Why has Lambeth Council declared a climate emergency?

In Lambeth, climate change will primarily lead to:

Increased risk of flooding

Increased air pollution

Intensification of the urban heat island effect

Urban heat island effect = where the urban environment leads to heat absorption and trapping, resulting in higher temperatures

In 2019 Lambeth declared a **climate emergency** and set out their response to the climate crisis.

Climate emergency = when urgent action is required to reduce or halt climate change and the potentially irreversible environmental damage resulting from it

Total emissions in Lambeth in 2017 were

909.1

kilotonnes ($ktCO_2$) of carbon dioxide (CO_2)

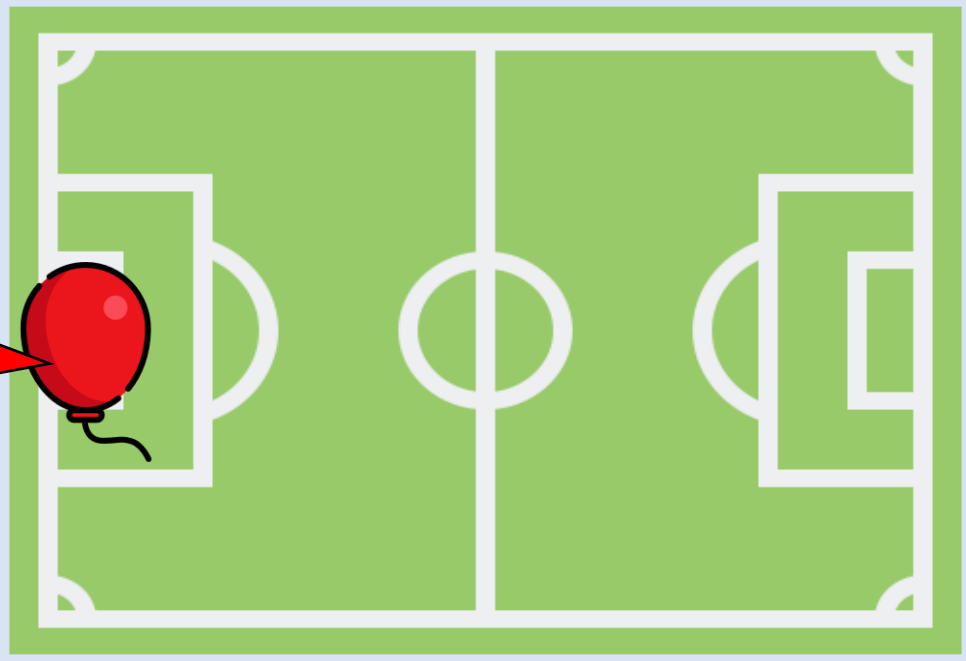
Although a reduction of 35.7% since 2005, more needs to be done

How much is 909.1 kilotonnes of carbon dioxide?

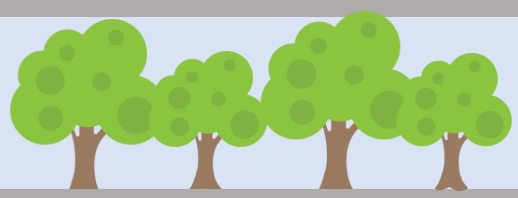
909.1
kilotonnes (ktCO2) of carbon dioxide (CO2)

