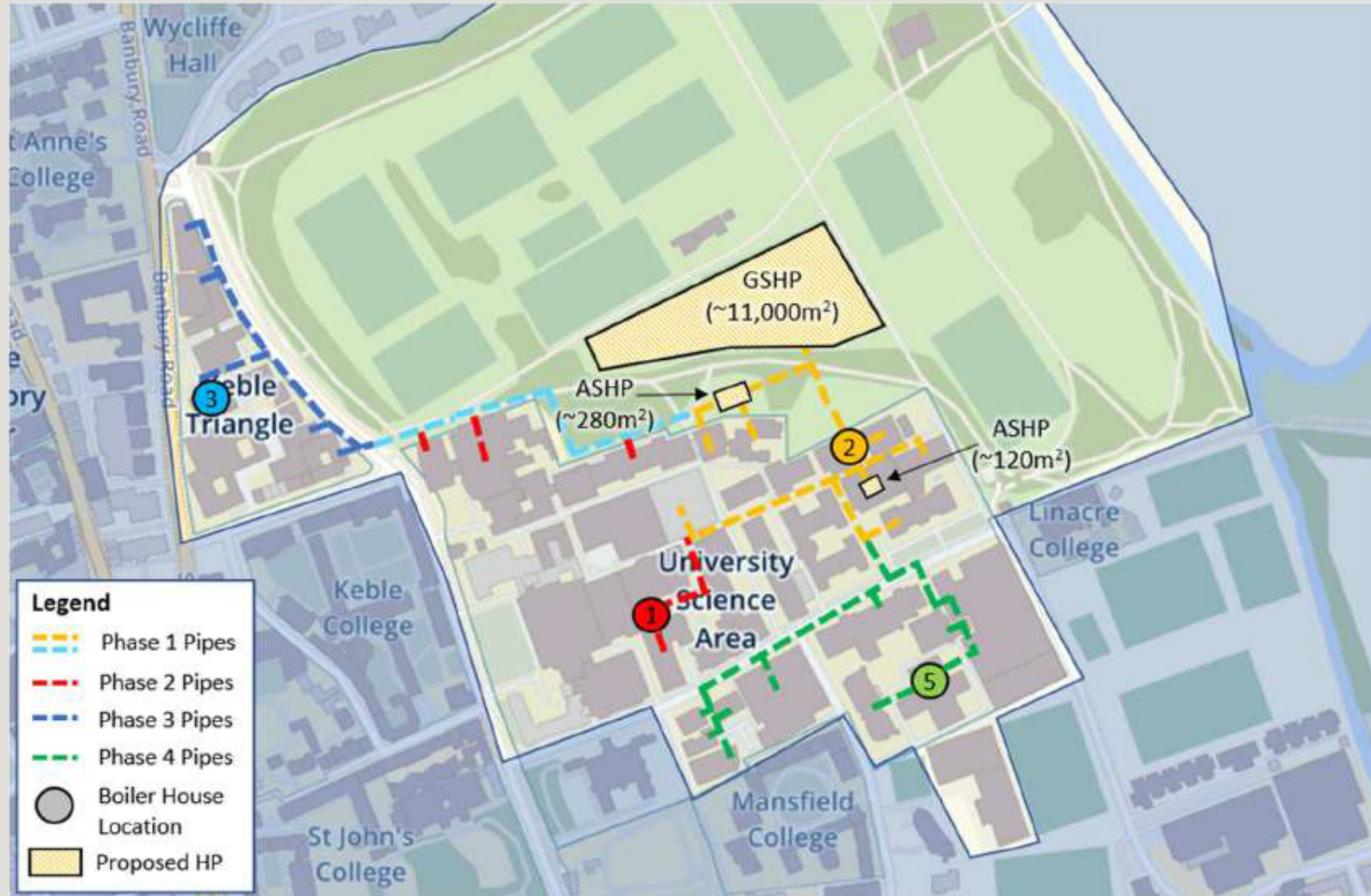
Replacing constant air velocity fume cupboards with variable air volume (so less air is removed when the sash is shut) can save £3,000 per annum

