



West  
Yorkshire  
Combined  
Authority

Tracy  
Brabin  
Mayor of  
West Yorkshire

# Appendix 1: Monitoring Indicators

Climate, Energy and Environment Committee

13 February 2024

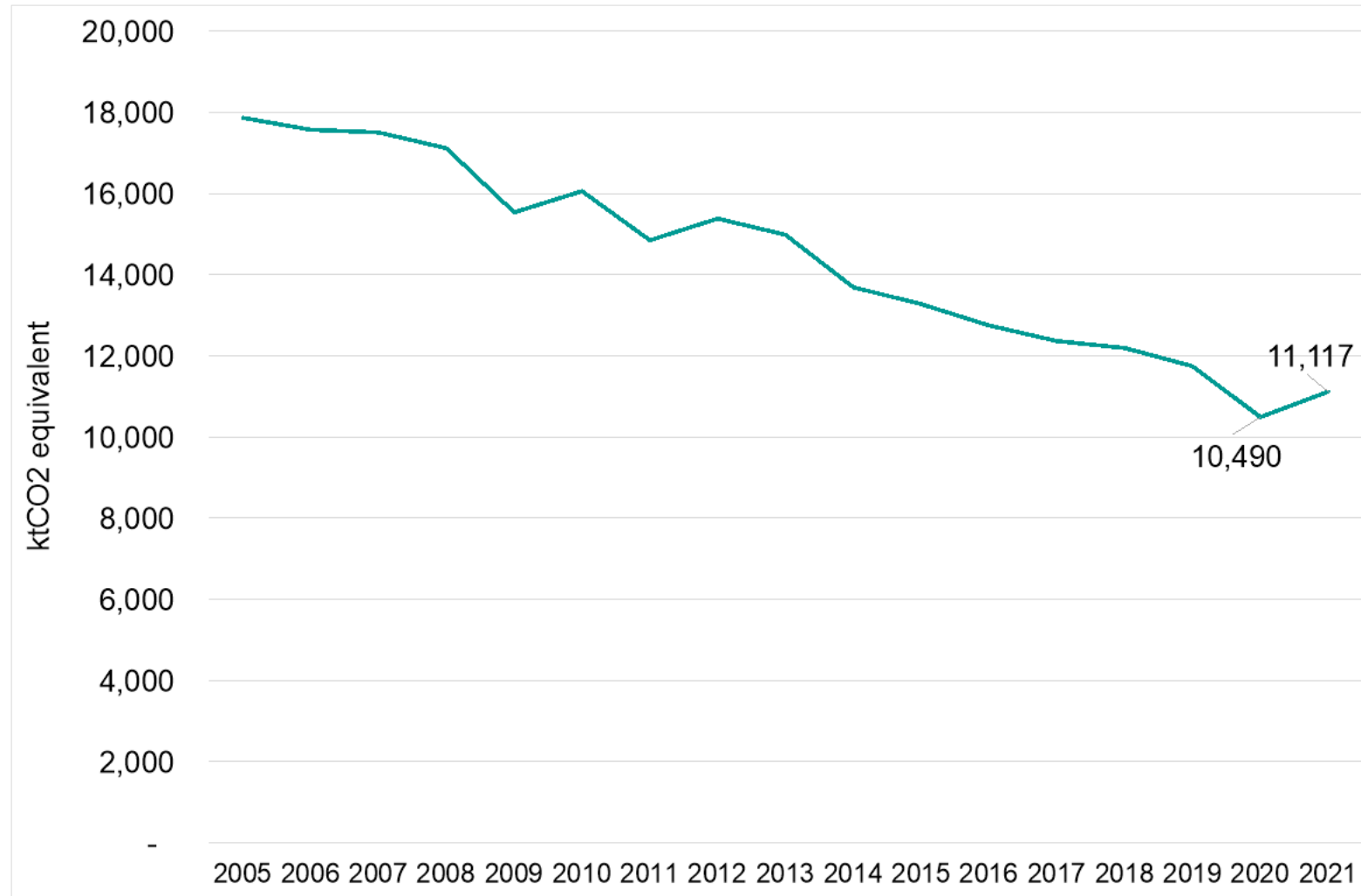
# Introduction

- 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 provide an 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: Trend in greenhouse gas emissions, West Yorkshire (kilotonnes CO2e)



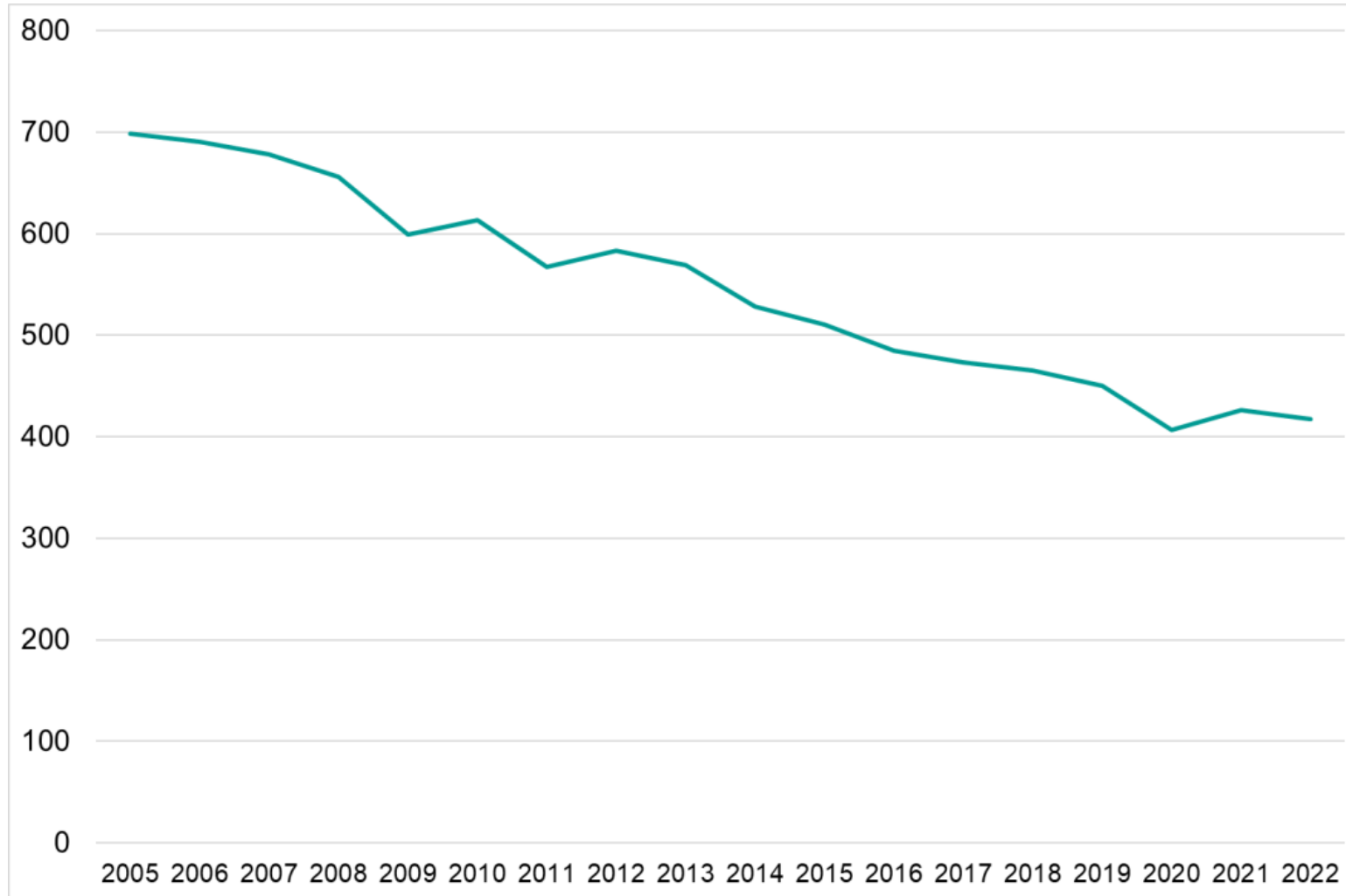
Emissions increased by 6% in 2021 but remain 5% below their 2019 level. This reflects the national picture.

