Carbon Sequestration Policy

1. Introduction

The University of East London recognises that unavoidable carbon emissions will be left after the adoption of its sustainability ambitions, and that these must be accounted for in order to meet our Net Zero goals. This policy seeks to lay out the method by which these residual emissions will be dealt with.

The Carbon Sequestration Policy forms part of the University's approach to tackling sustainability, as defined by our Sustainability Policy. The University is committed to reducing its carbon emissions in line with a Net Zero target of 2030, and aims to become the most sustainable university in London.

2. Definitions

Carbon sequestration is the process of capturing and storing atmospheric carbon dioxide. It can take place via natural processes such as tree growth, via the application of technologies (e.g. direct air capture and storage (DACS)), or a combination of natural and technological processes (e.g. bioenergy with carbon capture and storage (BECCS)). Activities that increase the amount of carbon sequestration are also referred to as 'removal enhancements'.

Carbon offsetting generally refers to the practice of purchasing emission reductions or removal enhancements that occurs outside the greenhouse gas (GHG) inventory boundary of an entity in order to compensate for emissions occurring within the entity's GHG inventory boundary.

Carbon sequestration can be undertaken within an entity's GHG inventory boundary in order to achieve a net zero inventory (i.e. the amount of sequestration equals the amount of emissions), or it can constitute an offset, if the removal enhancement occurs outside the GHG inventory boundary of the reporting entity. Direct carbon sequestration is removal that takes place within an organisational inventory boundary.

3. Approach

The University is committed to becoming Net Zero by 2030, including a wide scope of emissions. We plan to reduce the University's carbon footprint as significantly as possible by this date, through a wide number of actions and policies, and then consider carbon sequestration for our remaining emissions.

In accounting for our carbon emissions, we will follow best practice by generating a 'gross carbon' number for our in-scope emissions, and then a 'net carbon' number which will include the subtraction of any carbon sequestration deemed acceptable. Our Net Zero 2030 target is built on the understanding that we will require to invest in carbon sequestration to achieve it.

In deciding the scope of net emissions, our approach is based on the following criteria:

- Does the approach follow accepted best practice guidelines?
- Does the approach encourage tackling emissions at source as a priority and only sequester when all other avenues have been explored?
- Does the approach allow for deep engagement with the climate issue?
- Are the emissions savings genuinely additional, and not double counted?
- Is the approach credible for staff, students, and stakeholders?
- Is there any uncertainty as to whether emissions are actually reduced?
- Does the approach consider wider sustainability issues including pollution, ecological impact and social impacts?
- Can we be assured the approach generates long-term certainty over continued carbon reductions (through a range of carbon sequestration approaches)?
- Does the approach minimise 'cash out of the door' paid to others where savings cease as soon as annual payments cease?
- Does the approach allow the University the opportunity to secure additional benefits and activities, e.g. teaching, research, student experience, community engagement, policy influence?

Figure 1 provides a summary of the two approaches (direct carbon sequestration and carbon offsets) against these criteria.

Criterion	Direct carbon sequestration	Carbon offsets
Follows emerging best practice?	Yes	No
Encourages tackling emissions at source?	Potentially, as long as action is taken across all areas	Tends to suggest one payment 'covers all' and does little to engage broader community or consider wide questions
Allows for deep engagement?	Yes, via ongoing relationship	No, usually transactional
Savings genuinely additional?	Yes, with long-term commitment	Unclear and difficult to prove
Credible to staff, students and stakeholders?	Yes, though communication needs to be correct to explain the concepts involved	Unlikely based on industry experience
Uncertainty over reductions?	Minimised to the extent possible	Considerable – evidence suggests guarantees for the long-term are not always very credible
Considers wider sustainability questions?	Yes – can ensure the approach does	Sometimes – depends on the offset standard/project
Assurance for the long-term?	Yes – can control via ownership or long-term agreements	Very difficult to be assured – contractual mechanisms mean we are 'at a distance'
Minimises cash out of the door for transactional relationships?	Yes – may be more expensive in short term but develops assets and experience over time	No – benefits flow from a cash transaction and cease as soon as payments cease

Figure 1: Comparison of carbon sequestration and offsets

Taking this into account, it is clear that the only defensible position is to adopt an approach to meeting our net zero target using direct carbon sequestration alone – that is, we will only pursue approaches within our own scope of activities, either directly controlled or in active partnership. Our approach therefore rules out transactional, market based approaches that others (including other Universities) may adopt.

The implications of this approach are to rule-in certain approaches and rule-out others.

- Ruled in:
    - Direct ownership or active partnership of forests, peatlands etc.
    - Direct ownership or active partnership of windfarms, solar facilities, etc.
- Ruled out:
    - Power Purchase Agreements (PPAs) for wind and solar facilities
    - Market based payments for green power tariffs
    - Market based payments for green gas tariffs
    - Investment-led purchase of shares or funds in green power or forests

Note that ruling these out for the purpose of meeting our emissions targets does not necessarily mean we do not participate – for example, we will continue to purchase grid electricity using a green tariff.

The University commits to developing a detailed Carbon Sequestration Plan to follow this Policy, outlining the methods by which carbon sequestration activities will be carried out.