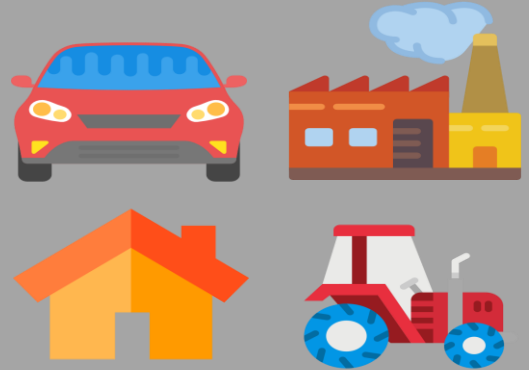
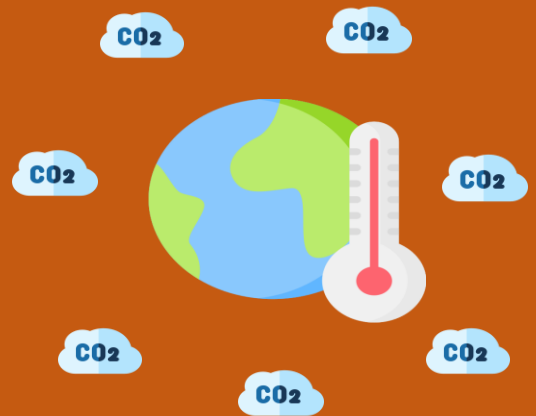


What does 'net-zero carbon emissions' mean?

1. Modern human activity relies on **energy**. Homes, cars, businesses and industries require energy to function. **Fossil fuels** such as oil and gas are used to produce energy but also produce emissions of **carbon dioxide (CO₂)** into the atmosphere as a waste.



2. **Carbon dioxide** is a greenhouse gas. This means that when it is released into the atmosphere, it contributes to the **greenhouse effect** – that is, it traps in the heat, creating an increase in temperature on the planet. This is often referred to as **global warming** or **climate change** and it has a range of negative consequences for the environment, biodiversity and human life.



3. 'Net-zero emissions' means achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere. So if Lambeth achieves net-zero it means its overall impact on the level of CO₂ in the atmosphere will be neutral – or 'zero.' Scientists consider this a critical goal in tackling the climate crisis.



4. The **UK** became the first major economy to legally commit itself to reach **net-zero** carbon dioxide emissions by **2050**. The more places that can achieve net zero locally – and the sooner they can do it – the faster the UK will reach net-zero too. Lambeth Council has set a target to reach net-zero emissions by 2030.

**UK net-zero
2050**

**Lambeth net-zero
2030**

Achieving net-zero would require changes in the way we live, the products we consume, the industries we develop and the technology we use.

There are different initiatives that can contribute to achieving net-zero. Some of them focus on reducing the emissions of carbon dioxide. Other initiatives focus on reducing the carbon dioxide that is already in the atmosphere. For example:



More efficient technology that uses less energy and therefore emits less carbon dioxide.



Changes in behaviour, like eating less red meat or cycling more often.



Using renewable energy sources to produce electricity.

The transport, domestic and commercial sectors are each involved in achieving net-zero emissions.

For example, this graph shows the carbon dioxide emitted by households in the past, against what it would need to be in 2050, to achieve net-zero in the UK.

Household emissions in 1990, 2017 and 2050

Annual emissions, kilogrammes of CO₂

■ Heating ■ Transport ■ Electricity
■ Aviation ■ Waste ■ Diet / Agriculture