NB: CO2e (CO2 equivalent) units are a measure of greenhouse gas emissions, including methane (CH4) and nitrous oxide (N2O) emissions as well as carbon dioxide (CO2) emissions. Each of the gases is weighted by its global warming potential - defined as its warming influence in relation to that of carbon dioxide over a 100-year period.

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

# Provisional figures show that UK emissions fell in 2022

Figure: UK annual territorial greenhouse gas emissions by million tonnes carbon dioxide equivalent (MtCO<sub>2</sub>e)

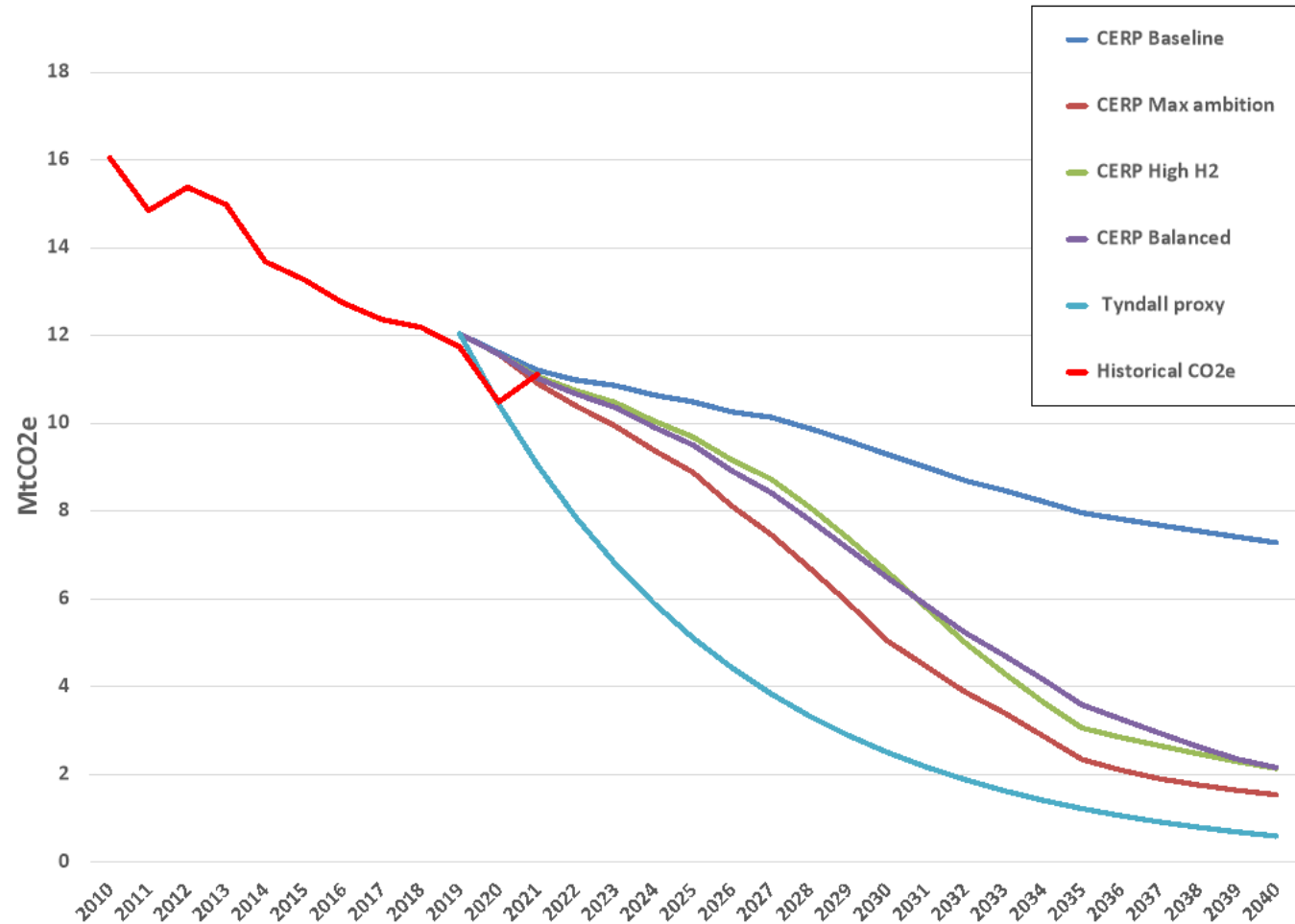


UK figures for 2022 point to a resumption of the pre-Covid trend. This is also likely to be the case for West Yorkshire when local figures are made available for 2022

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: Trend in West Yorkshire greenhouse gas emissions vs carbon reduction pathways (by million tonnes carbon dioxide equivalent (MtCO<sub>2</sub>e))



