



Report to:	Climate, Energy and Environment Committee
Date:	25 March 2025
Subject:	Monitoring Indicators
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Is this a key decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the decision eligible for call-in by Scrutiny?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information or appendices?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If the report does contain exempt information, what is the reason for exemption: <i>(indicate in the adjacent box the relevant paragraph of Schedule 12A, Local Government Act 1972, Part 1 – see Access to Information Rules)</i>	

1. Purpose of this Report

- 1.1 To provide an update on the relevant monitoring indicators and report on their performance to support the work of the Committee, particularly with reference to the discussion around the Climate and Environment Plan (Item 6 on the agenda).

2. Recommendations

- 2.1 That the Committee notes the messages from the monitoring indicators.

3. Information

Monitoring Arrangements

- 3.1 To present the latest position on the State of the Region monitoring indicators relating to climate, energy and the environment. The indicators reflect the outcomes that the work of the committee is seeking to address and are intended to provide a high level, strategic picture of performance rather than a detailed examination of operational performance of specific projects. The full State of the Region report covers more than 60 indicators mapped across the five Missions contained in the West Yorkshire Plan.

- 3.2 To support the discussion of the Climate and Environment Plan at the March meeting of the Committee **a summary of all key indicators has been provided**. This is a departure from the usual approach whereby indicators are reported on by exception i.e. when fresh data becomes available for each indicator, allowing the analysis to be updated.

Indicators

- 3.3 The core indicators agreed by the Committee are as follows:
- Greenhouse gas emissions (ktCO₂ equivalent)
 - Greenhouse gas emissions (ktCO₂ equivalent) by sector
 - Greenhouse gas emissions intensity ratio
 - Building energy efficiency
 - Premises at risk of flooding
 - Households in fuel poverty
 - Access to greenspace.
- 3.4 A number of supplementary indicators have also been included in the current pack. These indicators have been flagged by the Office for National Statistics as being relevant to the Local Growth Plan and could be monitored in future, subject to the approval of the Committee. The indicators are:
- Number of Boiler Upgrade Scheme (BUS) grants paid
 - Proportion of households receiving warm home discounts
 - Domestic electricity consumption
 - Renewable electricity: Installed Capacity
- 3.5 The indicators included in this paper are also visualised in the **appendix** to this paper.

Greenhouse Gas Emissions

- 3.6 The latest greenhouse gas emissions for 2022, published by the Department for Energy Security and Net Zero provide a breakdown of greenhouse gas emissions across the country, using nationally available data sets going back to 2005. They cover territorial emissions of carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), although not fluorinated gases. The key messages from analysis of the emissions data for West Yorkshire are provided below.
- 3.7 Total greenhouse gas emissions in West Yorkshire fell by 7.4% in 2022 compared with the previous year. The previous year (2021) saw an increase in emissions, but the decline in 2022 more than offset that. Therefore, emissions were 13.9% lower than in 2019 and 3.5% lower than in 2020 (the lowest point before 2022). Each year the Combined Authority compares the outturn carbon emissions with the carbon reduction pathways derived by the 2021 Carbon Emission Reduction Pathways (CERP) study. This

analysis has been repeated with the updated 2022 data reported above. The reduction in 2022 returned emissions to somewhere between the three reduction pathways, close to the maximum ambition scenario in the CERP report but well above the Tyndall proxy reduction pathway. Substantial progress needs to be made in future to achieve net zero carbon by 2038, in line with the Combined Authority's ambition, and this is considered in detail under Item 6 of the agenda Draft Climate and Environment Plan.

