

# Place Based Carbon Calculator

CREDS<sup>1</sup> have recently launched their Place-Based Carbon Calculator, a free tool that maps the carbon footprint of every neighbourhood in England. The tool has been developed to;

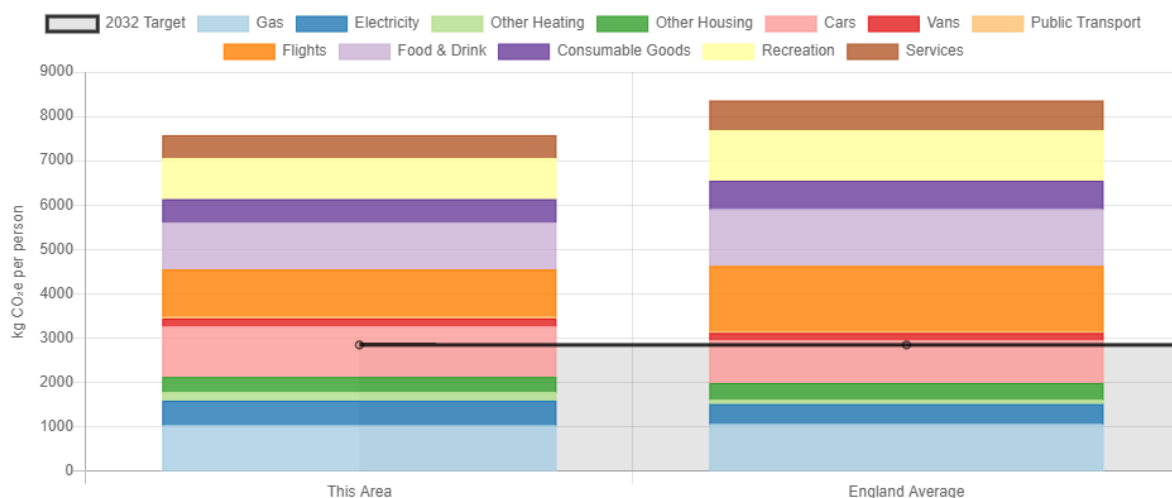
1. Calculate the carbon footprint of each neighbourhood in England
2. Add in as much context and explanatory data as possible, so we know why footprints vary and what we can do about it
3. Present all this data in an accessible and easy to use format.

To calculate an exact carbon footprint requires a lot of detailed information on individual behaviours and consumption patterns. Unfortunately, this kind of data does not exist for everybody in England. Instead, the tool draws on the best available data and research for each part of our carbon footprint. Where there is detailed local data it is used, such as gas and electricity consumption. But for other types of consumption, such as food, the calculator relies on surveys and modelling to fill in the gaps. Together these methods give an overview of the total carbon footprint for an LSOA. This is then divided by the number of people living in the LSOA to get an average carbon footprint per person. It is this metric, as it is easy to understand, that is used to compare across different areas.

The tool is free and available for anyone to view at - <https://www.carbon.place/>

## Rother' Carbon Footprint (according to CREDS tool)

CREDS can derive a 'footprint' by local authority area. For Rother;



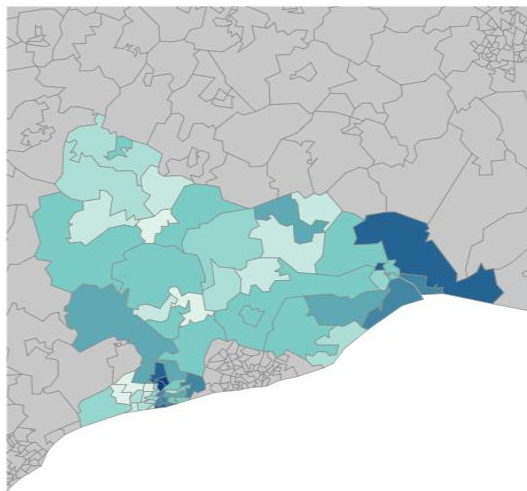
The above shows that on average a resident of Rother contributes less to carbon dioxide production than the England average.