## Scenarios

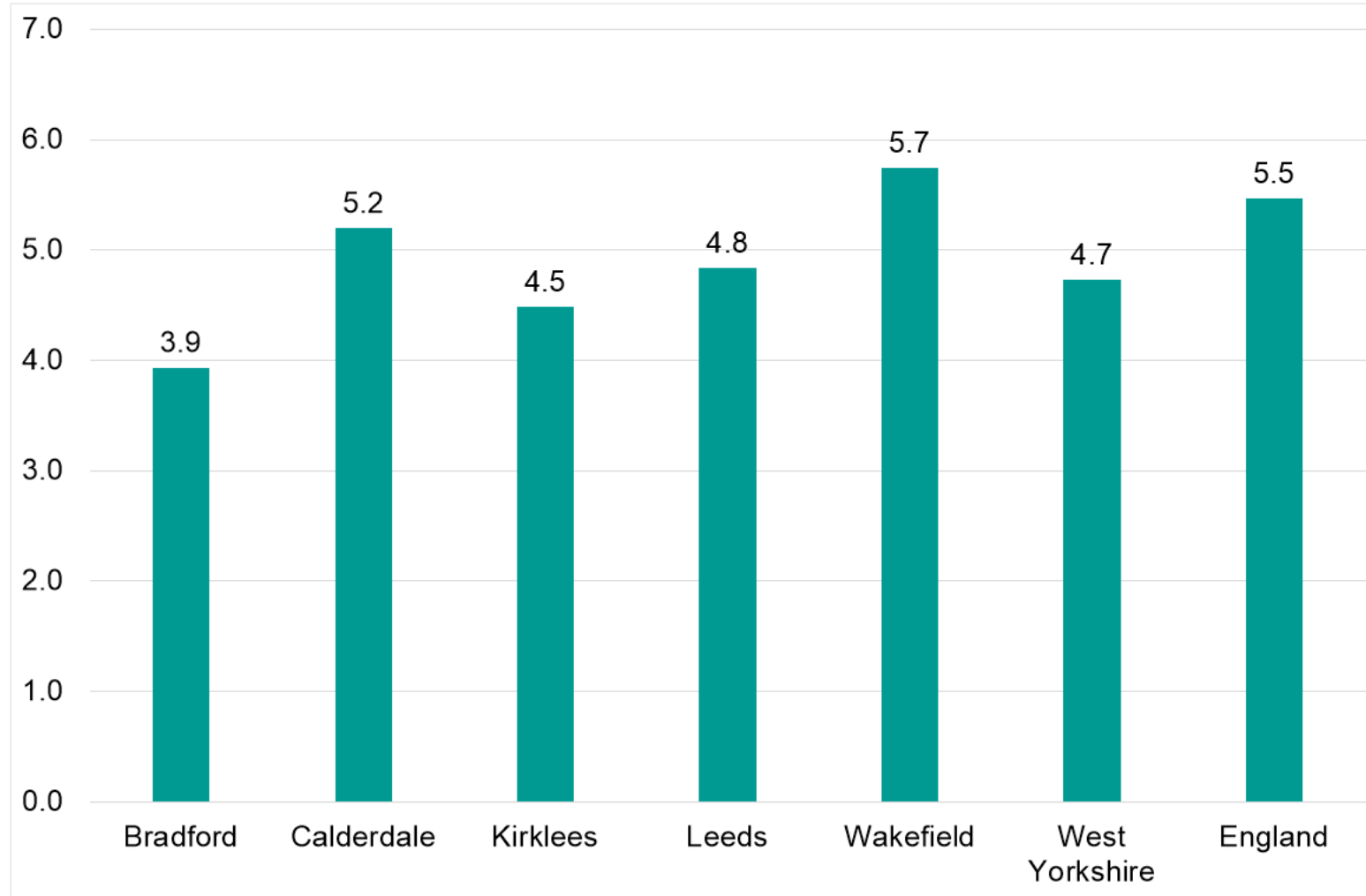
- Baseline - the likely levels of greenhouse gas emissions if no new action to reduce them is taken
- Max Ambition –Assumes significant electrification of heat, transport and industry supported by enabling technologies such as demand-side response and energy storage.
- High Hydrogen (High H<sub>2</sub>) - 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.

•See page 4 of this appendix for explanation of CO<sub>2</sub> equivalent (CO<sub>2</sub>e) units

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

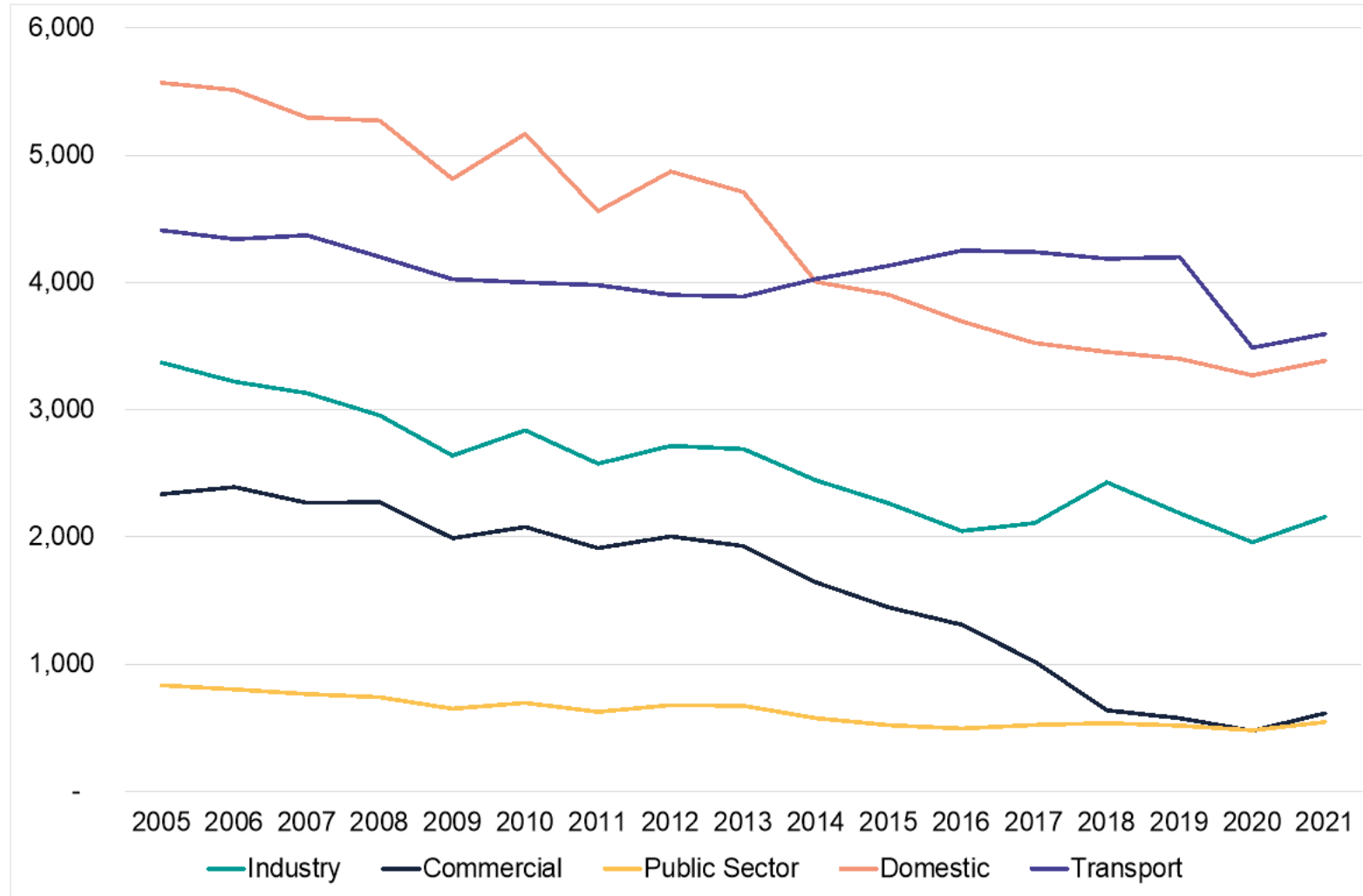
Figure: Per capita greenhouse gas emissions (tonnes CO2e per resident)