- 3.8 The trend observed in the UK is mostly the same. Emissions declined by 5.1% in 2022 and moved to the lowest levels seen in the period (2005-2022). That said, emissions were 9.9% below pre-pandemic levels, a smaller reduction than the one seen in West Yorkshire.
- 3.9 Greenhouse emissions per capita in West Yorkshire are lower than the England average: 4.4 ktCO₂ equivalent per resident compared to 5.1 ktCO₂ equivalent per resident in England. All local authorities have lower emissions than England with the exception of Wakefield (5.6 ktCO₂ equivalent per resident) which is principally due to the concentration of energy intensive industry in the district. The main difference between West Yorkshire's and England emissions comes from agriculture. Of the additional 0.7 ktCO₂e per resident that England has, 55% (0.4 ktCO₂e per resident) comes from agriculture. West Yorkshire has lower emissions per capita in all sources of emissions, except for public sector where it is the same. Emissions per capita fell at a faster rate than the national average in all West Yorkshire local authorities in 2022; all fell to their lowest level for the 2005-2022 period. The decline in per capita emissions ranges from -10.2% in Bradford to -6.6% in Wakefield.
- 3.10 While all broad sectors in West Yorkshire experienced a fall in emissions in 2022, there were significant differences among them. Transport, the biggest source of emissions in West Yorkshire (accounting for 35% of total emissions in 2022), fell very marginally by 0.4% and emissions remain higher than they were in 2020 by 1.6%.
- 3.11 The biggest contributors to the decline in absolute terms were the domestic sector (-516 ktCO₂e) accounting for 61.3% of the total decline in emissions, followed by industry (-127 ktCO₂e and 16.3% of the total decline).
- 3.12 The major difference between West Yorkshire and England's decline is seen in domestic emissions. Of the 1.9 percentage point difference in the decline in total emissions 1.3 percentage points can be attributed to domestic emissions. The decline in industrial emissions was stronger in England (1.4% contribution to the reduction of all emissions) than in West Yorkshire (1.2% of all emissions).
- 3.13 In terms of emissions intensity (ratio of emissions to economic output), West Yorkshire continued its downward path. Emissions intensity remains higher than the England average but it has converged significantly in the last four years.

Building Energy Efficiency

- 3.14 The Office for National Statistics recently published its estimates of the number of dwellings with an energy efficiency rating above EPC C, based on data from the Ministry of Housing, Communities and Local Government (MHCLG). As of March 2024, we estimate that 41.9% of the dwellings in West Yorkshire had an EPC of C or above, 3 percentage points above the numbers reported relative to March 2023 (38.8%). This share remains below England's average that stood at 49.8%, up from 46.6%. All local authorities in West Yorkshire remained below the national average: ranging from 32.6% in Bradford to 47.8% in Wakefield. The difference between the local authorities and the England average narrowed marginally in Calderdale, Leeds and Wakefield.
- 3.15 In terms of dwellings classified as new, which can include building conversions, the vast majority have an EPC at C or above. At national level the proportion is 96.6%. Within West Yorkshire's districts, the share is slightly lower except for Wakefield, where 97.9% of new dwellings have an EPC C or above. The remaining districts vary between 89.9% (Bradford) and Kirklees (92.9%). Between March 2023 and March 2024, the share of new dwellings with EPC C or above increased in England and all local authorities except Bradford (marginal decline), which suggests a recent increase in conversions.
- 3.16 When taking into consideration tenure (Owner-occupied, Private rent, Social rent), one can observe that social rent has the highest share of dwellings with EPC of C or above in England and West Yorkshire. On top of that, for Calderdale and Kirklees, the share is higher than England's (62.7% vs. 64.7% and 63.3% respectively). The remaining districts, despite being below England's average, made significant progress compared to the data reported for March 2023: the share of social rented properties with EPC of C or above rose at least 2 percentage points.

Fuel Poverty

- 3.17 The most recent official statistics at local level for fuel poverty are for 2021 – these do not capture the current situation in terms of fuel prices and the fluctuations in recent years. Official statistics on fuel poverty, from 2021, show West Yorkshire with higher poverty than the national average and higher than Greater Manchester.
- 3.18 In order to track the recent developments, and the impacts of the government response, the Combined Authority has produced its own indicative estimates of fuel poverty. These latest estimates are based on the End Fuel Poverty Coalition figures, therefore the number presented below cannot be directly compared to the official figures because the estimates use different methodologies (official estimates use Low-Income Low Energy Efficiency, while End of Fuel Poverty measures households that spend more than 10% of their income after tax and housing costs on energy bills).
- 3.19 With the latest energy price cap (October 2024), at £1,717 a year, it is estimated that 26.7% of West Yorkshire households live in fuel poverty (although the figures do not take

account of recent changes to winter fuel payment). That number is above the estimate for England at 20%. The estimated fuel poverty shows a decline from the period when the Energy Price Guarantee was in place but remains above the October 2021 level of 23.1%.

