

Appendix 1: Analysis of monitoring indicators

**Climate, Energy and Environment Committee, 24
October 2023**

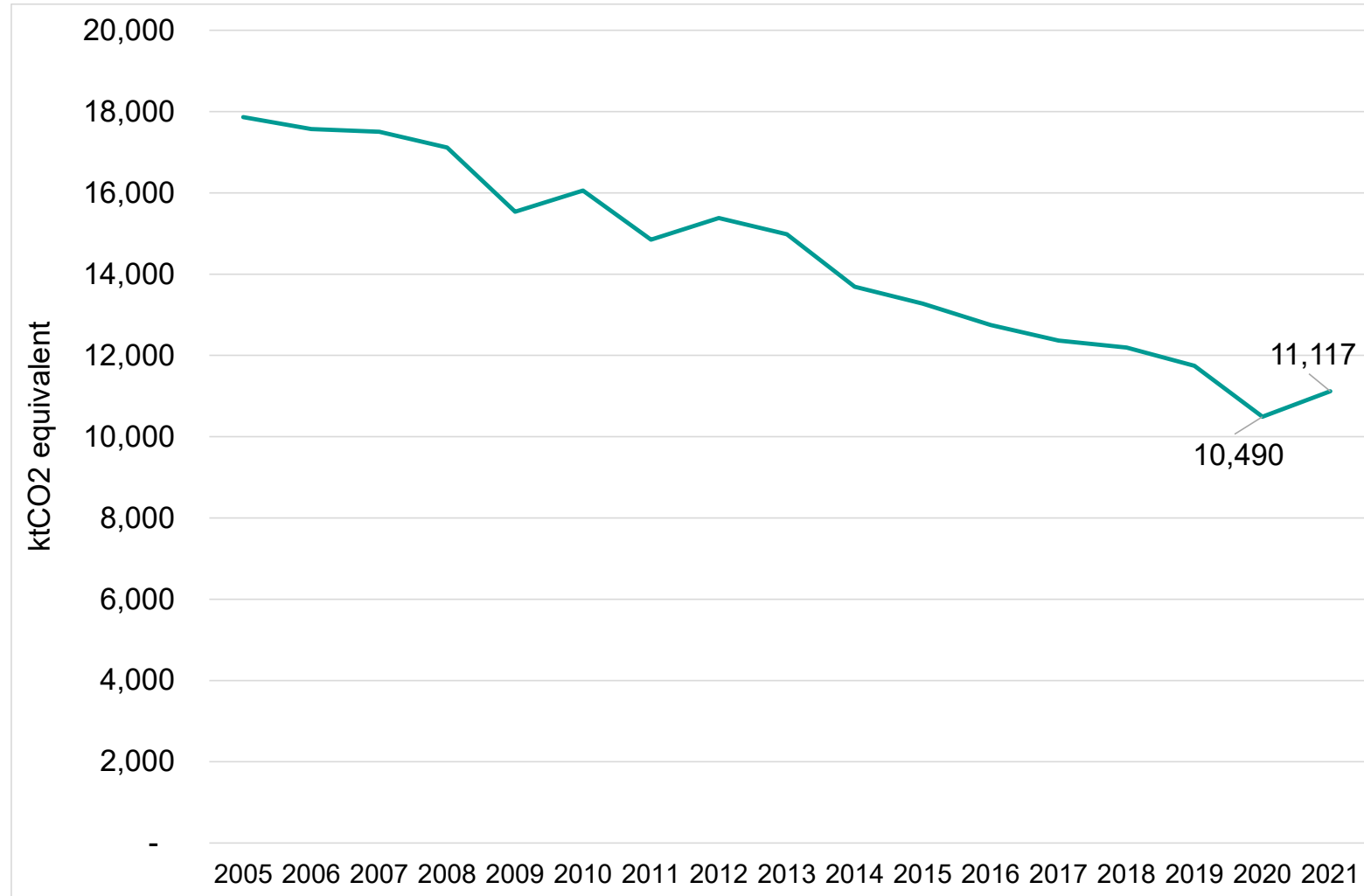
Introduction

- The following slides provide an overview of West Yorkshire's performance and progress against the headline indicators for State of the Region
- A subset of indicators has been presented, reflecting those most directly relevant to the Climate, Energy and Environment agenda.
- For some indicators there has been no change in the available data but the latest figures are contained in the pack to maintain the overall picture.

State of the Region indicators

Emissions increased in West Yorkshire in 2021 following the pandemic-related reduction in 2020 but remain below the 2019 level

Figure 1: Trend in greenhouse gas emissions, West Yorkshire (ktCO₂e)

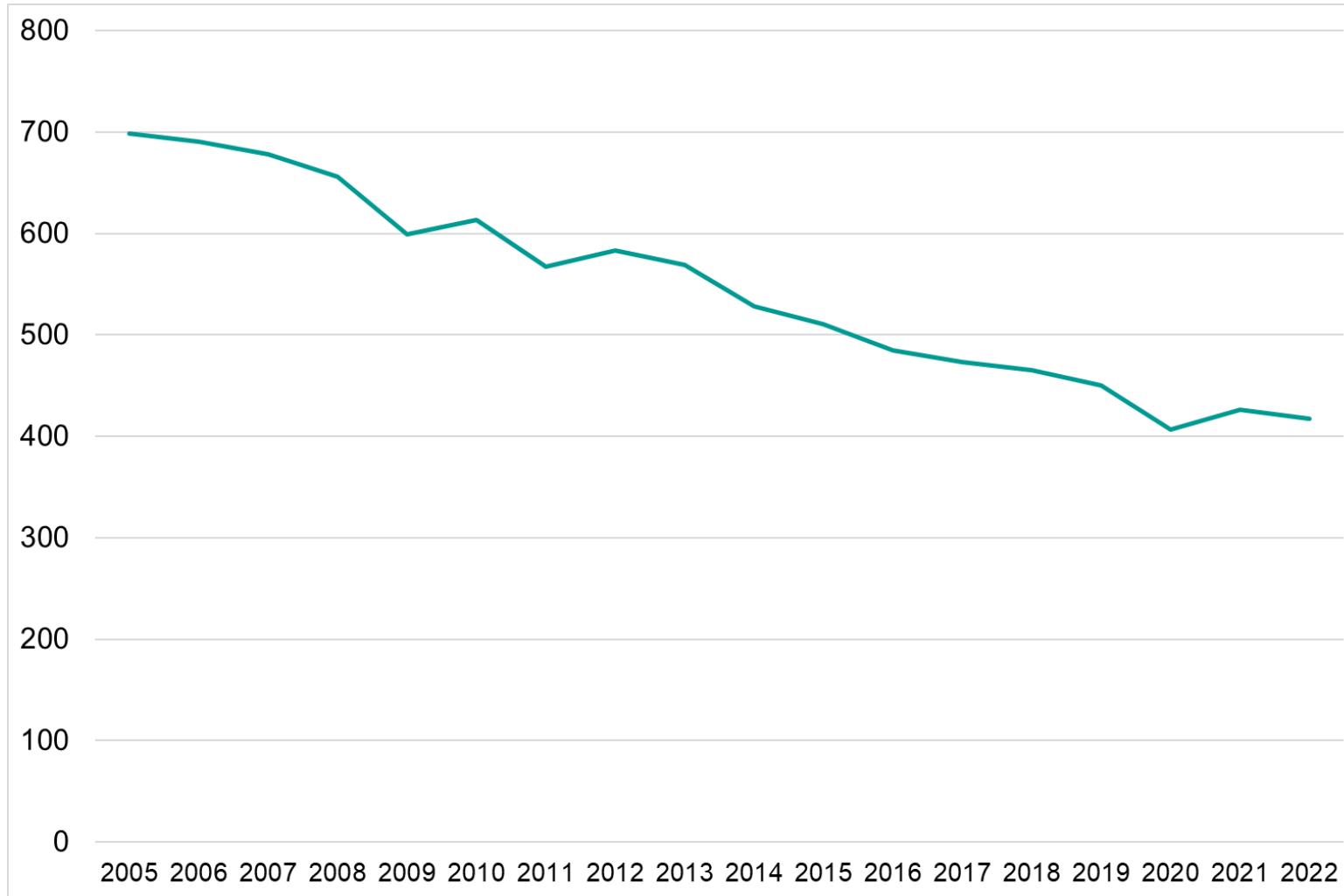


Emissions increased by 6% in 2021 but remain 5% below their 2019 level. This reflects the national picture.