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: Trend in greenhouse gas emissions by sector, (ktCO<sub>2</sub>e), West Yorkshire



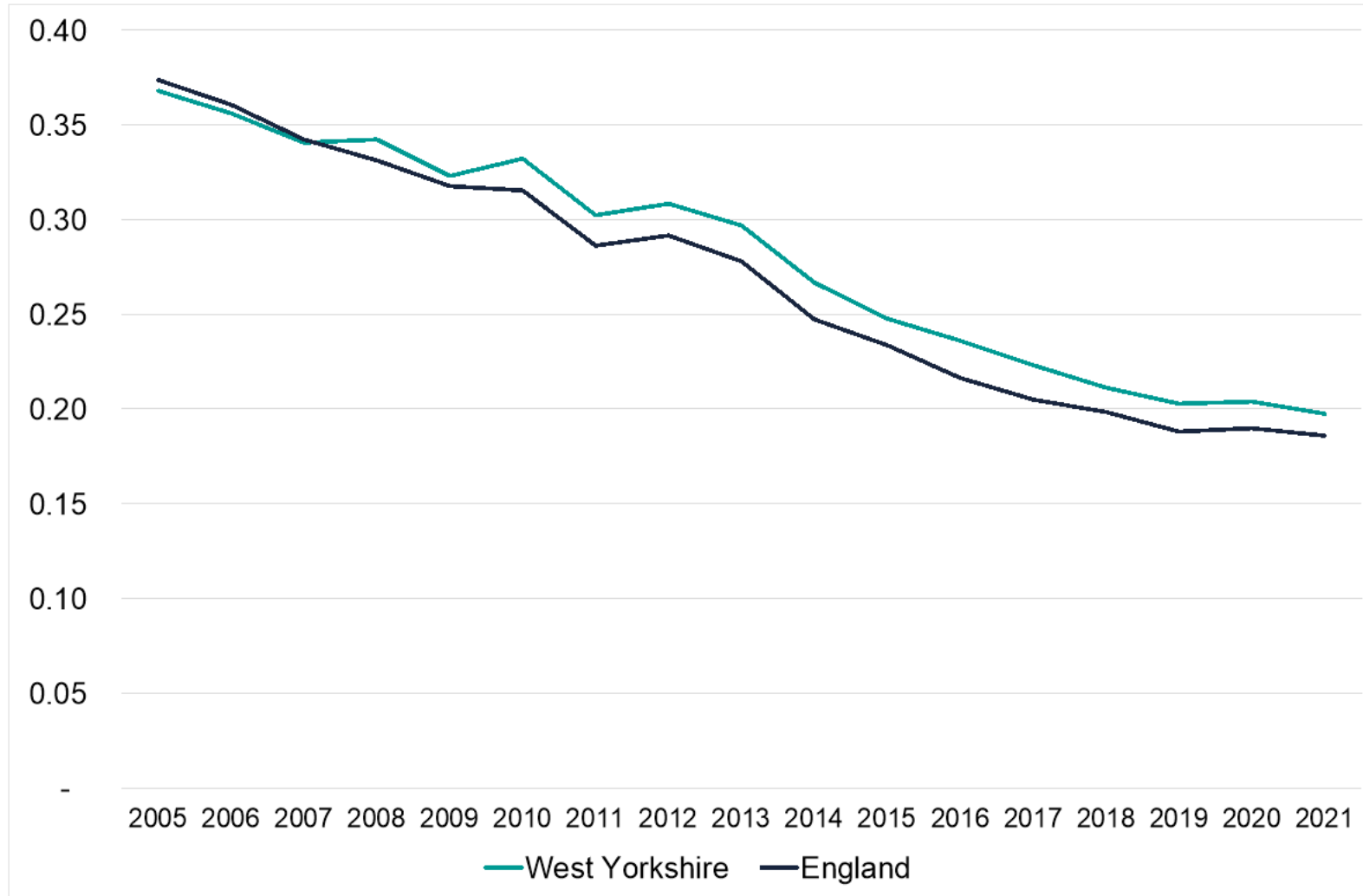
Although all sectors saw growth in 2021 most remain below their 2019 levels

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: Greenhouse gas emissions intensity (ktCO<sub>2</sub>e per £m gross value added)