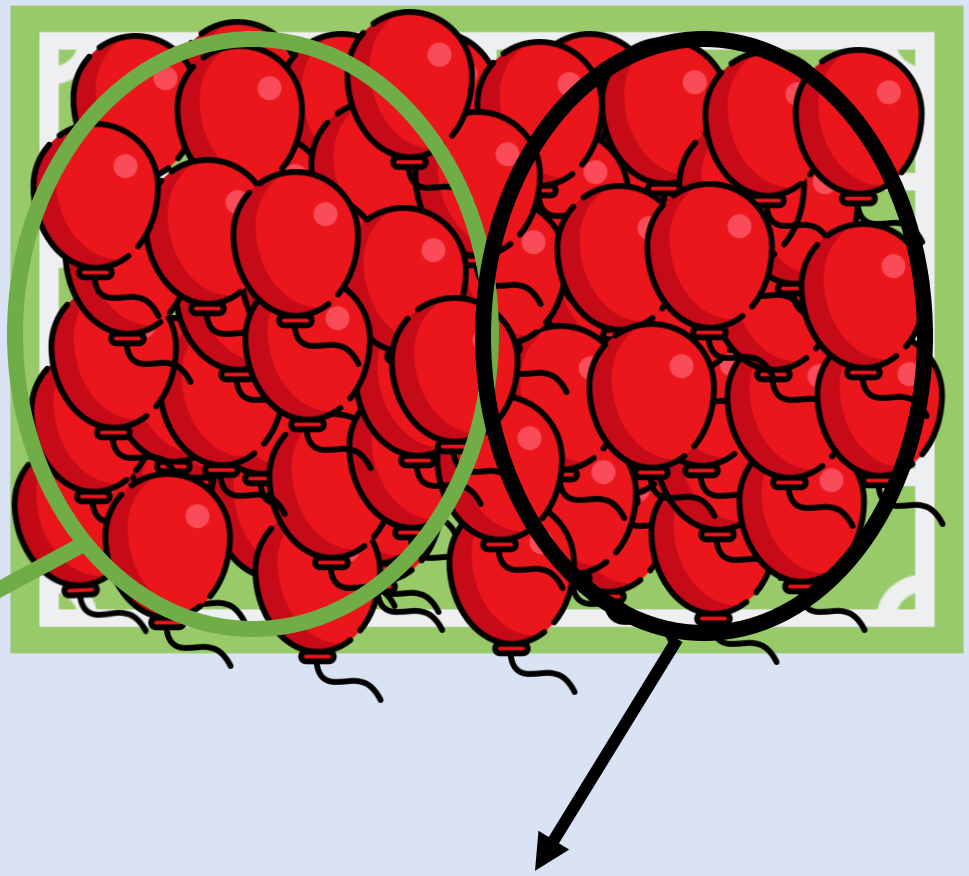
Picture a football field, and then imagine a round balloon with one end lined up on the goal line and the other on the 10 yards line (almost by the penalty mark) – that is, a balloon with a diameter of 30 feet.

If that balloon was filled with CO2, it would weigh about 1 ton; it would be a 1-ton CO2 balloon



909.1 kilotonnes of carbon dioxide would be the same as **909,100 balloons** on that same football field.





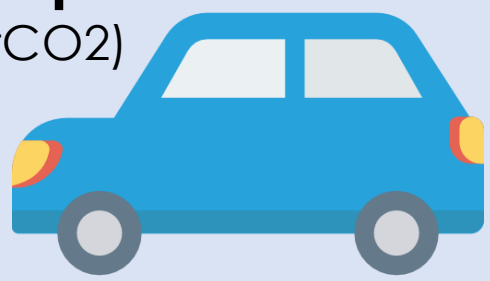
Within a year or two, a little more than half of those CO2 balloons will be absorbed from the atmosphere into the ocean or trees.

