

Chart of the month August 2021 – Total carbon footprint per capita

This month's chart looks at the carbon footprint per person based on seven underlying sources of emissions data: Electricity, Gas, Other Heating, Car Driving, Van Driving, Flights, and Consumption of goods and services. This is particularly interesting given the current worldwide environmental crisis. This data has been obtained from the place-based carbon calculator produced with funding from UK Research and Innovation through the Centre for Research into Energy Demand Solutions. The areas in the maps are displayed at Lower-layer Super Output Area (LSOA) level. This dataset has been made available in July 2021. For more information, please visit the <u>Place-Based Carbon calculator</u>.

Key findings:

Overall, all the districts in Oxfordshire scored above the England overall carbon footprint of 8,355 Kg CO₂ per capita, where highest means worst and lowest means best. Areas with the highest scores in the districts were Flights, Cars, Food & Drink, and Recreation. The following chart shows the amount of Kg CO₂ for every source in England compared to the districts in Oxfordshire. The **dashed line (---)** across the chart shows the **England target for 2032 (2,849)**.

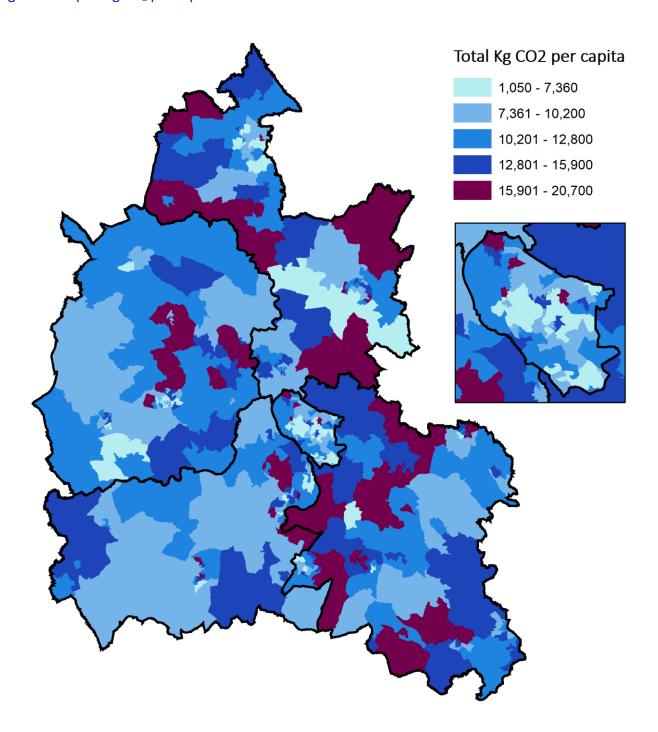
Sources of kg CO₂ per capita in the districts Gas ■ Electricity ■ Other Heating Other Housing Cars Vans ■ Public Transport ■ Flights ■ Food and Drink ■ Consumable Goods ■ Recreation Services 14000 12000 10000 8000 6000 4000 2000 0 England Cherwell Oxford South Oxon Vale of WH West Oxon

Figure 1. Sources of Kg CO₂ per capita in England and the districts, 2021

Source: Place-Based Carbon Calculator, 2021



Figure 2. Map of Kg CO₂ per capita in Oxfordshire's LSOAs



Source: Place-Based Carbon Calculator, 2021.



Cherwell

- Cherwell scored second best with 11,048 Kg CO₂ per capita. The district scored well on Gas, and worst on Other Heating.
- Cherwell scored worst on LSOAs: 009C in Deddington ward (20,700), 016E in Launton and Otmoor ward (20,000) and 010B, also in Deddington ward.
- The rural district scored best in LSOAs 005F (4,490) in Banbury Ruscote ward, 004A (4,640) in Banbury Cross and Neithrop ward, and 015D (4,770) in Bicester East ward.

Oxford

- The lowest score goes to Oxford with 9,392 Kg CO₂ per capita. The city scored best in most sources, second best in Gas, and worst on Public Transport.
- Oxford scored worst in LSOAs: 006A (19,200) in Headington ward, 003A (18,700) in North ward, and 002C (17,100) in Summertown ward.
- LSOAs with the lowest impact in Oxford are: 008A (1,050) in Carfax ward, 008B (2,500) in Holywell ward, and 006F (2,960) in Headington Hill and Northway.

South Oxfordshire

- Based on the underlying sources of emission, the highest score of Kg CO₂ per capita
 has been allocated to South Oxfordshire (12,515). The rural district scored the highest
 on most sources with the exception of Public Transport, Other Heating, and Vans.
- South Oxfordshire scored worst in LSOAs: 018A (19,600) in Woodcote & Rotherfield ward, 007B (19,200) in Haseley Brook ward, and 019D (19,100) also in Woodcote & Rotherfield ward.
- Lower-impact LSOAs in South Oxfordshire are: 010A (4,440) in Didcot West ward, 006A (5,910) in Berinsfield ward, and 014C (6,030) in Didcot South ward.