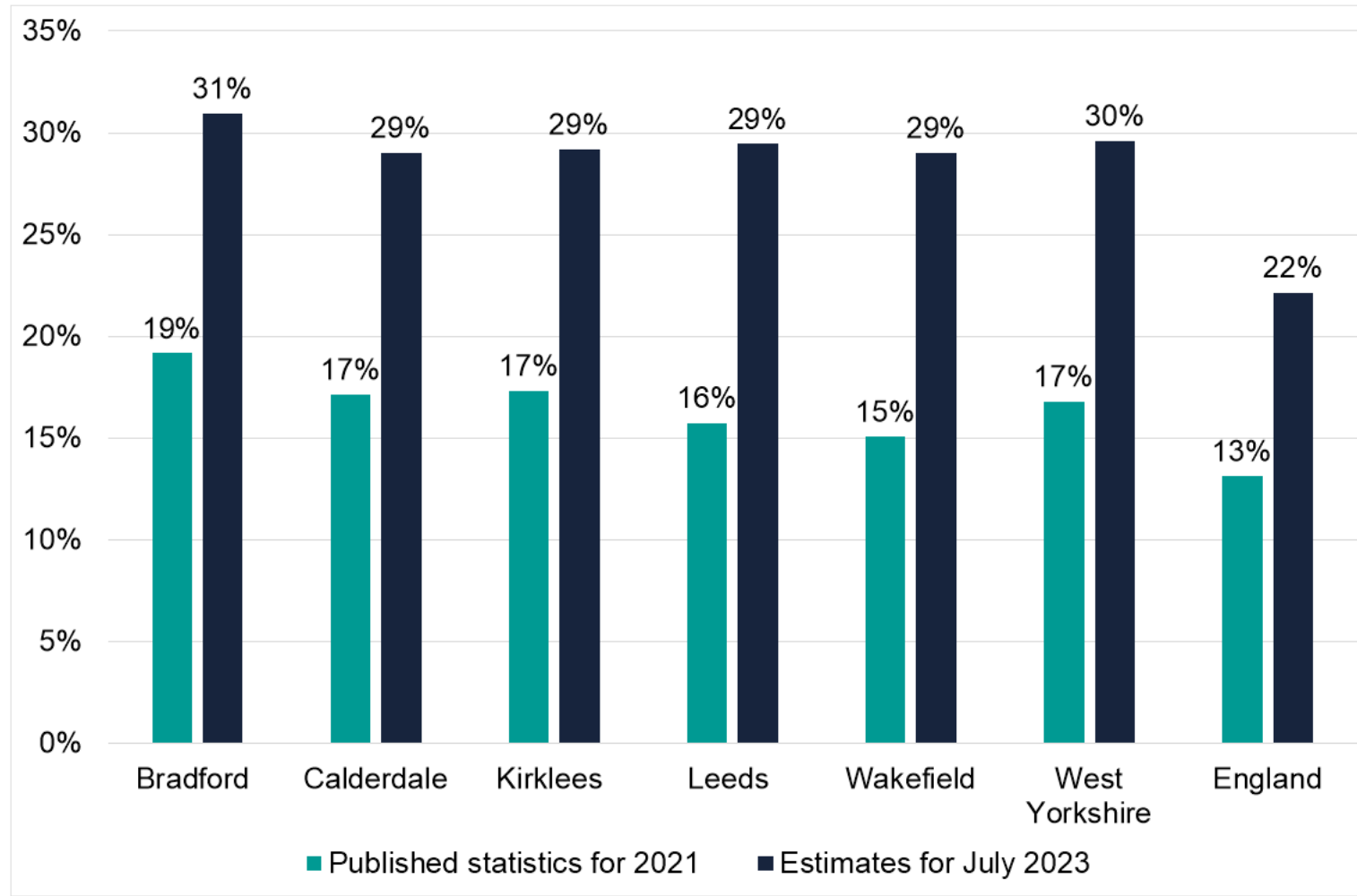


Emissions intensity remains slightly above the national average

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

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

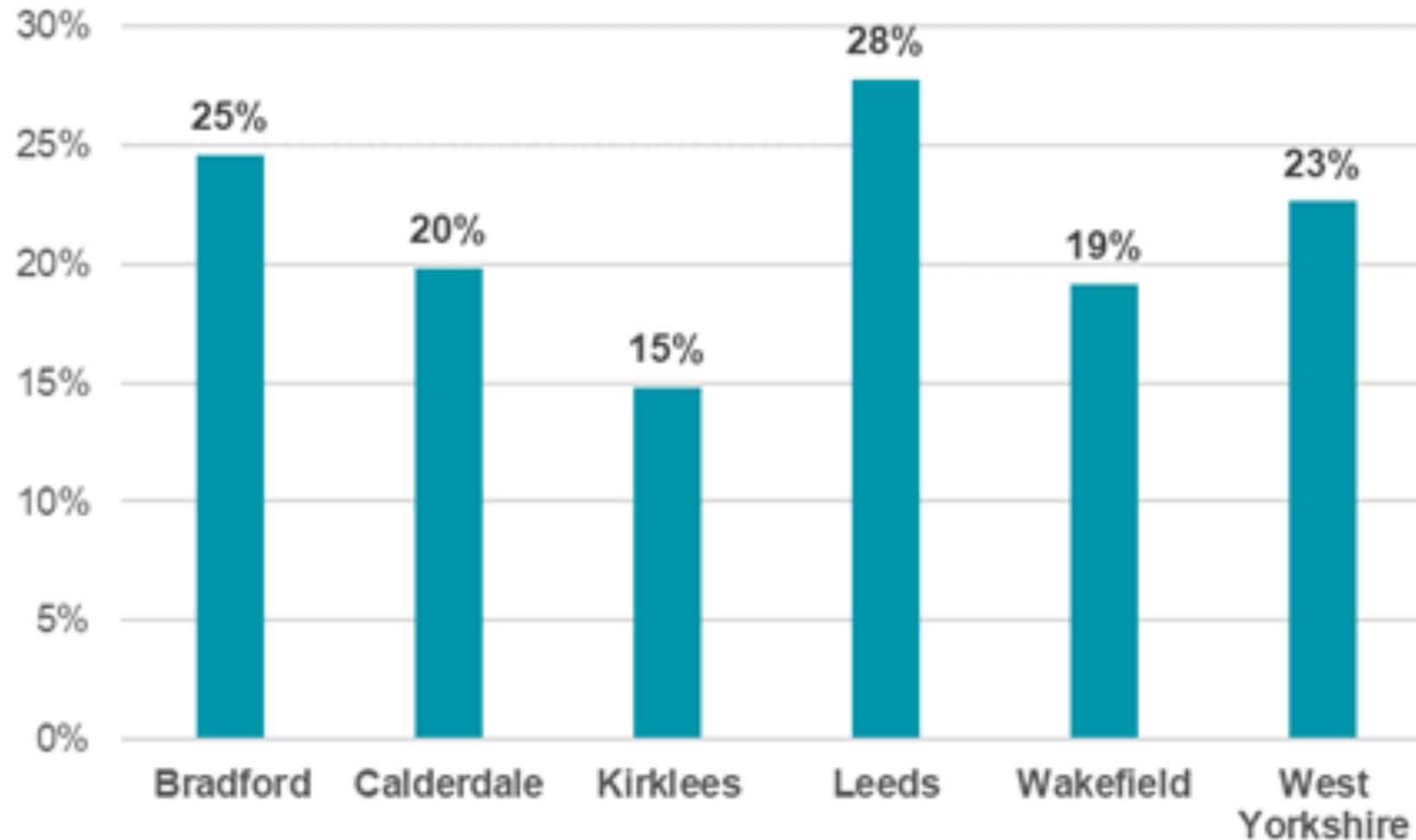
Figure: Proportion of households in fuel poverty