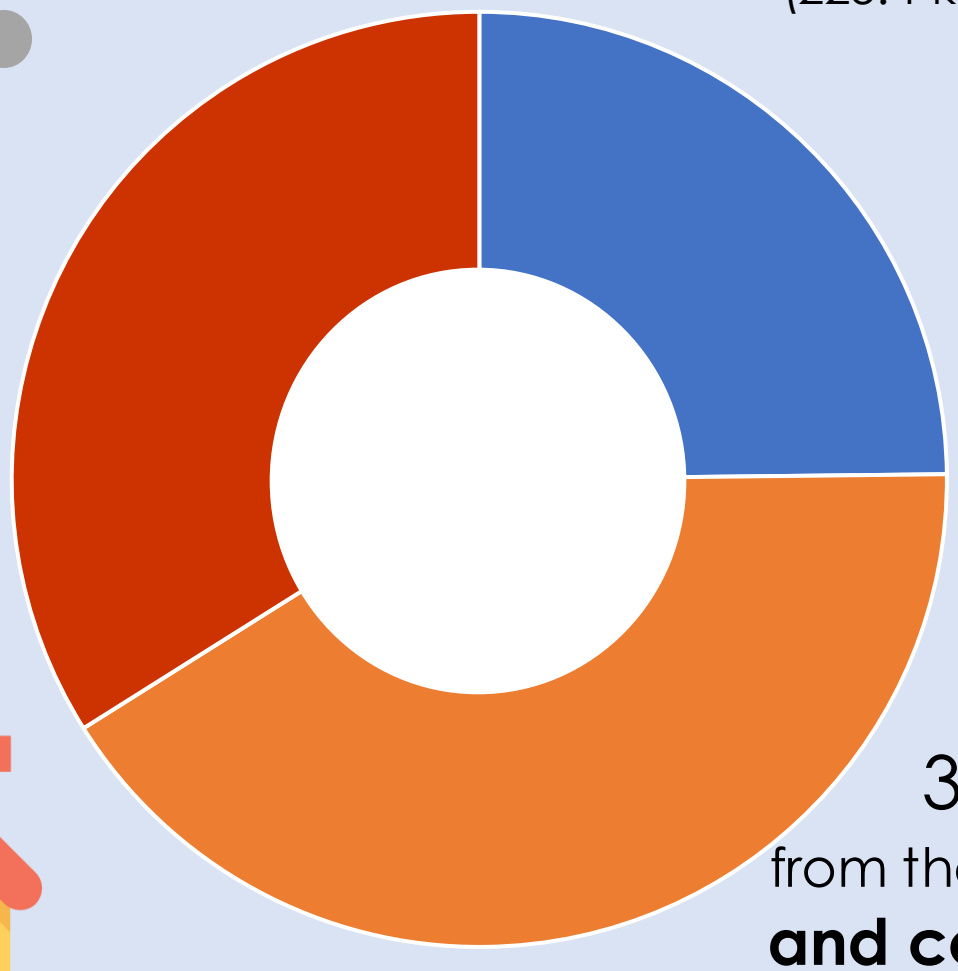
Unfortunately, the rest of the balloons will hang around for a very long time. One hundred years from now there will still be almost half a football field of CO2 balloons left to overheat the earth.

Where do Lambeth's carbon emissions come from?

909.1
kilotonnes (ktCO2) of carbon dioxide (CO2)

24.8%
from **transport**
(225.4 ktCO2)





41.2%
from **people's homes**
(375.3 ktCO2)

33.9%
from the **industrial and commercial sector**
(308.3 ktCO2)

Emissions per person in Lambeth 2017

2.8
tonnes of CO2

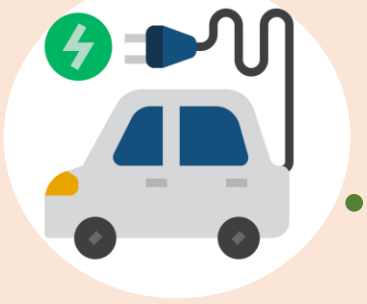
Lambeth has lower per capita emissions than the Greater London average (3.4 tonnes of CO2)

Transport - How we get around

24.8% of the borough's emissions come from road transport. Most of these emissions come from journeys in privately-owned petrol cars.