Premises at Risk of Flooding

- 3.20 The latest West Yorkshire estimates of premises within flood zones show that 3% of residential properties are within a flood zone 2 (1 in 1,000 years flood risk), and 1% for flood zones 3 (1 in 100 years flood risk). Calderdale has the highest risk of flooding (6%, zone 2) and Bradford the lowest (4%, zone 2); the remaining districts are in line with the West Yorkshire average.
- 3.21 The risk of flooding for commercial premises is significantly higher: 13% of commercial properties within a flood zone 2 (1 in 1,000 years flood risk) and 5% in flood zone 3 (1 in 100 years flood risk). The district differences are in line with the ones stated above for residential properties, with Calderdale having the highest risk of flooding: 28% of all commercial properties in a flood zone 2 and 14% in a flood zone 3.

Access To Greenspace

- 3.22 The selected indicator for 'access to greenspace' is defined as the 'proportion of the population who have access to local greenspace; that is, they live within 300m (as the crow flies) of an area of accessible natural greenspace of at least 2 hectares in size in which a sense of naturalness prevails over the sense of human made environment'. The latest data shows that 21% of West Yorkshire population have such access. The share varies across local authorities from 15% in Kirklees to 24% in Leeds.
- 3.23 The share of residents with access to green spaces in West Yorkshire is lower than for peer Combined Authorities. The figures range from 25% in South Yorkshire and 32% in Liverpool city Region. West Midlands and Greater Manchester sit in between those levels.

Boiler Upgrade Scheme (BUS) Monthly Statistics

- 3.24 The Department of Energy Security and Net Zero provides information on the Boiler Upgrade Scheme (BUS) take-ups between May 2022 and December 2024. The Boiler Upgrade Scheme (BUS) aims to incentivise and increase the deployment of low carbon heating technologies by providing an upfront capital grant towards the cost of an installation from 1 April 2022 are eligible to apply for the grant.
- 3.25 In West Yorkshire, there were 1,134 grants paid in West Yorkshire, which is 2.7% of the total number paid in England and Wales. As almost all of grants (+99%) refer to domestic properties, therefore comparing the grants by the dwelling stock gives us a better understanding of how West Yorkshire performs and which local authorities are using the

most in relative terms. The number of grants accounts for the equivalent of 0.11% of the existing dwellings, below the England average of 0.16%. Among the peer Combined Authorities analysed, West Yorkshire has the second highest rate, only behind South Yorkshire (0.13%) (see appendix). This topic is considered in more detail in the Home Energy West Yorkshire paper (Item 7).

Warm Home Discount

- 3.26 The Warm Home Discount Scheme is a one-off £150 discount in electricity bills, introduced in 2011 to tackle fuel poverty issues¹. According to Department for Energy Security and Net Zero, in 2023/24, there were 3.1 million households that received this support in Great Britain, which is 10.8% of the households in the country. This includes more than 150,000 households in West Yorkshire (14.8%). In West Yorkshire's local authorities, it varied between 11.8% in Leeds and 20.1% in Bradford – which means all local authorities had a higher proportion than the national average.
- 3.27 However, West Yorkshire had the lowest proportion of households receiving the Warm Home Discount Scheme among the six metropolitan counties.

Electricity Consumption

- 3.28 Electricity consumption data for 2023, provided by Department for Energy Security and Net Zero, shows that 40% of electricity consumption in West Yorkshire is for domestic purposes. This is similar to the English average and Greater Manchester and slightly higher than South Yorkshire, Cambridgeshire and Peterborough and Tees Valley where domestic consumption is around 30-35%. The weight of domestic consumption rose between 2007 and 2023 in all Combined Authorities analysed.
- 3.29 Mean domestic electricity consumption in West Yorkshire in 2023 was 3,200 (kWh per household), which is 7% lower than the England average. While West Yorkshire consumption is below the average, it is relatively high when compared to the Combined Authorities in the North and Midlands. Of those, only West Midlands and Greater Manchester have higher domestic electricity consumption (see appendix).
- 3.30 Leeds has the highest domestic consumption per household at 3,300 (kWh per household), but still below England's average. Conversely, Wakefield has the lowest consumption at 2,976 (kWh per household).
- 3.31 Since 2007, electricity consumption per household declined in all combined authorities and in all West Yorkshire's local authorities. West Yorkshire fell by 27%, in line with England (25%) but the second sharpest decline among the Combined Authorities