Source: UK local authority and regional greenhouse gas emissions national statistics, 2005 to 2021

Provisional figures show that UK emissions fell in 2022

Figure 2: UK annual territorial greenhouse gas emissions by million tonnes carbon dioxide equivalent (MtCO₂e)

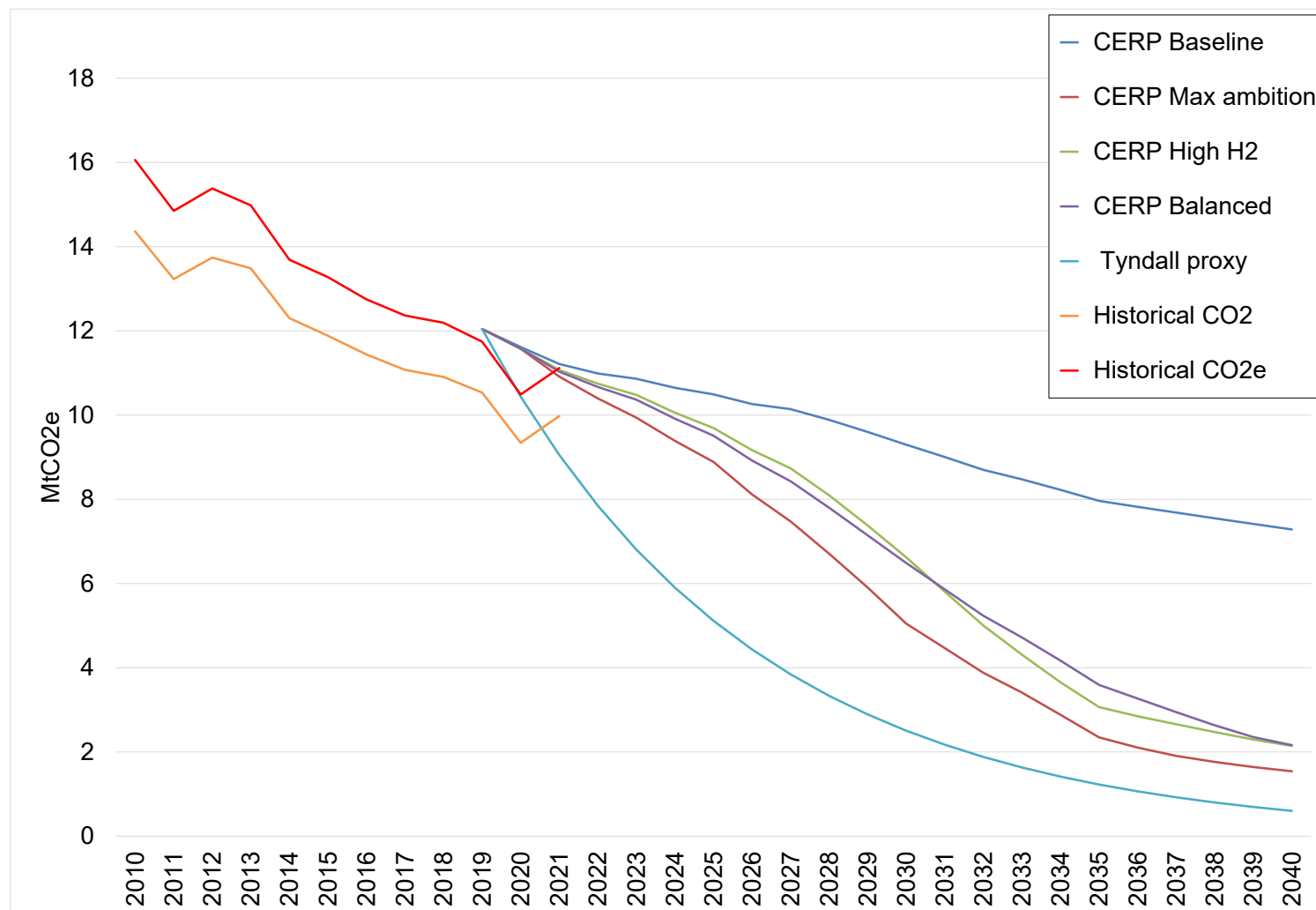


UK figures for 2022 point to a resumption of the pre-Covid trend. This is also likely to be the case for West Yorkshire when local figures are made available for 2022

Source: Provisional UK greenhouse gas emissions national statistics, 2022

The upturn in 2021 returned West Yorkshire carbon emissions to somewhere between the 'Baseline' (business as usual) and the three reduction pathways

Figure 3: Trend in West Yorkshire greenhouse gas emissions vs carbon reduction pathways (MtCO₂e)