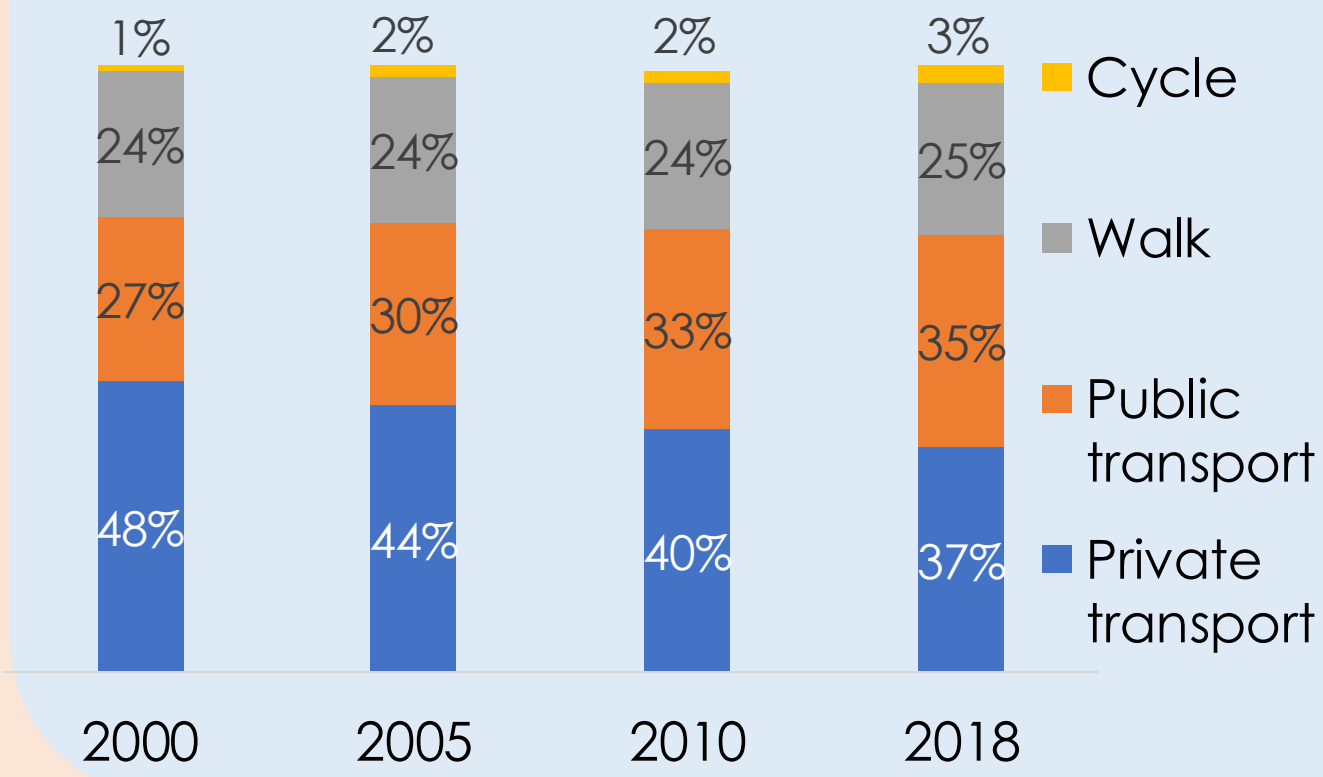
The average **petrol car** on the road in the UK produces the equivalent of **180g of CO2 every kilometre**

The average **local bus** on the road in the UK produces the equivalent of **82g of CO2 every kilometre**



The average **electric car** on the road in the UK produces the equivalent of **60g of CO2 every kilometre**

How do we get around in London?



