

Watlington Climate Action Plan: What is our carbon Footprint?

In my last two articles I explored the science which links Carbon Dioxide in the atmosphere, how that affects global temperatures and the challenge of reducing CO₂ emissions to achieve the UK target of “Net Zero” by 2050. So, what does that mean for Watlington? How much CO₂ do we emit and from where? What is our “Carbon Footprint”?

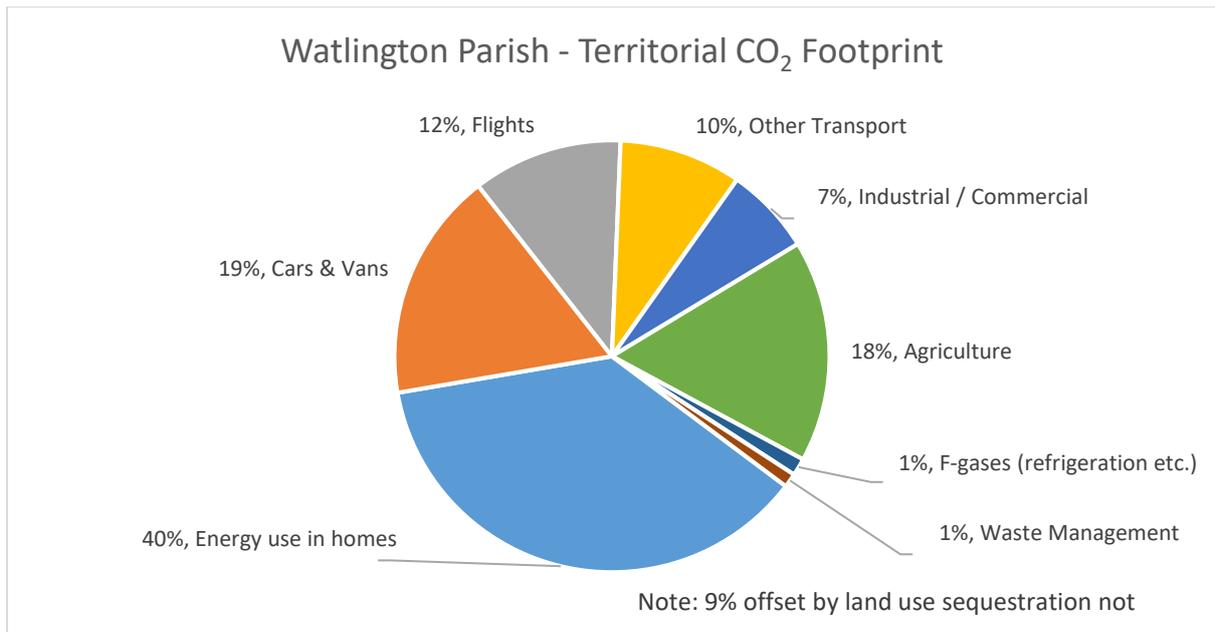
First, a couple of bits of jargon: Carbon dioxide isn't the only gas that contributes to temperatures rising. Others such as methane (from waste disposal and farming) and nitrous oxide (from fertilisers and water treatment) are even worse but breakdown in the atmosphere faster. To reflect this, total emissions are measured as “Carbon Dioxide Equivalent” (CO₂e) taking into account the relative impact of each gas. On this measure CO₂ makes up 80% of the greenhouse effect and all other gasses 20%.

To make things even more confusing, there are two ways in which you can measure our Carbon Footprint. One is to work out how much of each greenhouse gas the residents of the parish emit from our cars, homes and businesses. This known as a “Territorial” emissions. It doesn't include the emissions produced outside the parish to grow the food we eat, to make the goods we buy and to run the services we enjoy. That is known as our “Consumption” footprint.

Watlington Parish Council has, in common with SODC and UK Government, chosen to concentrate on our Territorial emissions. There is limited action we can take as a council on global manufacturing and agricultural practices and if every council and government achieves Net Zero in their own territory, then our Consumption footprint will get to zero too.

WCAG will continue their work targeting the Consumption footprint by raising awareness about consuming less, choosing local suppliers, and suppliers that manufacture goods in an environmentally friendly way.

We estimate that Watlington's Territorial footprint is 13,400 tonnes of CO₂e per year or about 4.9 tonnes per person. As a comparison, our Consumption footprint is roughly twice as much at 23,250 tonnes per year.



As the graphic shows 40% of our Territorial emissions are from the energy we use in our homes to stay warm, cook food, keep the lights on and to power appliances like washing machines. The next largest source of emissions (19%) comes from driving our cars and vans. Other transportation – taking the train to work or flying - makes up with another 22%.

We live in a rural environment and the trees, hedges, grass and crops that surround us all absorb CO₂. In total, they absorb and store (the technical term used is sequester) 9% of our emissions and this is deducted from the emissions to give the total Carbon Footprint.

The Parish Council has set a target to reduce our territorial footprint to zero by 2050 – the same target that the UK Government has committed to and which many other nations adopted at the recent COP26 summit.

So, what do we as a community need to do if we are to achieve that target? The Parish Council is going to take a lead and reduce its own emissions to zero by 2025 while looking at ways to help residents take action. The next couple of articles will look at what you can do to help.

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