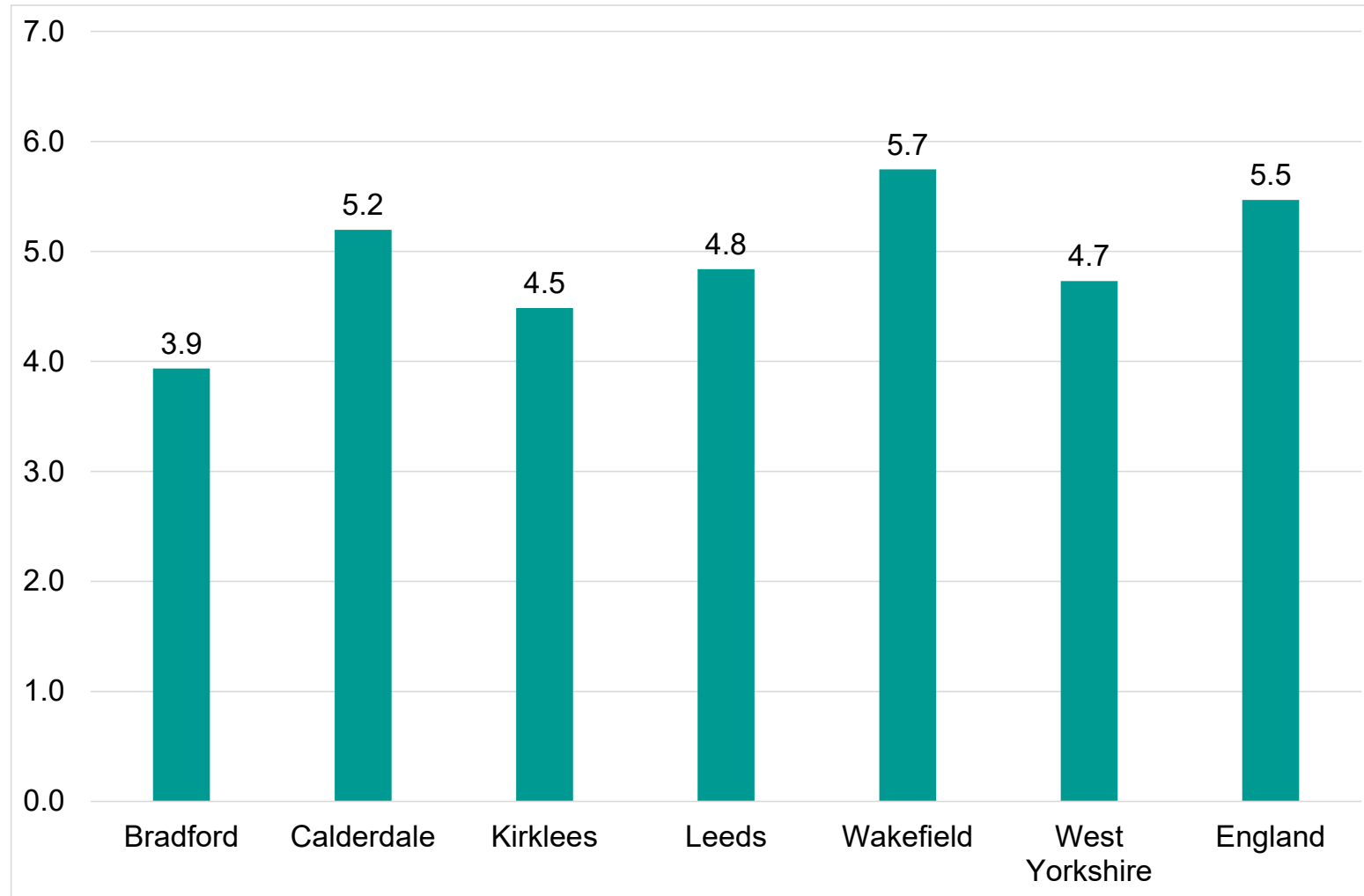
Scenarios

- Baseline - the likely levels of greenhouse gas emissions if no new action to reduce them is taken
- Max Ambition –Assumes significant electrification of heat, transport and industry supported by enabling technologies such as demand-side response and energy storage.
- High Hydrogen (High H₂) - Promotes large-scale hydrogen use and carbon capture and storage roll-out.
- Balanced – Encompasses a balanced mix of technology across all sectors with contributions from hydrogen, electrification, bioenergy, carbon capture and storage, and decentralised energy production.
- Tyndall proxy - suggests what the implications of the United Nations Paris Agreement are in terms of reductions of emissions.

Source: UK local authority and regional greenhouse gas emissions national statistics, 2005 to 2021

West Yorkshire has lower emissions per capita than the national average

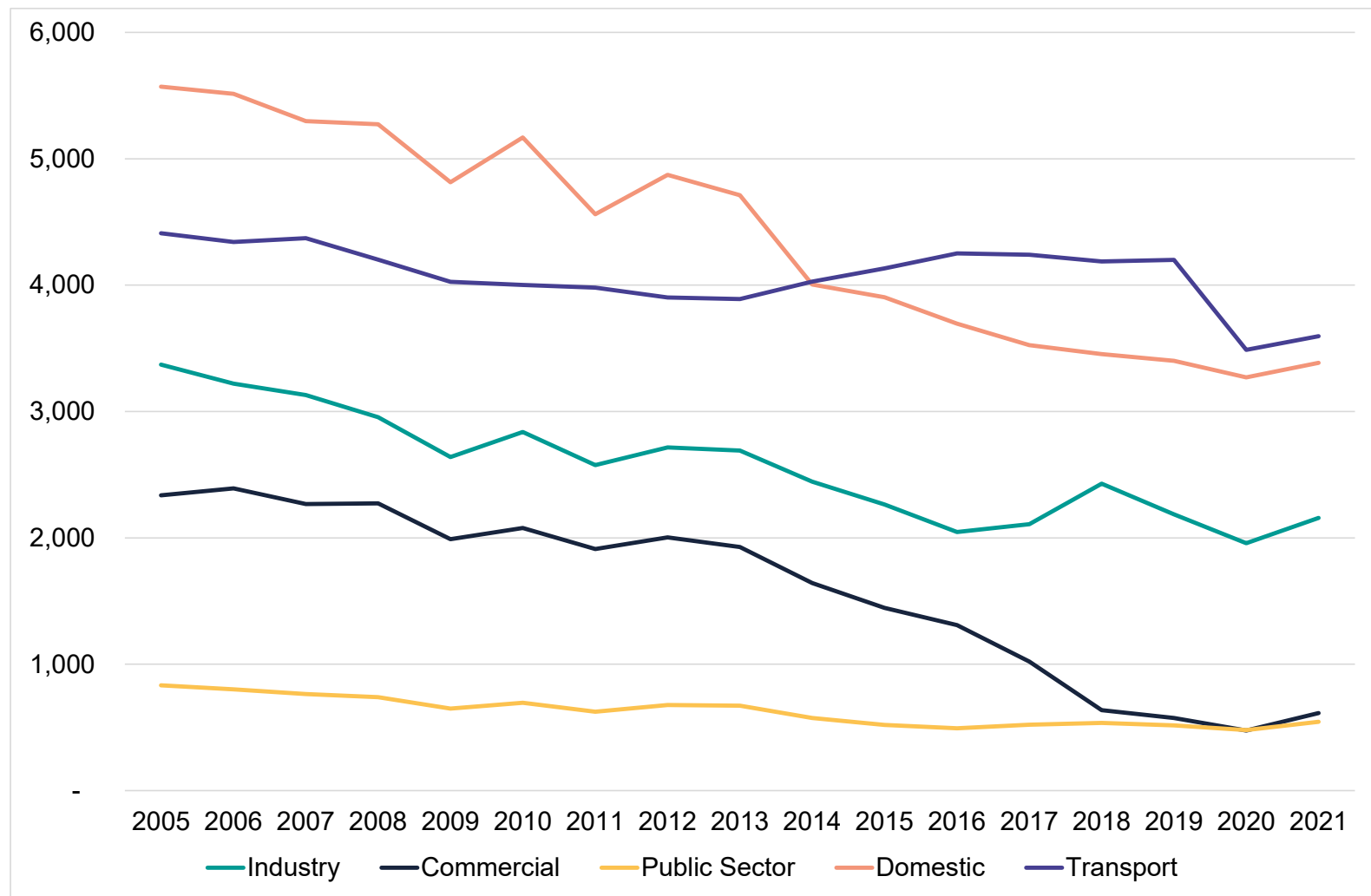
Figure 4: Per capita greenhouse gas emissions (tonnes CO₂e per resident)



Source: UK local authority and regional greenhouse gas emissions national statistics, 2005 to 2021

All of the main sectors of the West Yorkshire economy saw an increase in emissions during 2021