Cycling, walking and use of public transport have increased

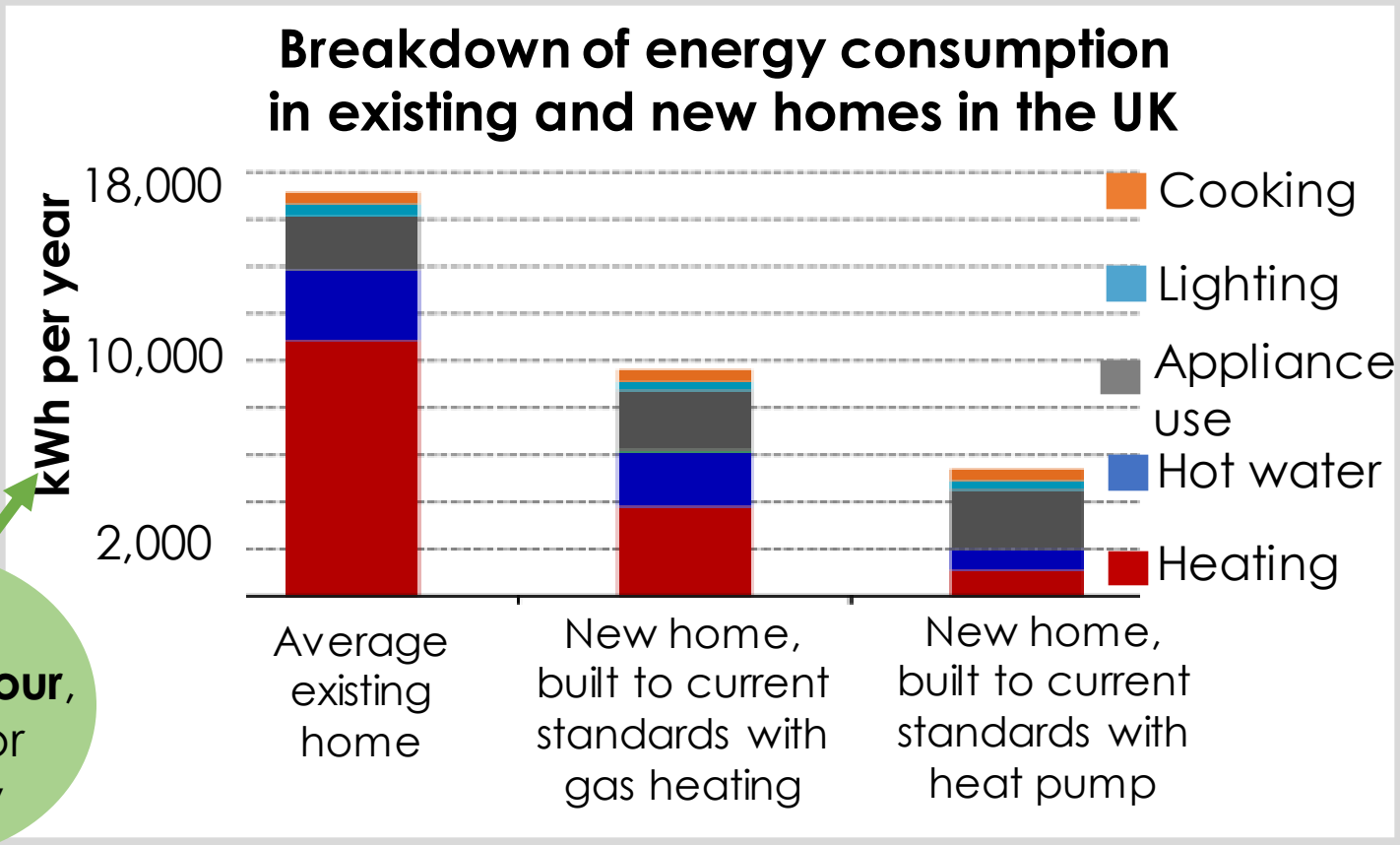
Use of private transport has decreased

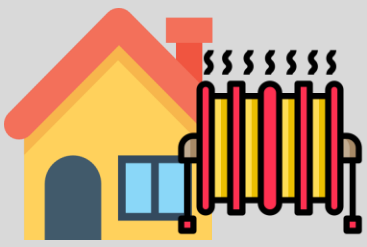
Domestic sector – Our homes and how we live

41.2% of the borough's emissions come from the domestic sector. This means the emissions from the energy we use in our homes to stay warm, cook, charge our appliances and keep the lights on.

In Lambeth, 89% of houses were built before 1982.

KWh = kilowatt-hour, a unit for energy





Most of the carbon emissions from the homes we live in come from **the energy we use to heat our homes.**

A heat pump produces around **60 grams of CO2** per KWh delivered heat

Direct electric heating produces around **215 grams of CO2** per KWh delivered heat

Gas boilers produces around **215 grams of CO2** per KWh delivered heat

Coal produces around **630 grams of CO2** per KWh delivered heat

The average UK household uses **10,300 kWh per year** to heat their home

Gas boilers are the most common heating system in the UK

Industrial and commercial sector – The energy used

33.9% of the borough's emissions come from the industrial and commercial sector. These emissions largely come from the energy that businesses and industries use for production of goods and to heat their spaces, but also from refrigerators and air conditioning.