Some of the key areas where Rother performs better than the UK average relate to lifestyle choices such as the food we eat, flights taken, recreation activity, consumable goods, and services purchased.

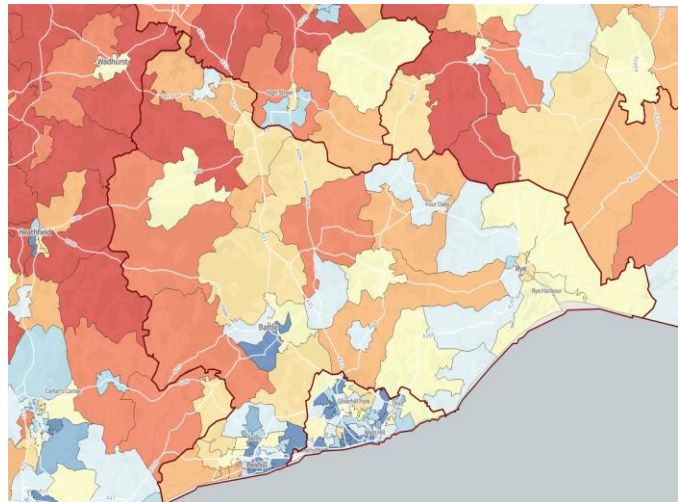
<sup>1</sup> The Centre for Research into Energy Demand Solutions (CREDS) is a research centre established in 2018 with a vision to make the UK a leader in understanding the changes in the energy demand needed for the transition to a secure and affordable, net-zero society. It is a partnership between many of the UK's leading academic institutions (including the University of Sussex) and other relevant interested bodies (such as BEIS, the Energy Savings Trust, Ofgem).



These are all areas where choice and wealth are influential factors and play a bigger role in how much carbon is emitted per person. This is more evident when you look at the CO2/person indices in comparison to the multiple indices of deprivation. There is a general correlation between the wealthier areas (as shown in lighter shades of blue and green MID Map) and the greater CO2/person areas (as shown in darker reds and orange)



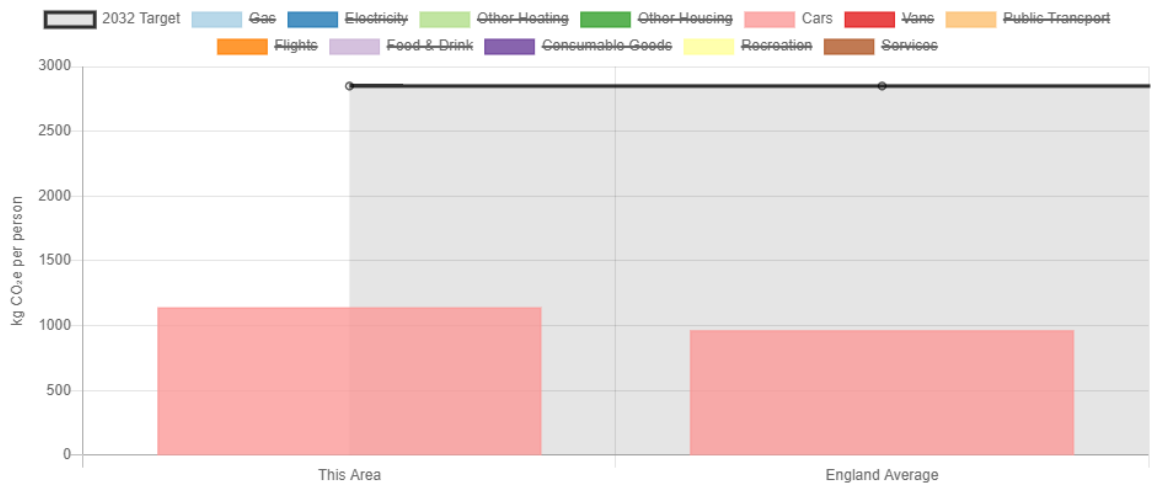
Multiple Indices of Deprivation (MID)