Heat Decarbonisation

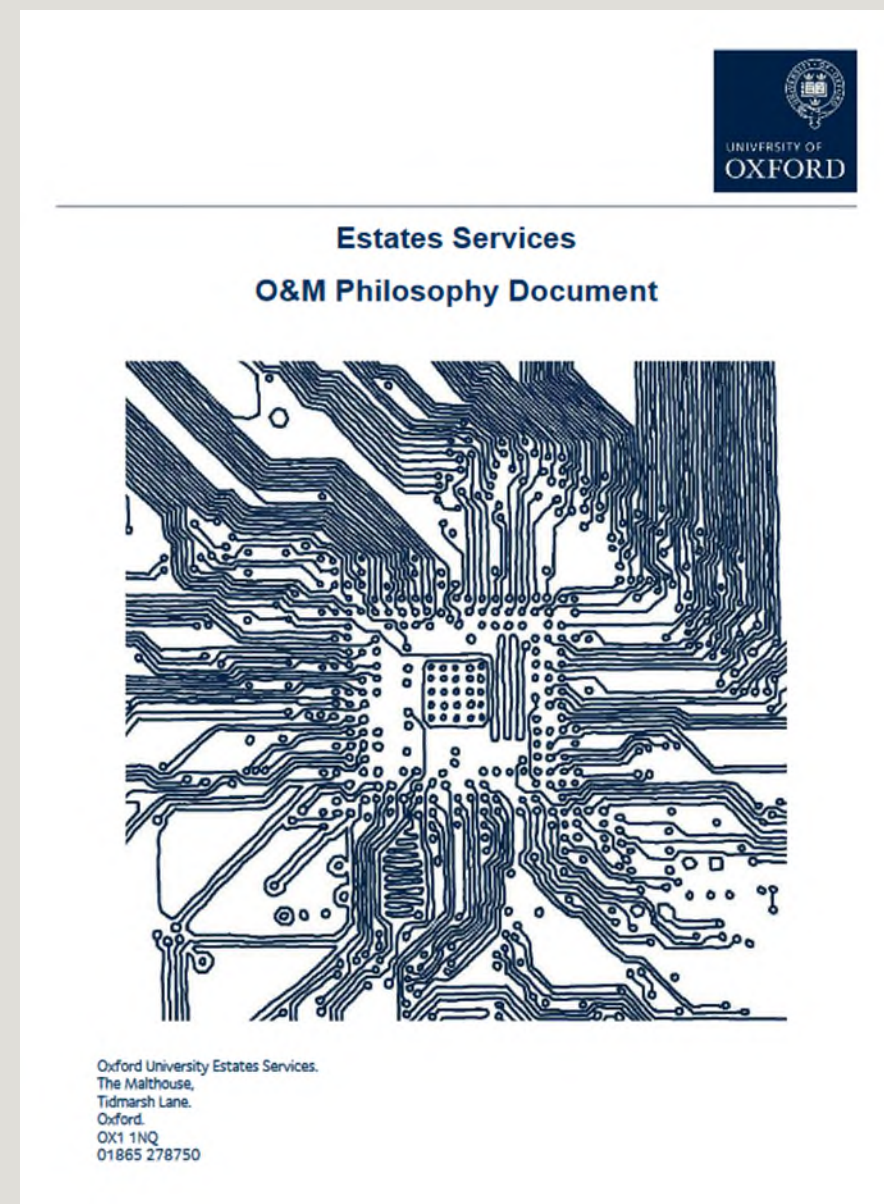
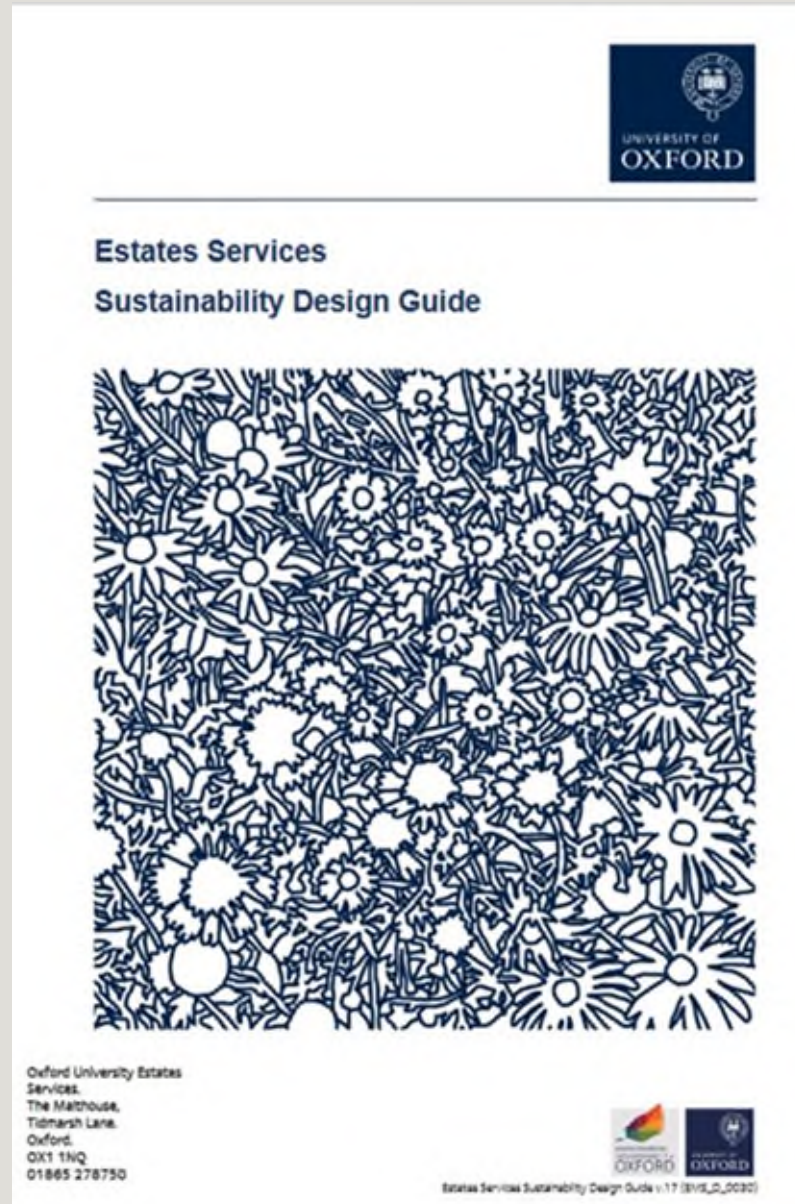
Last year, we burnt 107GWh natural gas across the functional estate to heat air and water.