Emissions from industrial and commercial activity are created in similar ways to those in our own homes, only on a much larger scale, from:

- Heating and cooling spaces
- Energy used to produce goods or keep various appliances going, such as computers or medical equipment
- Business travel

Did you know??
It is estimated that the supermarket fridges consume around 1% of the UK's electricity – enough to power 800,000 homes.

What type of commercial activity is there in Lambeth?

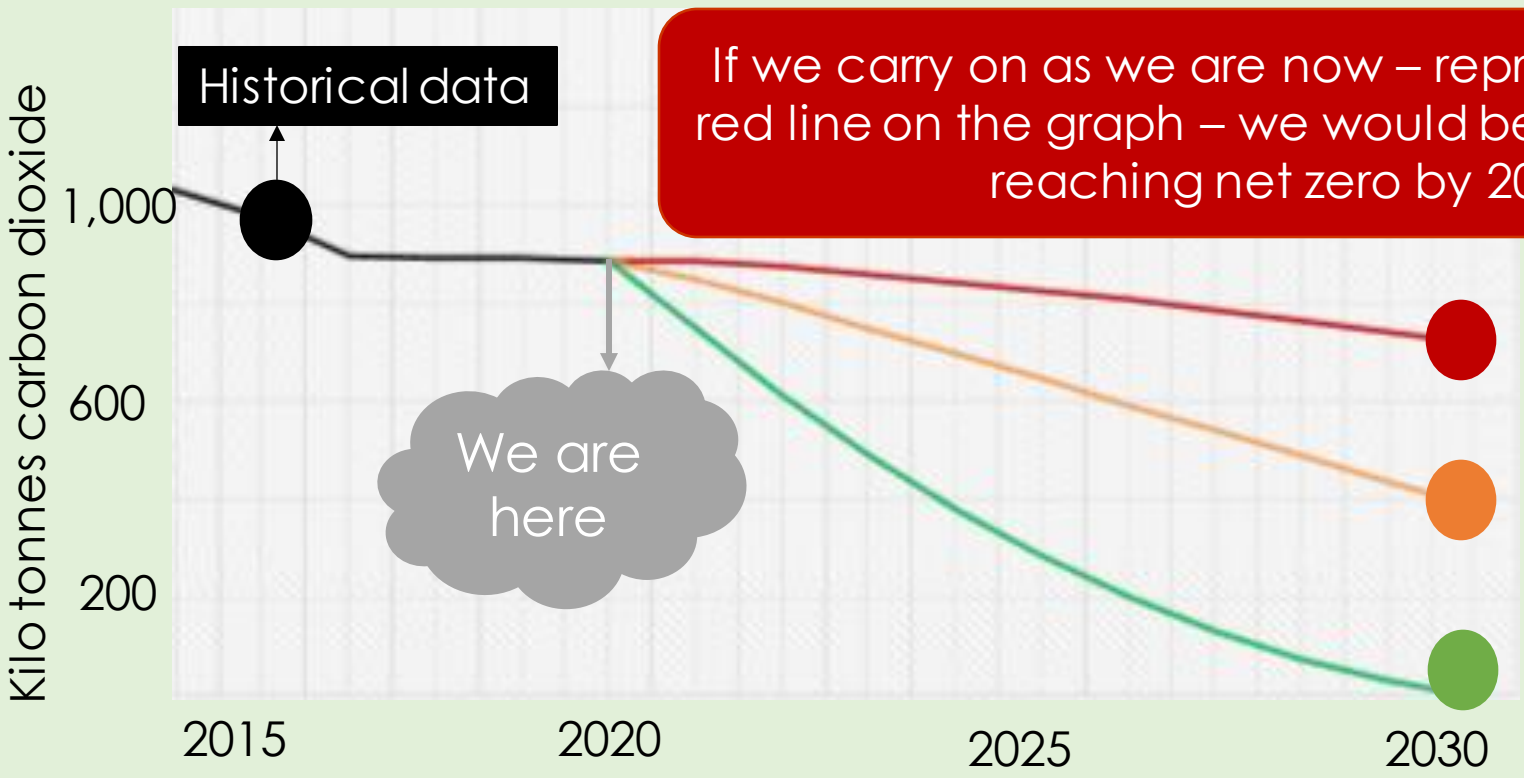
1. **Public administration** (for example various office based work)
2. **Education** (for example teaching and research)
3. **Health** (for example working in hospitals and GP surgeries)

These sectors employs around 55,000 people.