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

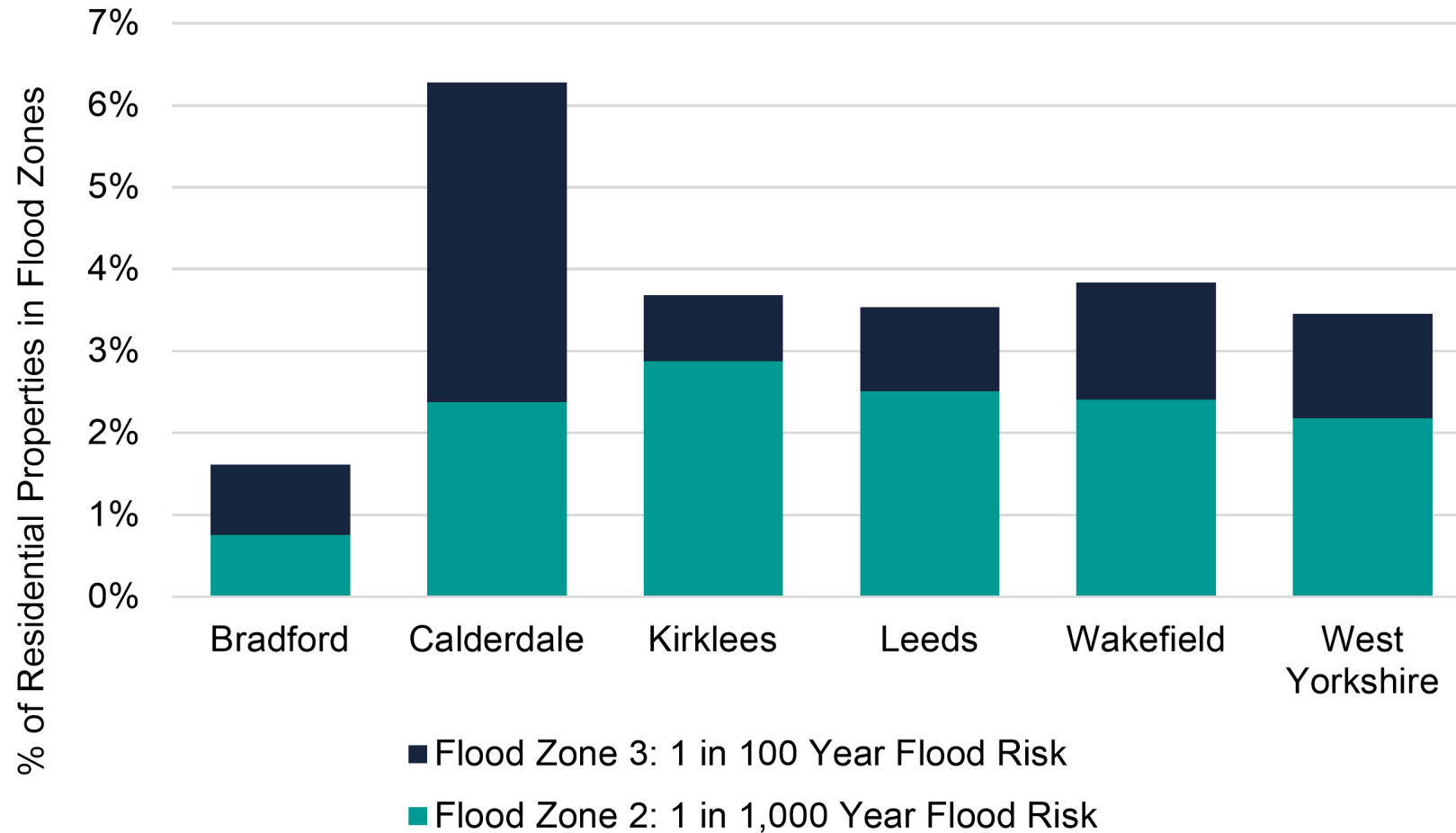


This indicator has been developed by Natural England and relates to the proportion of the population with easy access to local natural greenspace – i.e. live within 300m (as the crow flies) of an area of accessible natural greenspace of at least 2 hectares in size.

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

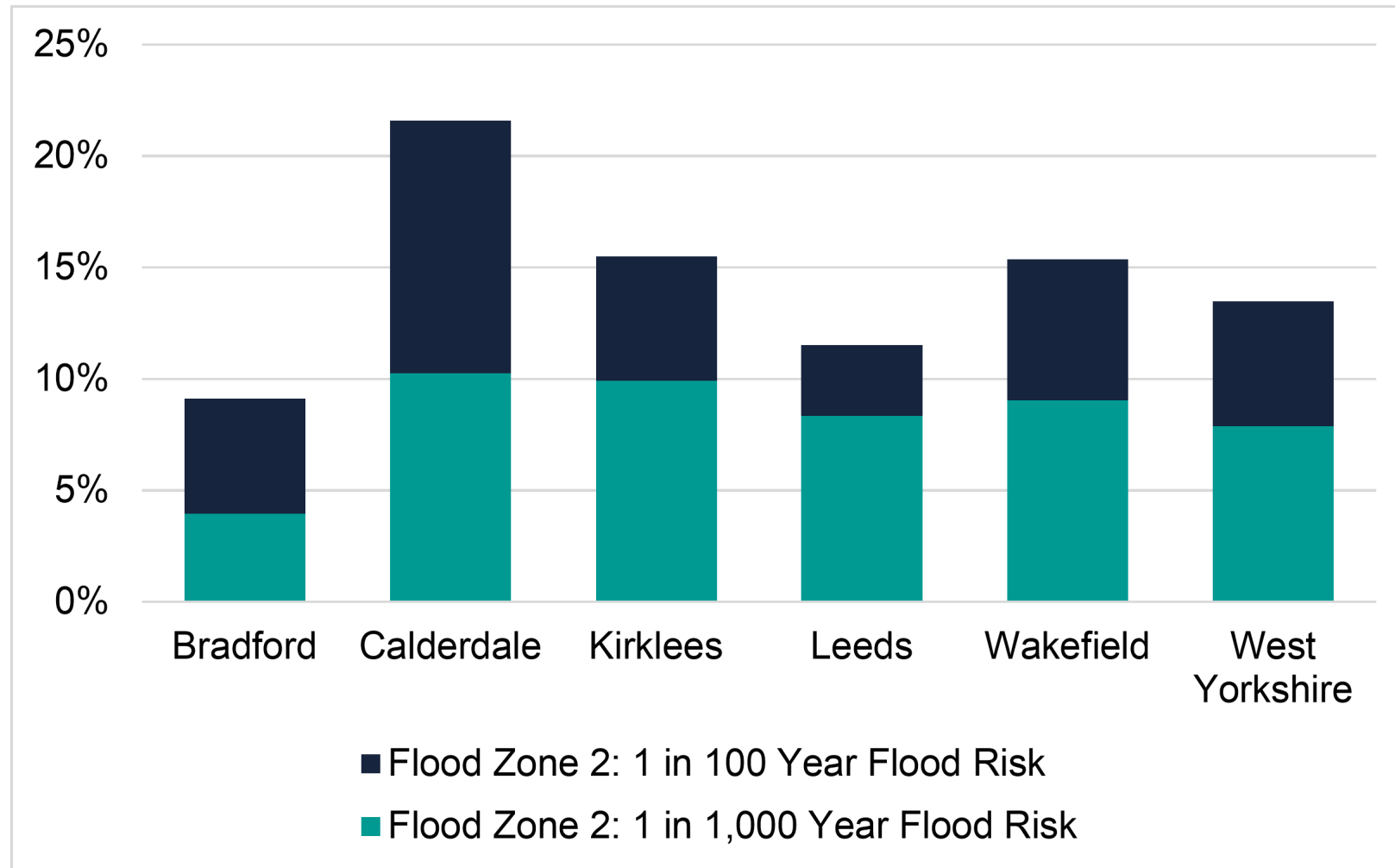
Figure: Proportion of residential properties in flood zones