Vale of White Horse

- The second highest score goes to Vale of White Horse with 11,418 Kg CO₂ per capita. While it scored below South Oxfordshire in all sources, it scored particularly high in Flights, Recreation, and Services. The district has the lowest (best) score in Transport, and second best in Vans.
- LSOAs with the highest Kg CO₂ per capita are: 008D, (18,100) in Abingdon Fitzharris ward, 004D (17,600) in Abingdon Peachcroft ward, and 003F (17,500) in Botley & Sunningwell ward.
- The district scored well in LSOAs: 003C (4,750) in Kennington & Radley ward, 008C (6,600) in Abingdon Caldecott ward, and 014B (6,940) in Wantage Charlton ward.

West Oxfordshire

- The third place goes to West Oxfordshire with 11,337. The rural district scored the highest in Gas, and Vans, and the second highest score in Electricity, Other Heating, and Cars.
- West Oxfordshire scored worst on LSOAs: 004F (19,300) in Woodstock and Bladon ward, 005A (18,000) in Charlbury and Finstock ward, and 009B (17,300) in Witney West ward.
- Areas with the lowest Kg CO₂ per capita are LSOAs: 009A (4,280) in Witney Central ward, 010F (4,950) in Witney South ward, and 001B (5,430) in Chipping Norton ward.



Supporting Tables

LSOAS with the biggest CO₂ impact in Cherwell				
LSOA	Total kg CO₂ per capita	Ward name		
Cherwell 009C	20,700	Deddington		
Cherwell 016E	20,000	Launton and Otmoor		
Cherwell 010B	19,700	Deddington		
Cherwell 016F	19,600	Launton and Otmoor		
Cherwell 011D	19,300	Fringford and Heyfords		
Cherwell 001C	17,500	Cropredy, Sibfords and Wroxton		
Cherwell 010E	17,500	Deddington		
Cherwell 011E	17,100	Fringford and Heyfords		
Cherwell 015C	16,700	Bicester South and Ambrosden		
Cherwell 004E	16,600	Banbury Grimsbury and Hightown		

LSOAS with the biggest CO₂ impact in Oxford				
LSOA	Total kg CO₂ per capita	Ward name		
Oxford 006A	19,200	Headington		
Oxford 003A	18,700	North		
Oxford 002C	17,100	Summertown		
Oxford 001A	16,100	Wolvercote		
Oxford 001C	15,000	Wolvercote		
Oxford 004D	14,400	Marston		
Oxford 011C	14,100	St Clement's		
Oxford 007D	13,900	Quarry and Risinghurst		
Oxford 012A	13,000	Hinksey Park		
Oxford 007C	12,600	Quarry and Risinghurst		

LSOAS with the biggest CO₂ impact in South Oxon				
LSOA	Total kg CO₂ per capita	Ward name		
South Oxfordshire 018A	19600	Woodcote & Rotherfield		
South Oxfordshire 007B	19200	Haseley Brook		
South Oxfordshire 019D	19100	Woodcote & Rotherfield		
South Oxfordshire 007D	18100	Chalgrove		
South Oxfordshire 006F	17700	Sandford & the Wittenhams		
South Oxfordshire 001B	17200	Thame		
South Oxfordshire 018C	17200	Kidmore End & Whitchurch		
South Oxfordshire 018B	17000	Goring		
South Oxfordshire 009E	16700	Didcot North East		
South Oxfordshire 015E	16500	Cholsey		



LSOAS with the biggest CO₂ impact in Vale of WH				
LSOA	Total kg CO₂ per capita	Ward name		
Vale of White Horse 008D	18100	Abingdon Fitzharris		
Vale of White Horse 004D	17600	Abingdon Peachcroft		
Vale of White Horse 003F	17500	Botley & Sunningwell		
Vale of White Horse 011A	17500	Grove North		
Vale of White Horse 010E	17200	Sutton Courtenay		
Vale of White Horse 014F	17000	Wantage & Grove Brook		
Vale of White Horse 004B	15900	Abingdon Dunmore		
Vale of White Horse 011D	15800	Grove North		
Vale of White Horse 004E	15500	Abingdon Peachcroft		
Vale of White Horse 006B	15500	Abingdon Fitzharris		

LSOAS with the biggest CO₂ impact in West Oxon				
LSOA	Total kg CO₂ per capita	Ward name		
West Oxfordshire 004F	19300	Woodstock and Bladon		
West Oxfordshire 005A	18000	Charlbury and Finstock		
West Oxfordshire 009B	17300	Witney West		
West Oxfordshire 007B	17100	Hailey, Minster Lovell and Leafield		
West Oxfordshire 006D	16500	Freeland and Hanborough		
West Oxfordshire 005C	16300	Charlbury and Finstock		
West Oxfordshire 008F	15500	Witney North		
West Oxfordshire 006C	15000	Freeland and Hanborough		
West Oxfordshire 004B	14100	Stonesfield and Tackley		
West Oxfordshire 015C	14100	Standlake, Aston and Stanton Harcourt		

Source: Place-Based Carbon Calculator, 2021



References:

Source:

- Place-Based Carbon Calculator LSOAs
- Place-Based Carbon Calculator Local Authorities
- OCSI Local Insight Requires Login credentials

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- Oxford City Council
- South Oxfordshire District Council
- Vale of White Horse District Council
- West Oxfordshire District Council

Data notes and briefings from this service are available at <u>District Data Service website</u>.