¹ The majority of eligible households received their discount automatically without having to apply. However, according to the Fuel poverty charity National Energy Action (NEA): "Even for households who were still theoretically eligible, 300,000 households missed out as they were required to prove their eligibility and were left baffled by the complexity of the new scheme."

analysed. Within West Yorkshire, the decline in electricity consumption per household varied from -22% in Leeds to -28% in Kirklees. The long-term decline in consumption has been due to increased energy efficiency (including lighting and appliances) and in more recent years, warmer temperatures and the impact of increased energy prices.

Renewable Electricity

- 3.32 Department for Energy Security and Net Zero publishes annual data on the amount of renewable electricity generated by local authority since 2014. Renewable generation of electricity in West Yorkshire grew significantly since 2014. Between 2014 and 2024 the amount of electricity generated by renewable sources rose 54%, from 2,890 MWh to 4,456 MWh. This has been driven by Calderdale where electricity generated by renewables rose by 2.5 times, more than doubling its contribution from 14.5% to 33.2% of West Yorkshire's renewable electricity. This increase in Calderdale was mainly driven by onshore wind electricity generation.
- 3.33 When measured against electricity consumption presented previously, West Yorkshire renewable energy moved from 3.1% in 2014 to 5.7% in 2023. Calderdale produces the equivalent of 21% of its electricity consumption in 2023, after peaking in 2020 at 26%.
- 3.34 The composition of renewable electricity in West Yorkshire has been moving toward onshore wind and photovoltaic. In 2014, these two sources accounted for 33% of the renewable electricity generated (19% and 14%, respectively); in 2023, they accounted for 71%, with onshore wind accounting for 40% and photovoltaic 32%.
- 3.35 When compared with others Combined Authorities, there is a clear split between the most urban Combined Authorities (where West Yorkshire is included) and the others with significant parts of non-urban land. In 2023, North of Tyne and Cambridgeshire and Peterborough generate more than the equivalent 40% of its electricity consumption by renewables. Tees Valley, South Yorkshire and West of England generate more than the equivalent of 10% of its electricity consumption. The remaining Combined Authorities generated less renewable electricity as a share of their consumption than West Yorkshire (5.7%), with proportions between 2.4% for Liverpool City Region and 3.0% for West Midlands.

Gas Consumption

- 3.36 Between 2005 and 2023, gas consumption in West Yorkshire fell by 34%. The decline was slightly sharper for non-domestic uses (-37% vs. -31% for domestic). This is mostly in line with other combined authorities. As a result, domestic gas consumption rose from 61% of all consumption in 2005 to 64% in 2023. The West Yorkshire local authorities follow similar trends.

4. Risks and Mitigations

4.1 There are no risks directly arising from this report.

5. Tackling the Climate Emergency Implications

5.1 The latest report shows the considerable scale of the challenge presented by the lack of energy efficiency of dwellings in West Yorkshire and the implications of this for fuel poverty.

6. Inclusive Growth Implications

6.1 Addressing the high prevalence of fuel poverty in West Yorkshire is central to the Combined Authority's inclusion agenda and it is a concern that fuel poverty rates remain above those recorded before the energy crisis.

7. Equity and Diversity Implications

7.1 Some of the issues highlighted in the paper are more likely to affect specific groups. Single parent households have the highest prevalence of fuel poverty of any household type; ethnic minority households also have a greater risk of being in fuel poverty due to low incomes. Fuel poverty rates in England are typically higher amongst households containing disabled people.

8. Financial Implications

8.1 There are no financial implications directly arising from this report.

9. Legal Implications

9.1 There are no legal implications directly arising from this report.

10. External Consultees

10.1 No external consultations have been undertaken.

11. Background Documents

11.1 There are no background documents referenced in this report.

12. Appendices

- [Appendix 1 - Monitoring Indicators](#)