Technology is rapidly advancing towards the electric heating.

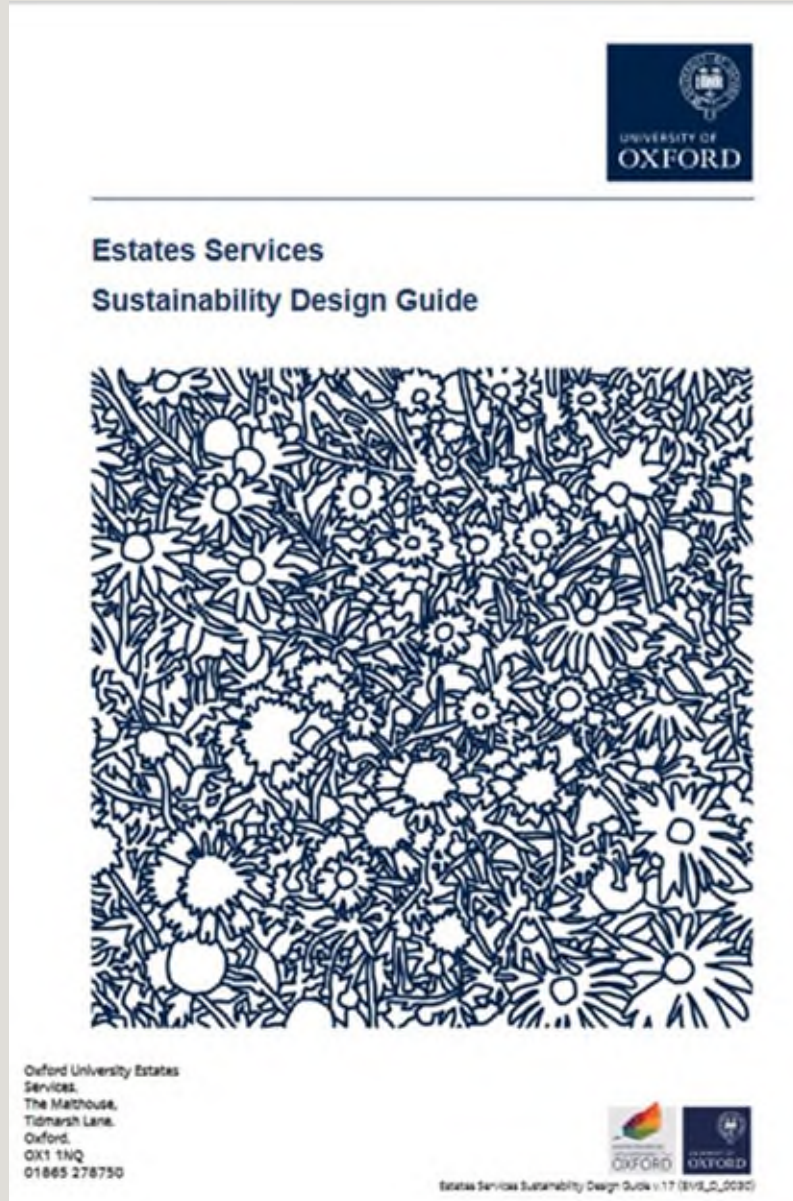
As the power grid decarbonises, can the University take advantage and remove carbon from heat?