Figure 5: Trend in greenhouse gas emissions by sector, (ktCO₂e), West Yorkshire

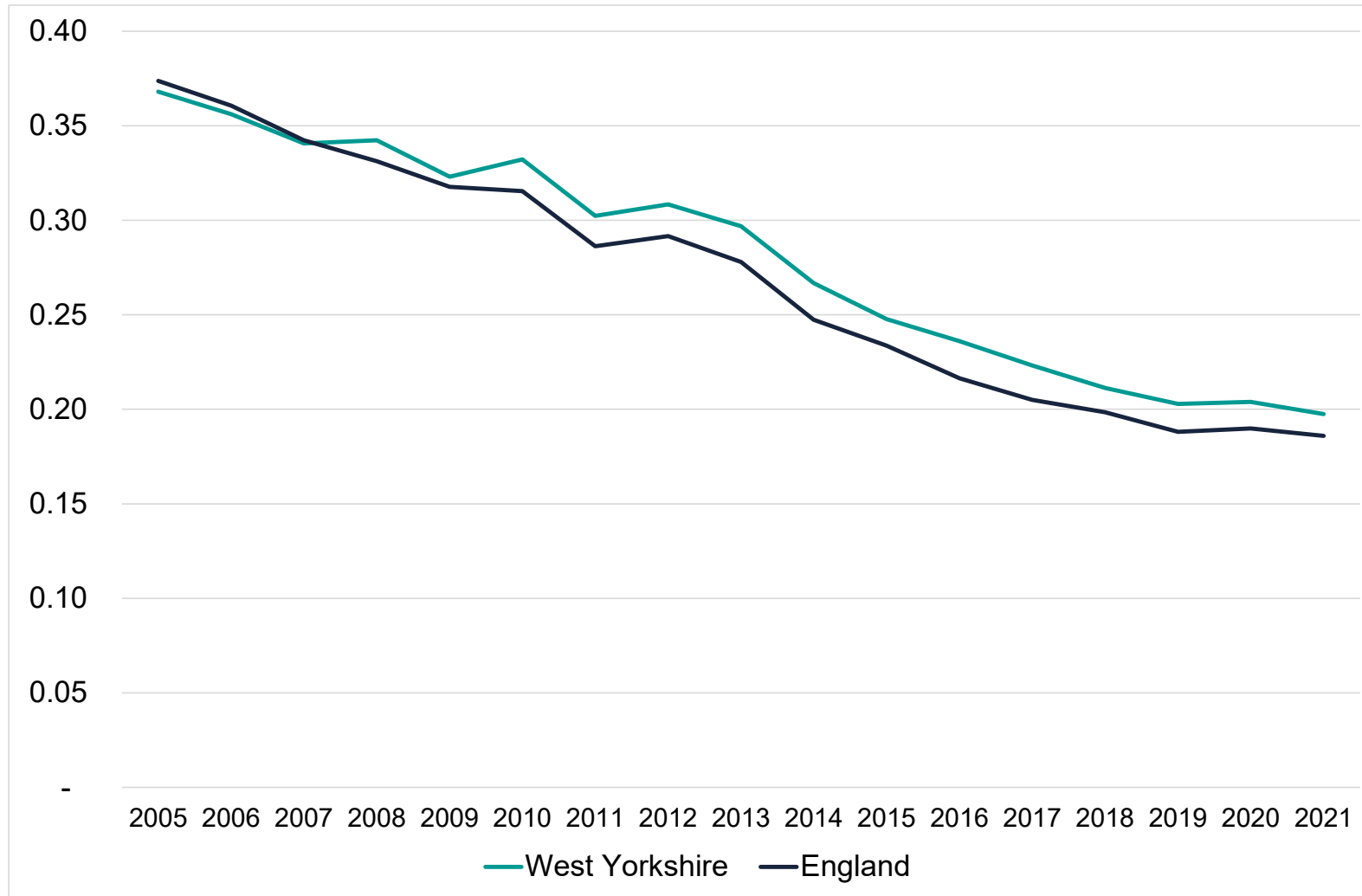


Although all sectors saw growth in 2021 most remain below their 2019 levels

Source: UK local authority and regional greenhouse gas emissions national statistics, 2005 to 2021

West Yorkshire's emissions intensity ratio fell in 2021 as an increase in GVA offset the rise in emissions

Figure 6: Greenhouse gas emissions intensity (ktCO₂e per £m gross value added)

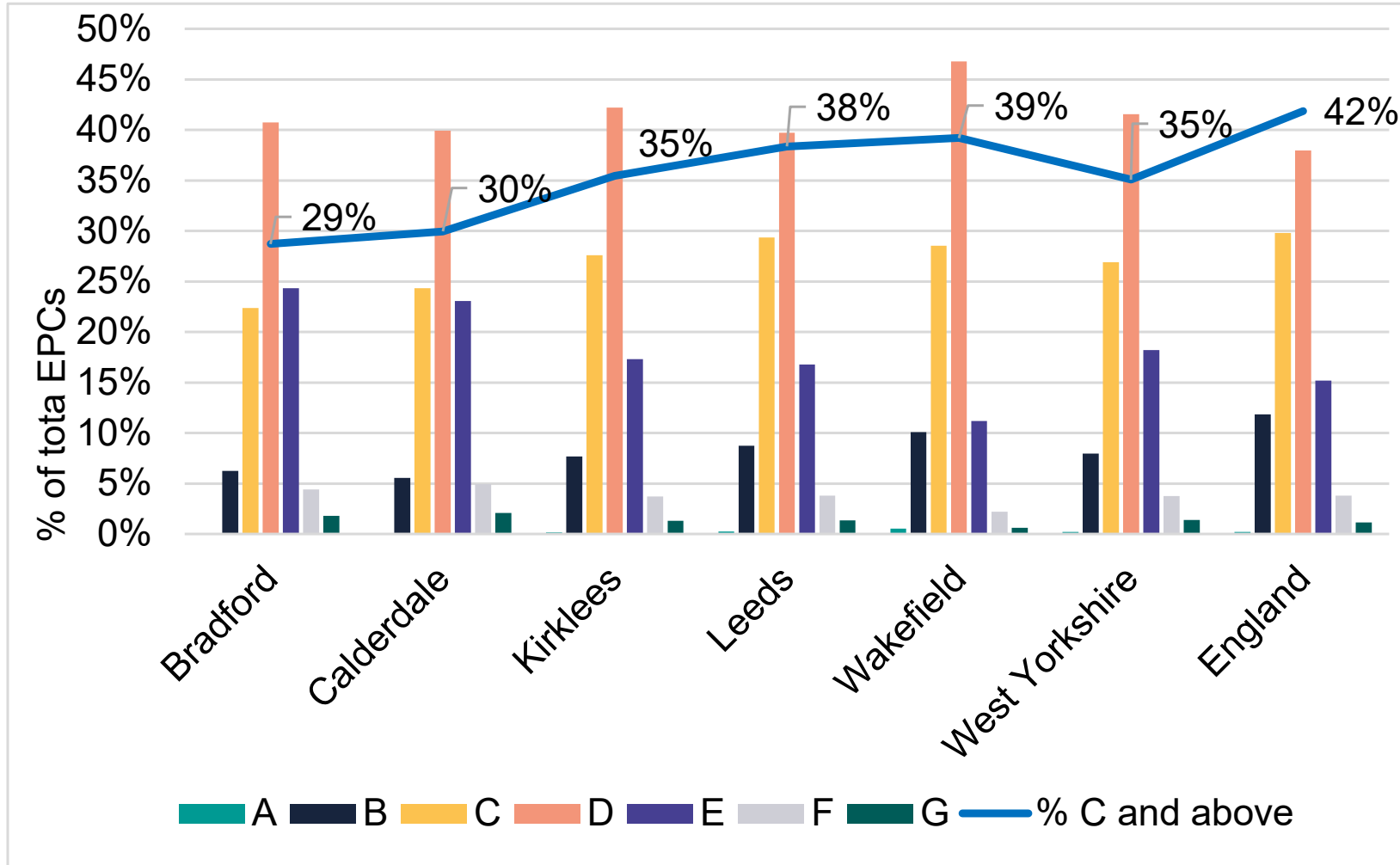


Emissions intensity remains slightly above the national average

Source: UK local authority and regional greenhouse gas emissions national statistics, 2005 to 2021