Source: Environment Agency 2023, Ordnance Survey 2023

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

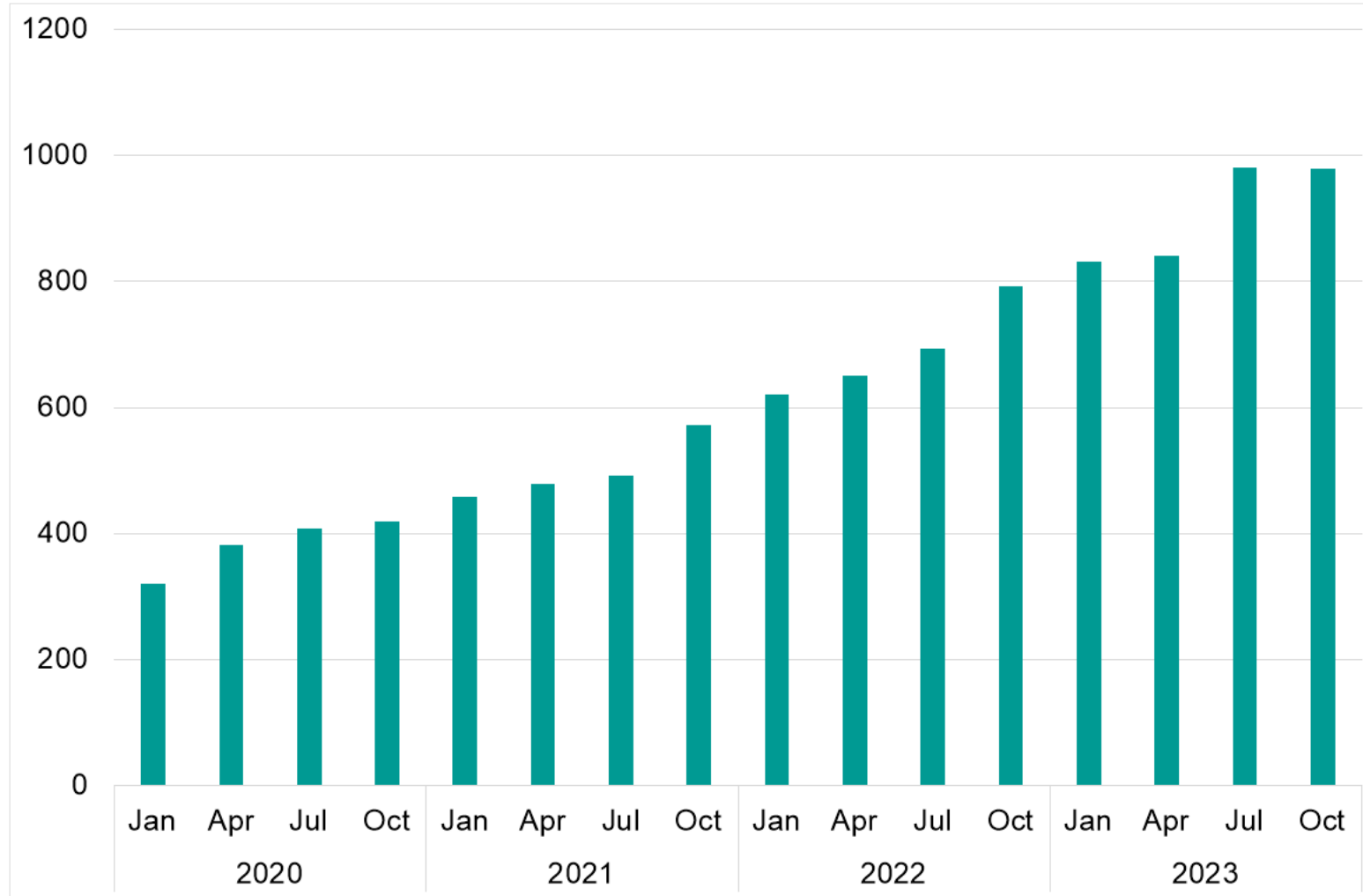
Figure 12: Proportion of commercial properties in flood zones