Low Carbon Standards

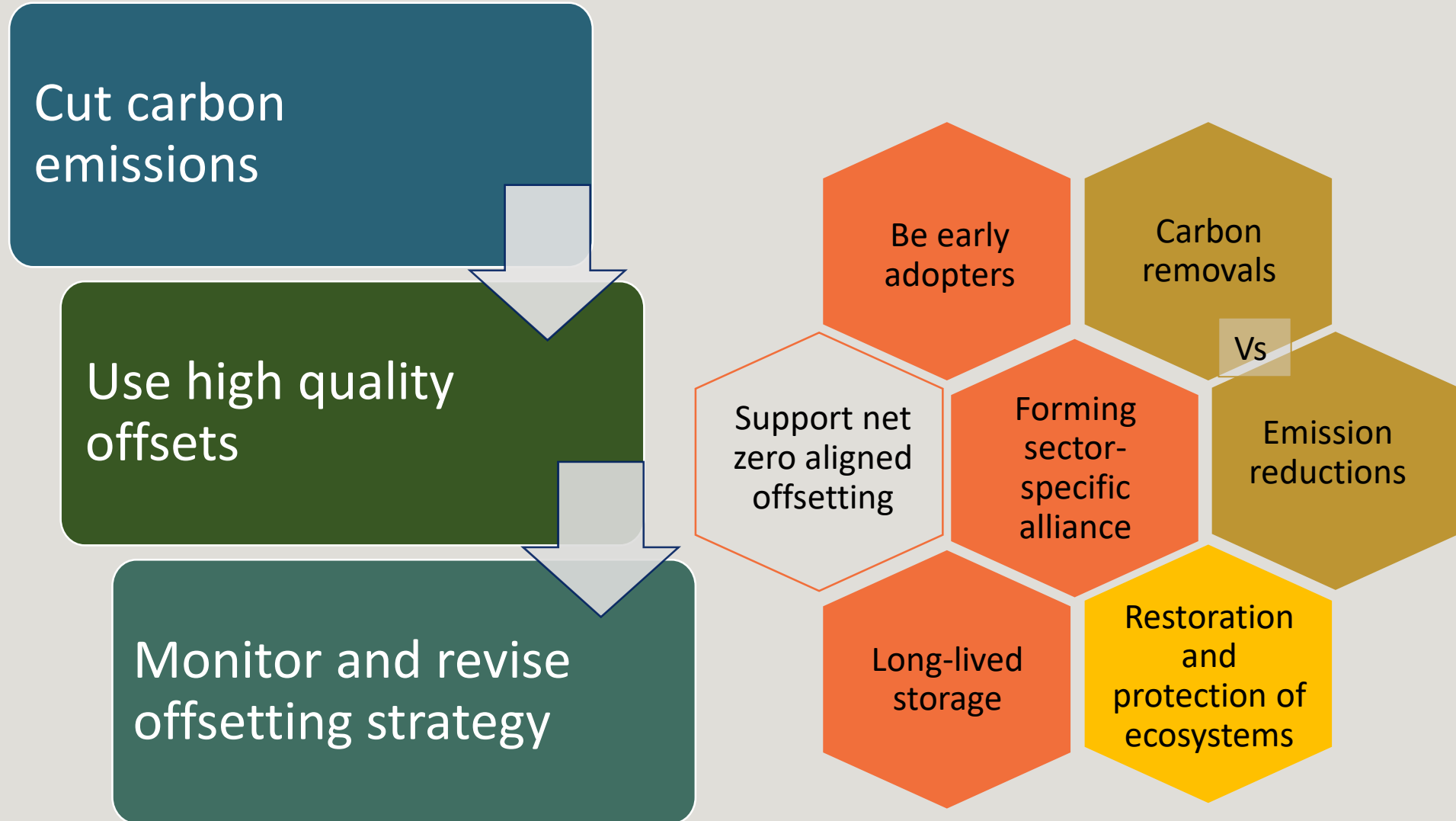


Low Carbon Standards



1. Addressing the climate crisis by reducing operational energy and embodied carbon
2. Encourage consistent application of standards and methodologies
3. Providing greater clarity for refurbishment projects
4. Update biodiversity requirements in line with the Environmental Sustainability Strategy and best practice
5. Define stepped and specific derogation standards where necessary

University of Oxford offsetting principles



Any Questions?



ENVIRONMENTAL
SUSTAINABILITY at
OXFORD