West Yorkshire dwellings with an EPC are less likely to have an energy efficiency rating of C or above compared to national average

Figure 7: Profile of Energy Performance Certificates by local authority and Energy Efficiency Rating, as of Q2, 2023



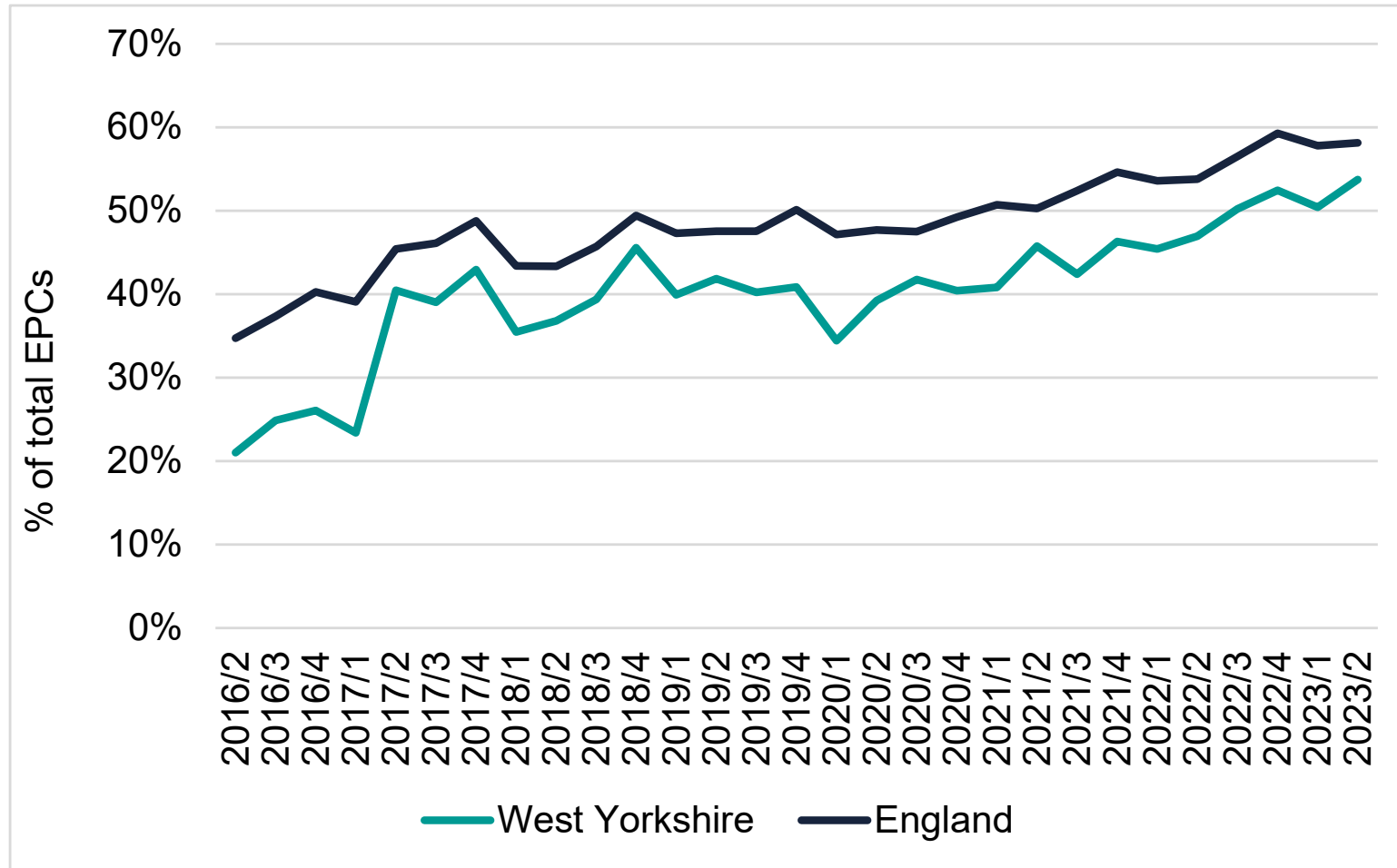
These figures relate to the total cumulative stock of EPCs lodged since Q4 2008 up to Q2 2023.

The proportion of cumulative lodgements with a rating of C and above in West Yorkshire increased slightly from 34% in Q2 2022 to 35% in Q2 2023.

Source: Energy Performance Certificate data, Department for Levelling Up, Housing and Communities

The proportion of EPCs with a rating of C and above in WY is increasing over time, reaching 54% in lodgements for Q2 2023

Figure 8: Trend in proportion of Energy Performance Certificates with Energy Efficiency Rating of C and above based on each quarter's EPC lodgements



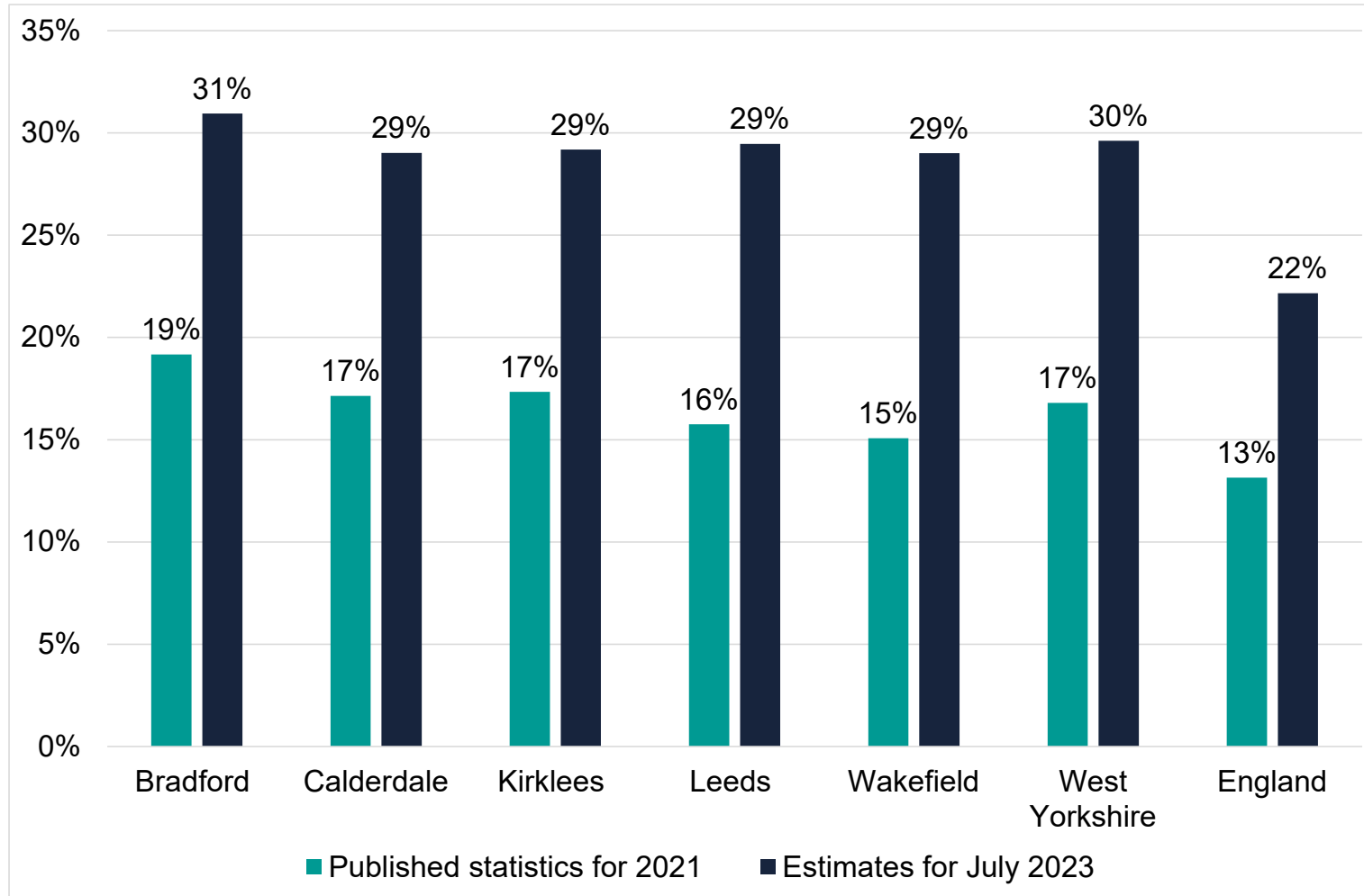
These figures relate to EPC lodgements in each quarter.