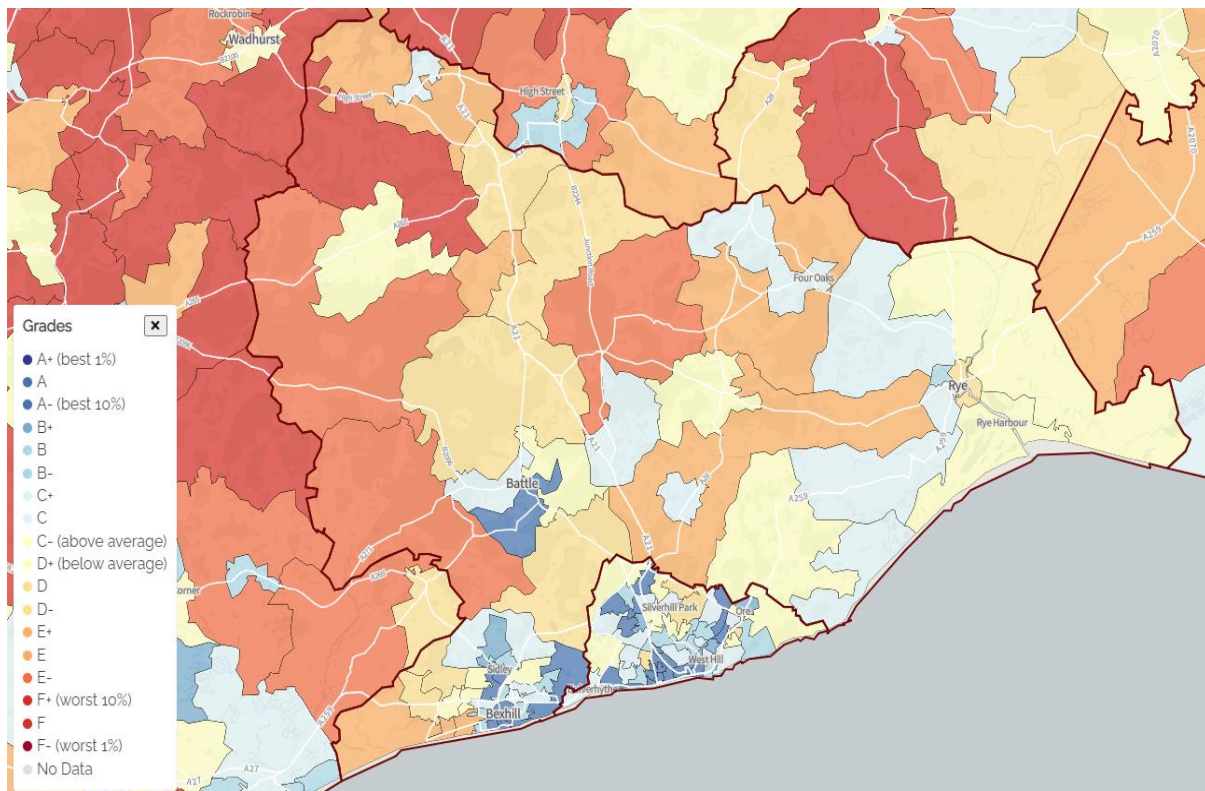
Carbon/Person in LSOA

The fact Rother has a population that is comparatively deprived and suffers particularly from a low wage economy assists in our performance on a national level as our residents are limited in their lifestyles choices.

Looking at cars the difference between Rother and the England average is also marked with the carbon output being almost 20% higher than the national average. This is likely a reflection of the particularly rural nature of our district with limited public transport. This is relatively consistent with similar rural areas of equivalent wealth.



What the Place-Based Carbon Calculator can do is drill down to a very local level (Lower Super Output Area) which will be of use to Parish Councils, local Councillors and the local community in identifying priorities for tackling carbon emissions on a local community level.



Looking at just two areas of the district in Sidley and Ticehurst and Etchingham which are at the opposite ends of the scale with regards to indices of deprivation we can see that their carbon footprints are very different. It should be noted that the footprint is only relative based on data available to the system.