Source: Environment Agency 2023, Ordnance Survey 2023

# No change in number of public charging devices in final quarter of 2023

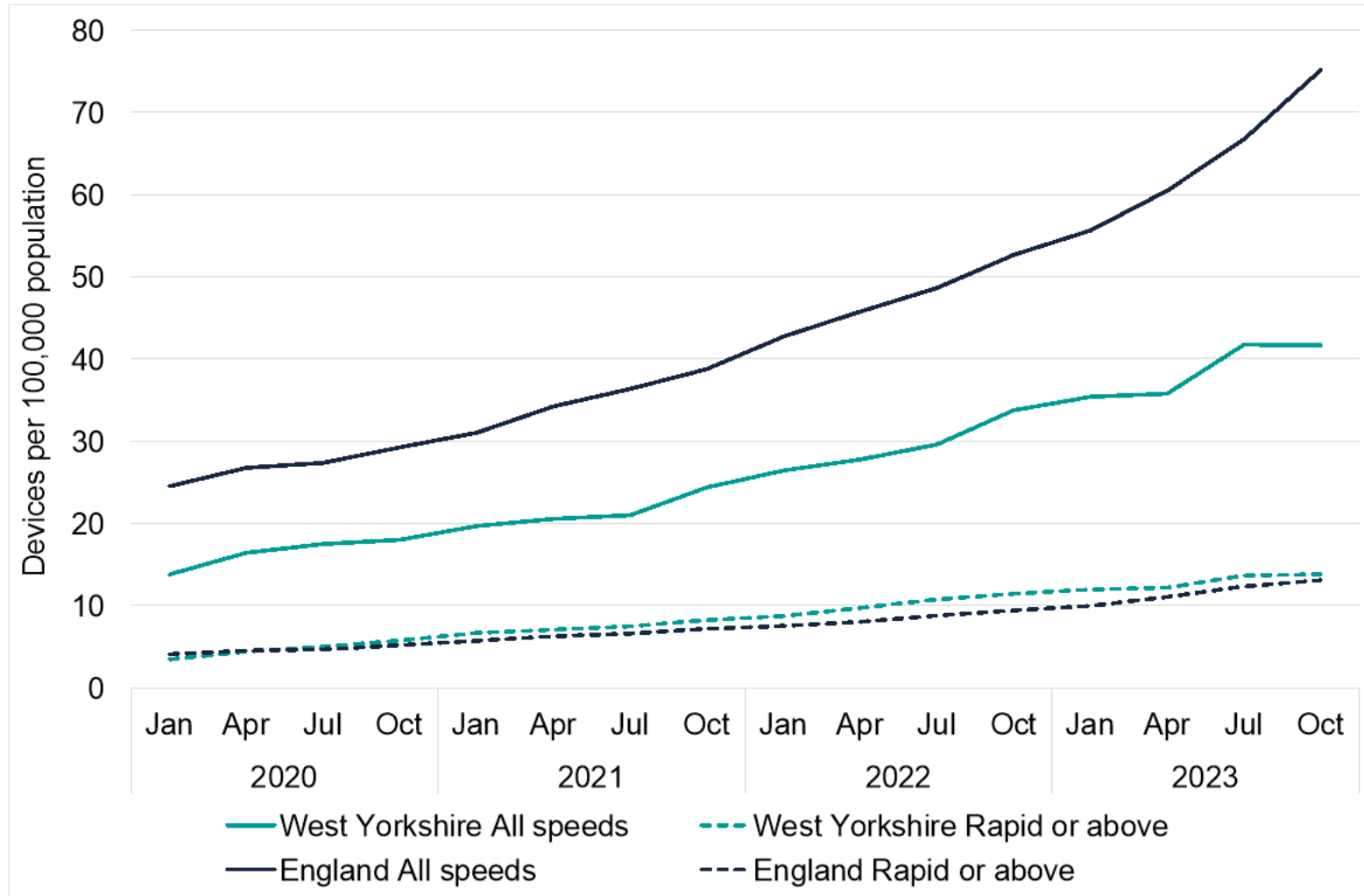
Figure: Trend in deployment of publicly-available electric vehicle charging devices, West Yorkshire



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

# Although growing rapidly, the gap with the national average is widening in terms of overall charging device availability

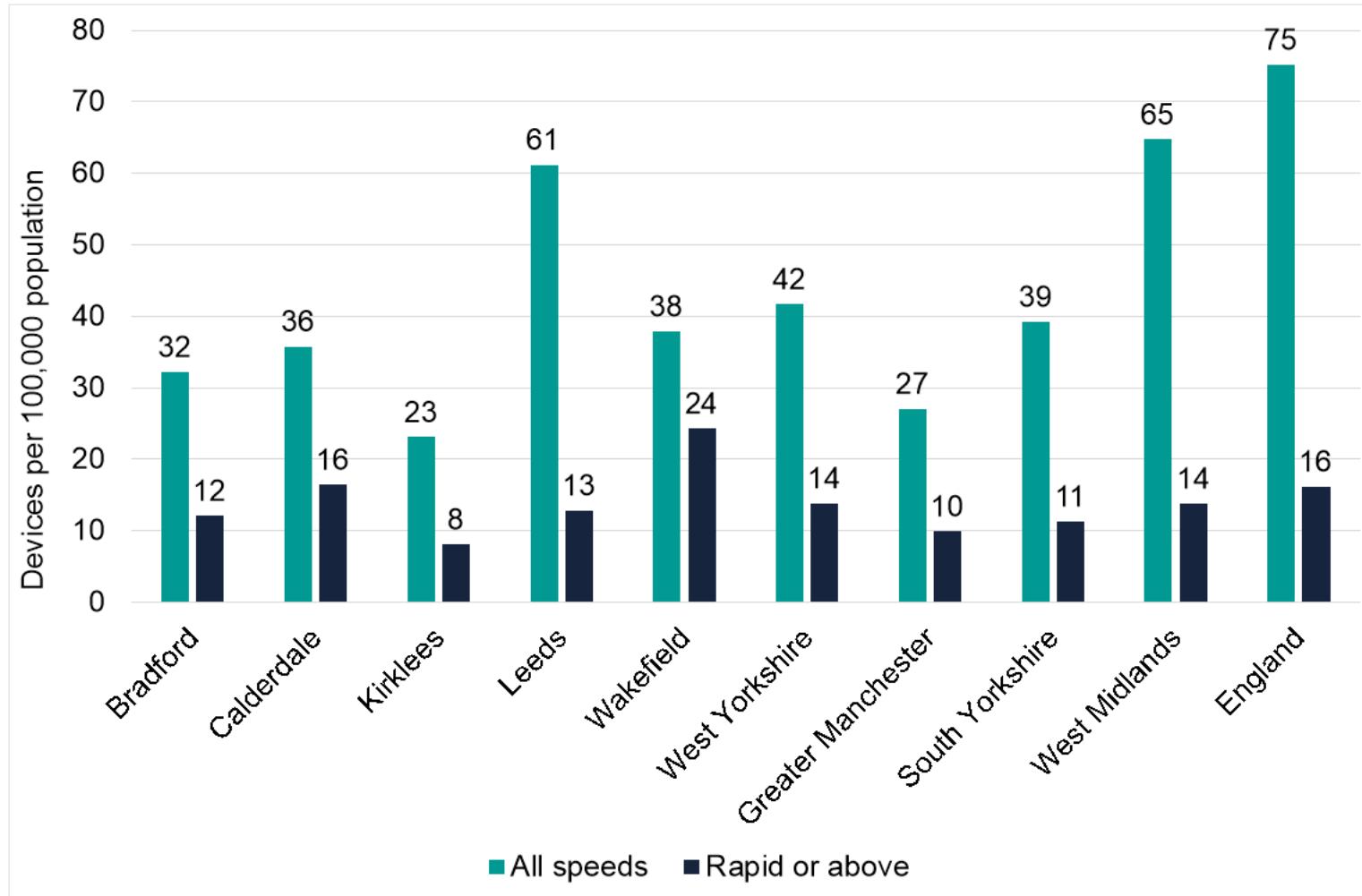
Figure: Publicly-available electric vehicle charging devices per 100,000 population, July 2023



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

# Leeds has highest prevalence of overall charging devices but Wakefield leads on rapid or above devices

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



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