Pathway to net zero 2030

Lambeth Council has committed to reach **net zero by 2030.**

'Net zero' means that the amount of carbon dioxide that reaches the atmosphere is balanced out by the amount taken out of the atmosphere.



If we carry on as we are now – represented by the red line on the graph – we would be no where near reaching net zero by 2030.

No change

Some reductions of emissions

Achieve target reduction of emissions

The amber line projects what will happen if we make significant reductions to Lambeth's emissions from road transport and the energy used in our homes, commercial and industrial buildings. This would be an improvement, but not enough to reach our target. To go further, the borough would need to invest in **offsetting programmes.**

Offsetting programmes = programmes that help remove carbon emissions from the atmosphere, for example solar power farms and tree planting.

The green line shows the reduction in carbon emissions that we would need to make in order to achieve our 2030 target.

Achieving the carbon reduction necessary would require the council to work together with residents, businesses and other organisations.

What happens now?

In 2019, Lambeth declared a climate emergency to set out their response to the climate crisis. It involved three key actions:

Adopt a carbon neutral target by 2030 for corporate emissions

Develop a carbon reduction plan to achieve this

Establish Lambeth Climate Assembly to develop the approach for carrying out the response

Lambeth Council has already adopted the target of being 'carbon neutral' as an organisation by 2030.

The carbon reduction plan and the climate assembly are tools to achieve this goal.

Lambeth's carbon reduction plan focuses just on making Lambeth Council operations carbon neutral - it only refers to the council's buildings and vehicles.

It doesn't describe how the borough as a whole will reach net zero.

Lambeth Council doesn't have the power to significantly reduce emissions across the borough on its own.

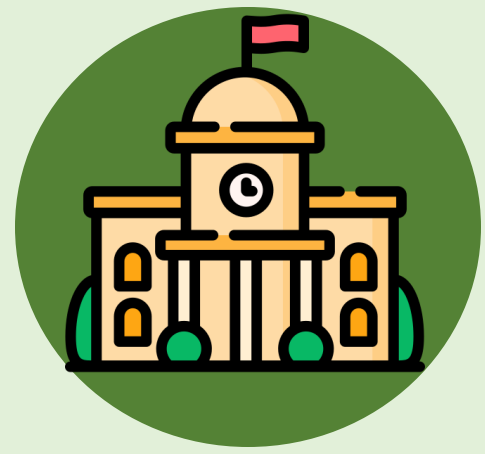
The Lambeth Climate Assembly will bring together residents to develop a collective response to the climate crisis which is about more than just the Council.

Lambeth's corporate carbon reduction plan

This plan only concerns how to make Lambeth Council operations carbon neutral

Retrofit public buildings to improve energy efficiency

Reduce energy consumption in corporate buildings



100% of energy consumption by Lambeth Council buildings generated from renewable energy

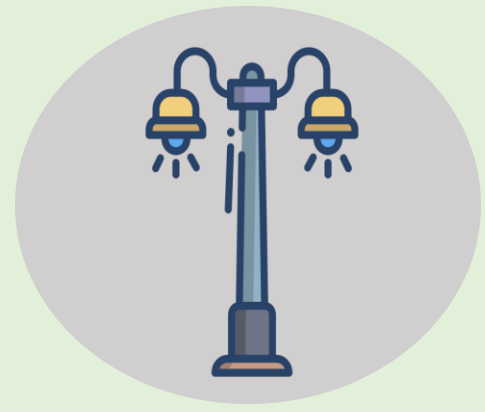
Build all new council homes to the highest efficiency standards

Invest in the council's housing stock to achieve highest possible sustainability ratings

Improve energy efficiency of the council's property portfolio

Only ultra-low emission vehicles to be leased by 2022

Use sustainable travel for work journeys



Install LED street lighting