

Carbon Reduction Strategy

Vision

Oxford Brookes will be a sector leader in energy efficient, low-carbon operations and behavioural practices.

Key drivers of energy and carbon

Carbon emissions can be viewed as having three key drivers as summarized below. Our carbon reduction strategy consists of a combination of reduction measures related to each driver.

1. **Energy Demand** – The energy services required for our buildings (thermal comfort, lighting, IT, etc.)
2. **Energy Efficiency** – The energy efficiency of the equipment/kit used to provide energy services
3. **Energy Source** – The amount of carbon in the energy sources we use (carbon intensity).

Objectives

Each of the key drivers of carbon emissions has a related objective as follows:

1. Optimise space use and refurbish existing buildings and use sustainable design practices for new buildings.
2. Optimise use of existing energy-consuming kit (heating, lighting, etc.) and upgrade to more efficient kit.
3. Switch from electricity to (lower carbon) natural gas and invest in on-site renewable energy.

The most cost-effective way to cut our carbon emissions is to first consider opportunities to reduce the demand for energy services – for example, making better use of our existing building space before creating new buildings. Once this has been done, we focus on maximising the energy efficiency of the kit used to provide energy services (heating, lighting, etc.). Finally, we consider the use of low carbon energy sources – for example, using (lower carbon) natural gas in place of (higher carbon) grid electricity and the use of solar energy. This approach is summarised in the carbon reduction hierarchy below.

Carbon Reduction Hierarchy