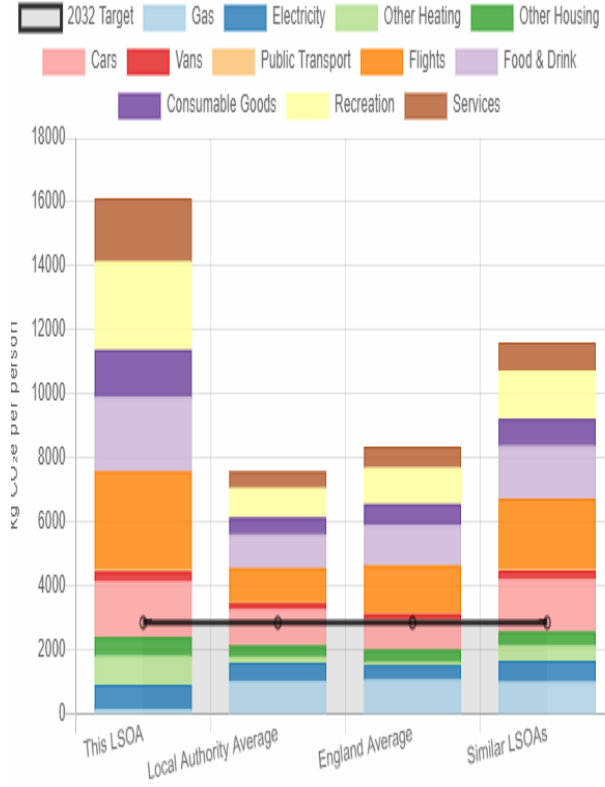
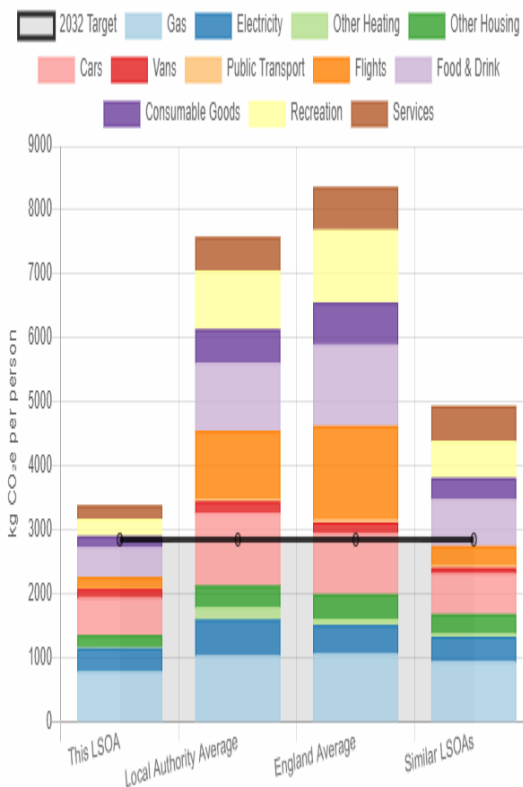
The results show two very different neighbourhoods in relation to their contribution to the districts wider carbon footprint. In fact the Carbon Output per head of population in the worst performing area is 5 times greater than the best performing area.

**Sidley**

Name	Grade	kgCO <sub>2</sub> e per person
Total	<b>A</b>	3380
Electricity	<b>B</b>	368
Gas	<b>B</b>	780
Other Heating	<b>C</b>	238
Car Driving	<b>B</b>	581
Van Driving	<b>D-</b>	134
Flights	<b>A-</b>	181
Consumption of goods and services	<b>A+</b>	1300

**Ticehurst and Etchingam**

Name	Grade	kgCO <sub>2</sub> e per person
Total	<b>F</b>	16100
Electricity	<b>F</b>	768
Gas	<b>A+</b>	131
Other Heating	<b>F</b>	902
Car Driving	<b>F</b>	1760
Van Driving	<b>F+</b>	291
Flights	<b>F+</b>	3040
Consumption of goods and services	<b>F</b>	9140



The Place Based Carbon calculator is free and available for anyone to view at - <https://www.carbon.place>.