Although the proportion of EPCs with a rating of C and above in West Yorkshire is increasing, suggesting an ongoing improvement in energy efficiency performance, it is still lower than the national average.

Source: Energy Performance Certificate data, Department for Levelling Up, Housing and Communities

Estimates suggest that 30% of West Yorkshire households are in fuel poverty

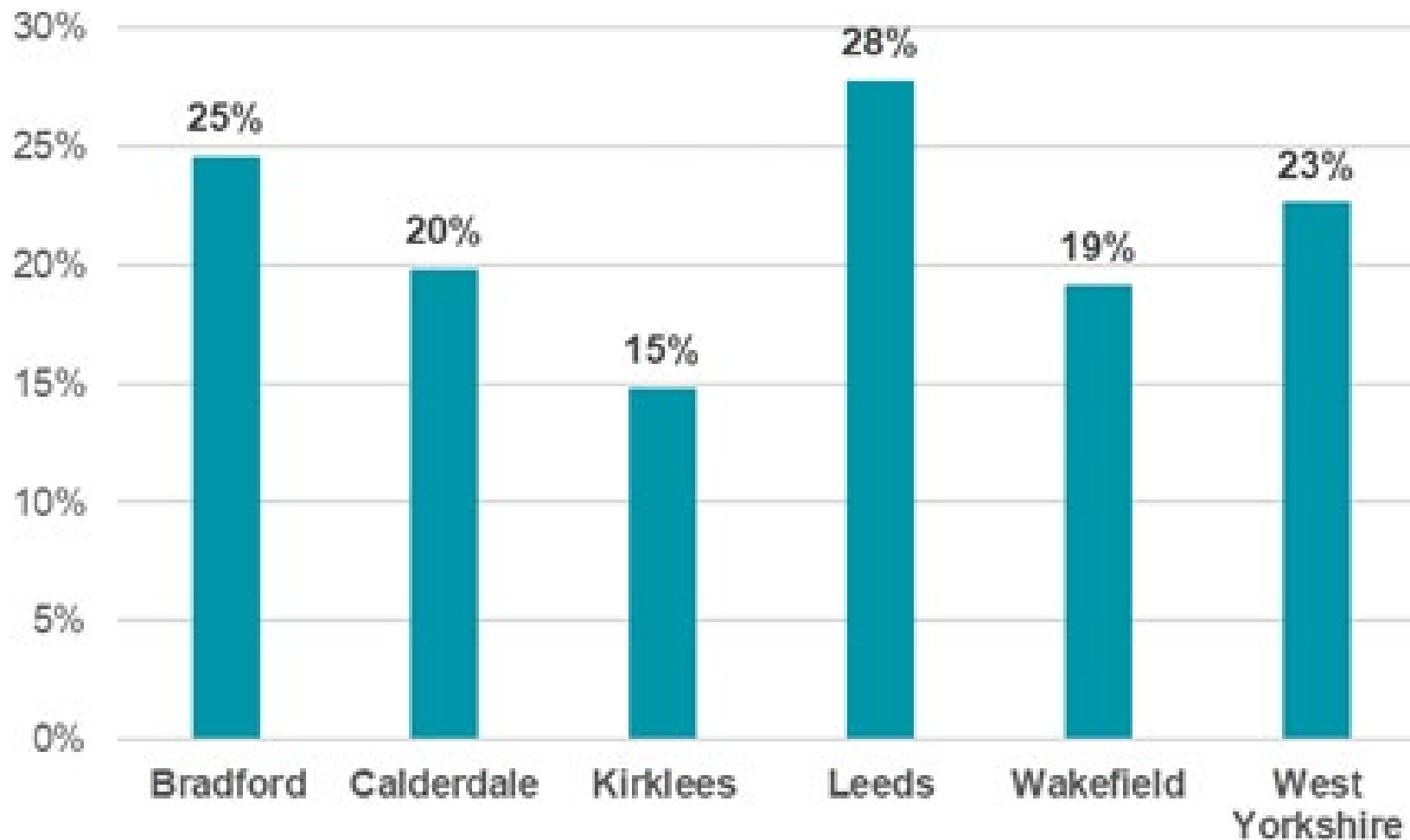
Figure: Proportion of households in fuel poverty



Source: Sub-Regional Fuel Poverty Statistics, BEIS; Combined Authority estimates

Almost a quarter of West Yorkshire's population have easy access to local natural greenspace

Figure 10: Proportion of the population who have access to local natural greenspace

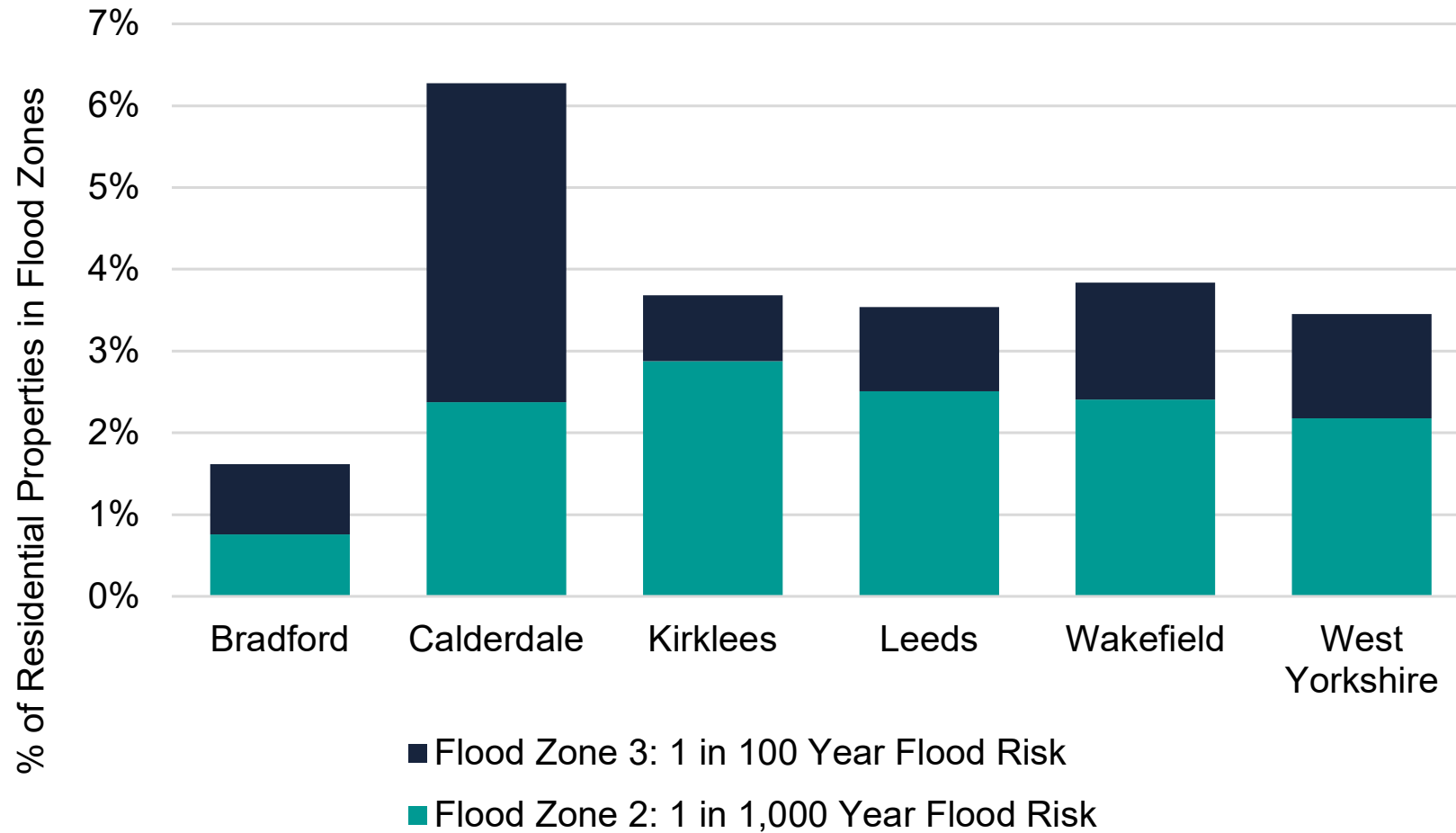


This indicator relates to the proportion of the population with easy access to local natural greenspace – i.e. live within 300m (as the crow flies) of an area of accessible natural greenspace of at least 2 hectares in size.

Source: Environmental Agency, ONS Mid-Year Population Estimates

3% of residential properties in West Yorkshire fall within a flood zone, rising to more than 6% in Calderdale

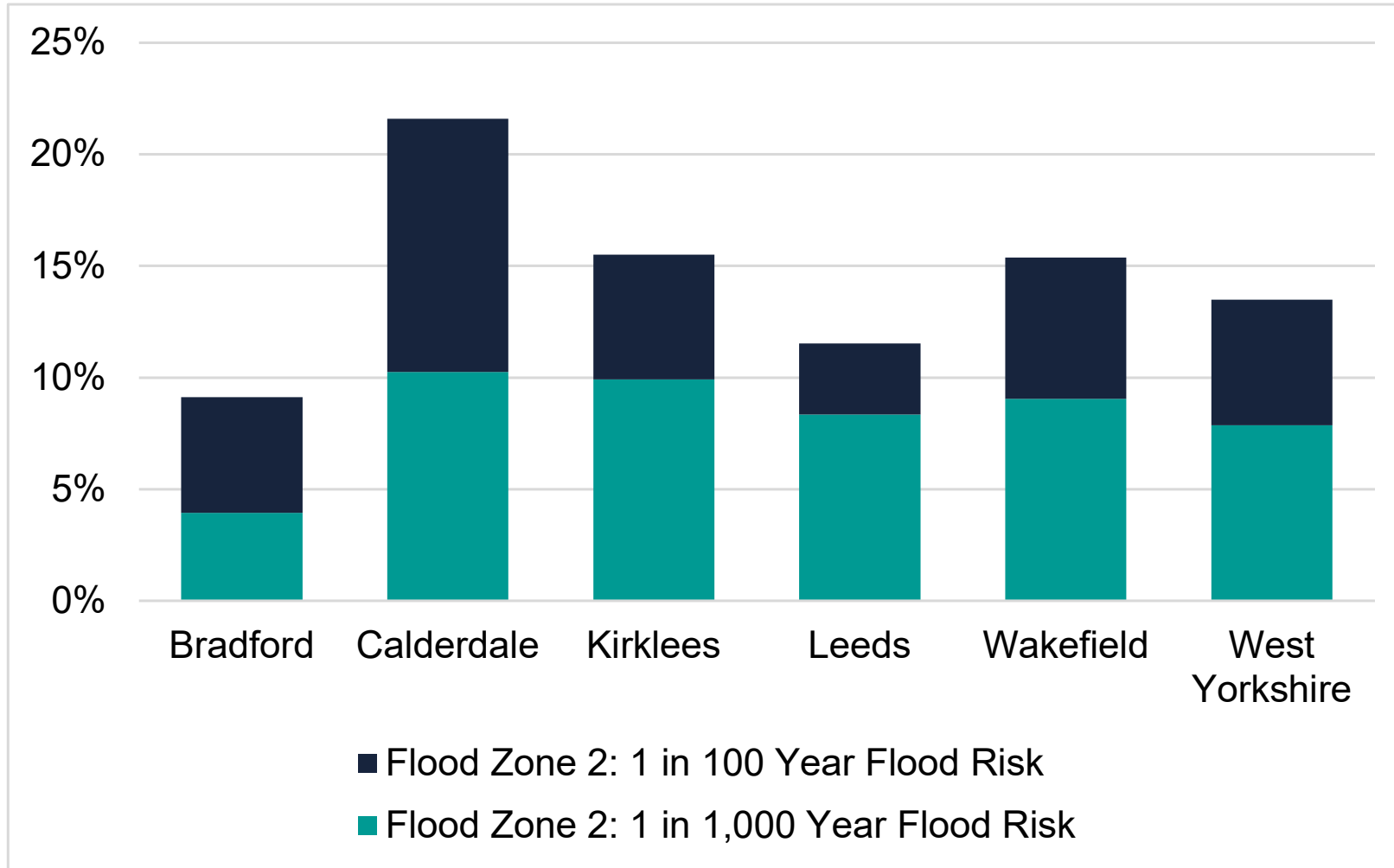
Figure 11: Proportion of residential properties in flood zones



Source: Environmental Agency 2023, Ordnance Survey 2023

14% of commercial properties in West Yorkshire fall within a flood zone

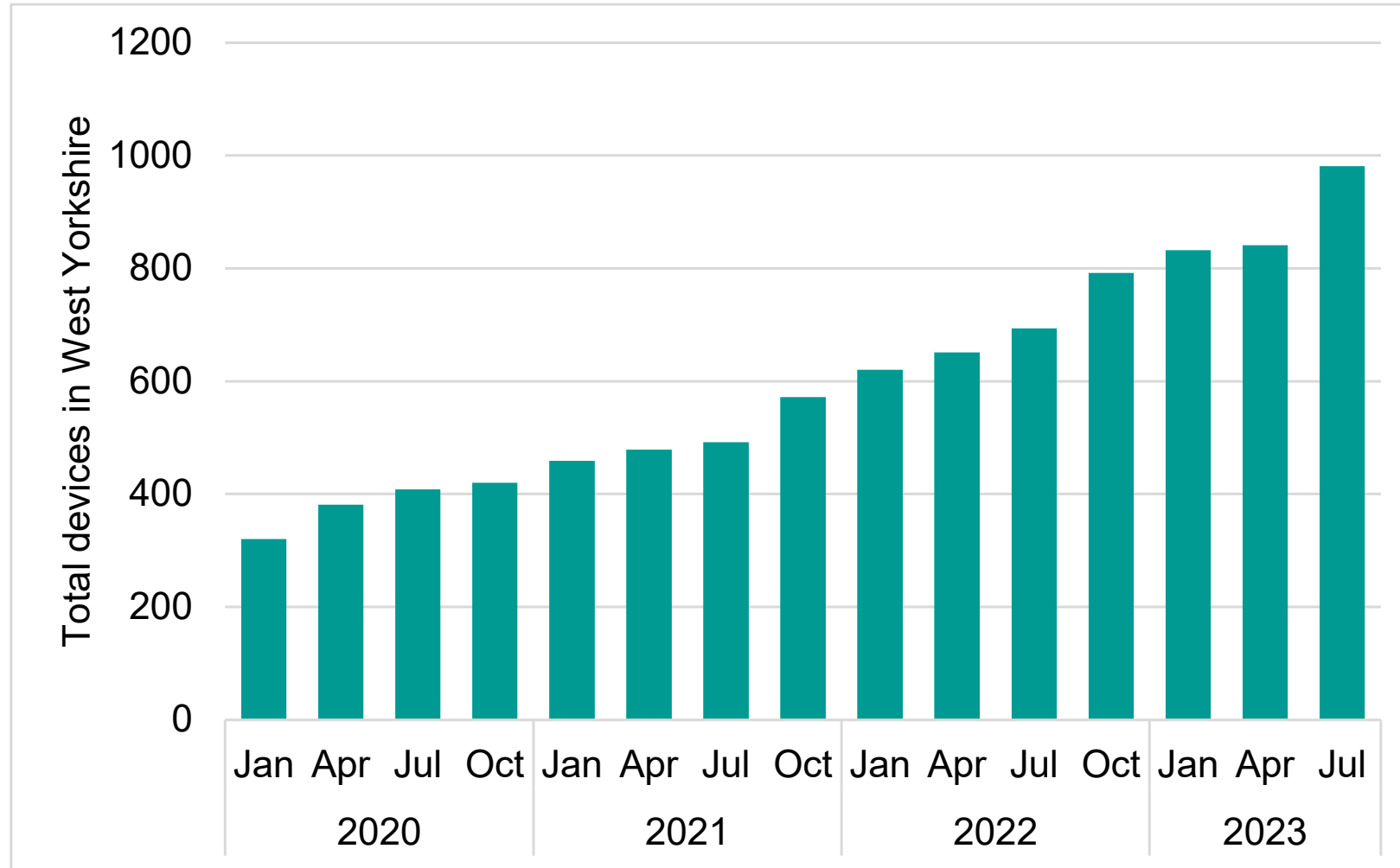
Figure 12: Proportion of commercial properties in flood zones



Source: Environmental Agency 2023, Ordnance Survey 2023

The number of publicly available EV charging devices in WY is growing rapidly

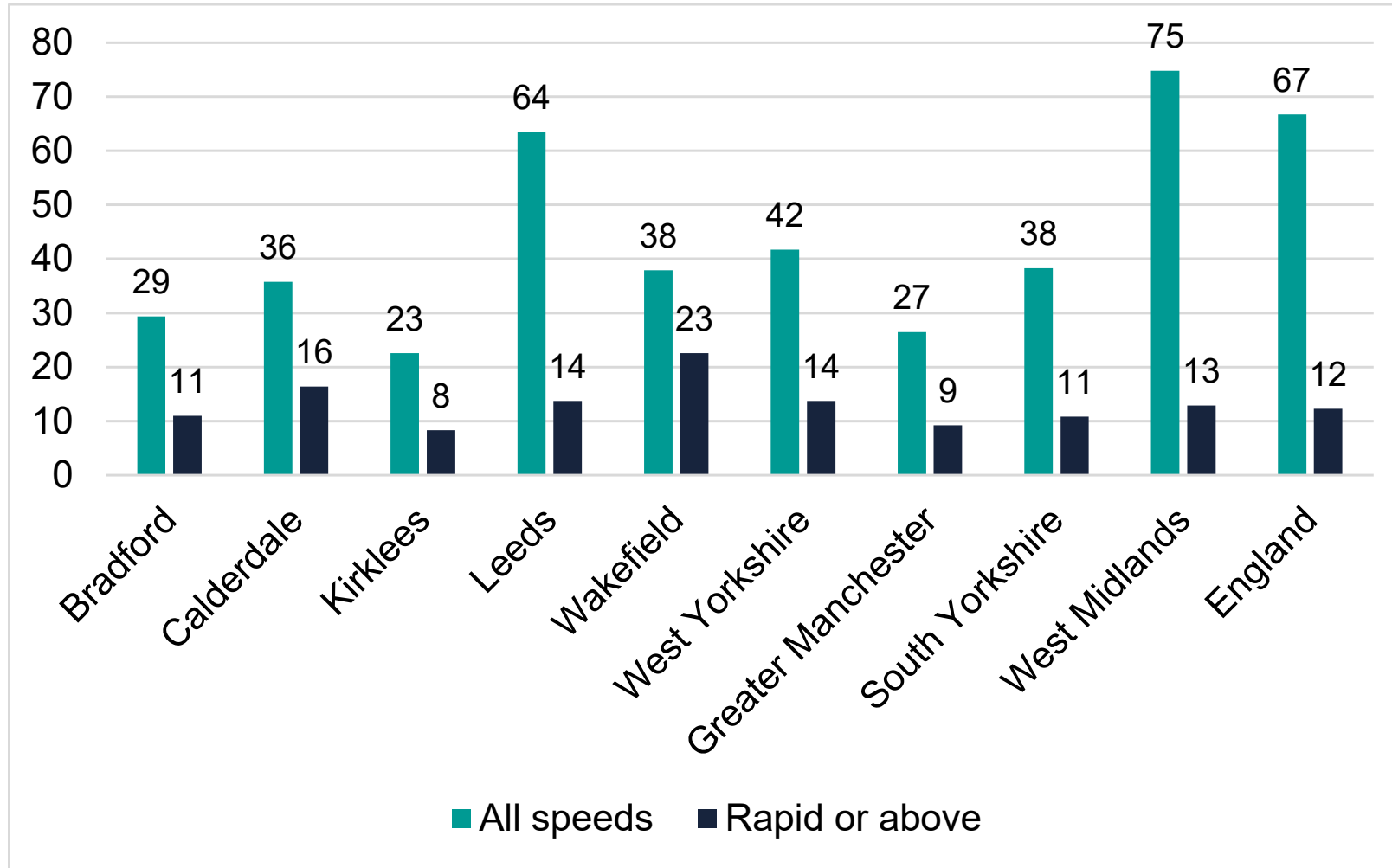
Figure 13: Trend in deployment of publicly-available electric vehicle charging devices, West Yorkshire



Source: Electric Vehicle Charging Device Statistics: July 2023, Department for Transport

Overall prevalence of public EV charging devices is below national average in WY but the region has a high prevalence of rapid charging devices

Figure 14: Publicly-available electric vehicle charging devices per 100,000 population, July 2023



Source: Electric Vehicle Charging Device Statistics: July 2023, Department for Transport