

Combined Authority Sustainability Benchmarking

Summary Report – annual analysis of metrics 2019

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About Sustainability West Midlands

We are the sustainability adviser for the leaders of the West Midlands. We are also the regional sustainability champion body for the West Midlands, as designated by government. We are a not-for-profit company that works with our members in the business, public and voluntary sectors. Our Board is private sector led and has cross-sector representation; they are supported by our team of staff and associates.

Our vision is that by 2020 businesses and communities are thriving in a West Midlands that is environmentally sustainable and socially just.

Our role is to act as a catalyst for change through our advice to leaders, to develop practical solutions with our members and share success through our communications.

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1 Introduction

Sustainability West Midlands (SWM) is the sustainability delivery partner for the West Midlands Combined Authority (WMCA). This report is part of an ongoing support programme to help the WMCA integrate sustainability within its strategy and operations, drawing on good local and national practice.

This report provides a summary of the annual data used to underpin sustainability performance and monitoring in the WMCA area and how these compare to the eight other CAs areas in England. This is the third year of producing this monitoring report. The full technical report, containing the background to the study and the full range of tables, graphs and a methodology, is available on the same webpage as this summary report.

The key sustainability metrics we used are taken from various sources in line with the WMCA's sustainability priorities¹ as determined by its Environment Board and SWM's West Midlands 2020 sustainability roadmap.² These are:

- Carbon emissions (absolute)
- Air pollution
- Health inequality (male and female)
- Economic productivity (per capita)

It's Environment Board has identified the additional priorities of:

- Carbon emissions (per capita)
- Renewable energy generated
- Household and non-household waste recycled
- Sites in positive conservation management
- Water quality
- Flood risk
- Households in fuel poverty
- Economic productivity (absolute)
- Carbon intensity (CO₂ emitted per £ million GVA)

We have also included in this report analysis of the following metrics:

- Fraction of mortality attributable to particulate air pollution (to supplement the air quality metric already analysed)

Data for metrics reflecting Environment Board Priorities that we could not obtain for this report on a national scale are:

- Water quality
- Flood risk

¹ <https://www.sustainabilitywestmidlands.org.uk/resources/wmca-environmental-priorities/>

² <https://www.sustainabilitywestmidlands.org.uk/priorities/>

Spatial coverage

The below diagram shows each CA that has been analysed for this study.



The below list shows which local authorities fit within the WMCA boundary.

- Birmingham (Unitary, West Midlands conurbation)
- Bromsgrove (District, Worcestershire)
- Cannock Chase (District, Staffordshire)
- Coventry (Unitary, West Midlands conurbation)
- Dudley (Unitary, West Midlands conurbation)
- East Staffordshire (District, Staffordshire)
- Lichfield (District, Staffordshire)
- Redditch (District, Worcestershire)
- Sandwell (Unitary, West Midlands conurbation)
- Solihull (Unitary, West Midlands conurbation)
- Tamworth (District, Staffordshire)
- Walsall (Unitary, West Midlands conurbation)
- Warwickshire (County)
- Wolverhampton (Unitary, West Midlands conurbation)
- Wyre Forest (District, Worcestershire)

2 Result profiles

2.1 Environment: Carbon emissions

How can and why should the WMCA fight the causes of climate change?

One of the main causes of climate change is the emission of greenhouse gases. Through changes in operations and behaviours, carbon emissions are the easiest of these gases to mitigate and can contribute to minimising the negative social and economic impacts of climate change such as floods and heatwaves.

Influencing factors: Due to its size, the fact that it's the centre for UK manufacturing and has concentrated networks of motorways crossing through the region, the WMCA produces the largest amount of CO₂ compared to other CAs. Much of the changes in CO₂ reduction are driven by national policy around the decarbonisation of our energy supply. However, the local delivery of business support, building standards, retrofit of existing houses, local energy generation and recycling of waste all play a part.

Target: The WMCA has committed to reducing its carbon emissions by 40% from 2010 to 2030. This is currently being reviewed to reflect the new international and national evidence published in the last year.

Current progress: The WMCA has reduced its overall and per capita emissions between the years 2010 to 2016 albeit slightly less than the average, but remains the CA region that emits more carbon than any other due to its size spanning three Local Enterprise Partnerships. However, it is also the CA area that has experienced the largest economic growth, while still reducing carbon emissions (figure 1).

Local good practice: Tamworth and Redditch council areas emit the smallest amount of CO₂, both per capita and in absolute terms. Tamworth has also decreased emissions the most since 2010.

Local support required: Rugby council area emits a disproportionate amount of CO₂ per person, followed closely by North Warwickshire. Both have made poor progress in reducing emissions since 2010, compared to most other local authority areas within the CA geography.

Recommendations: Use learning between smaller districts to share good practice between locations such as Rugby and Tamworth. In the larger emitting LAs such as Birmingham, there is potential for rollout of energy efficiency and renewable energy programmes to ensure the target is met.

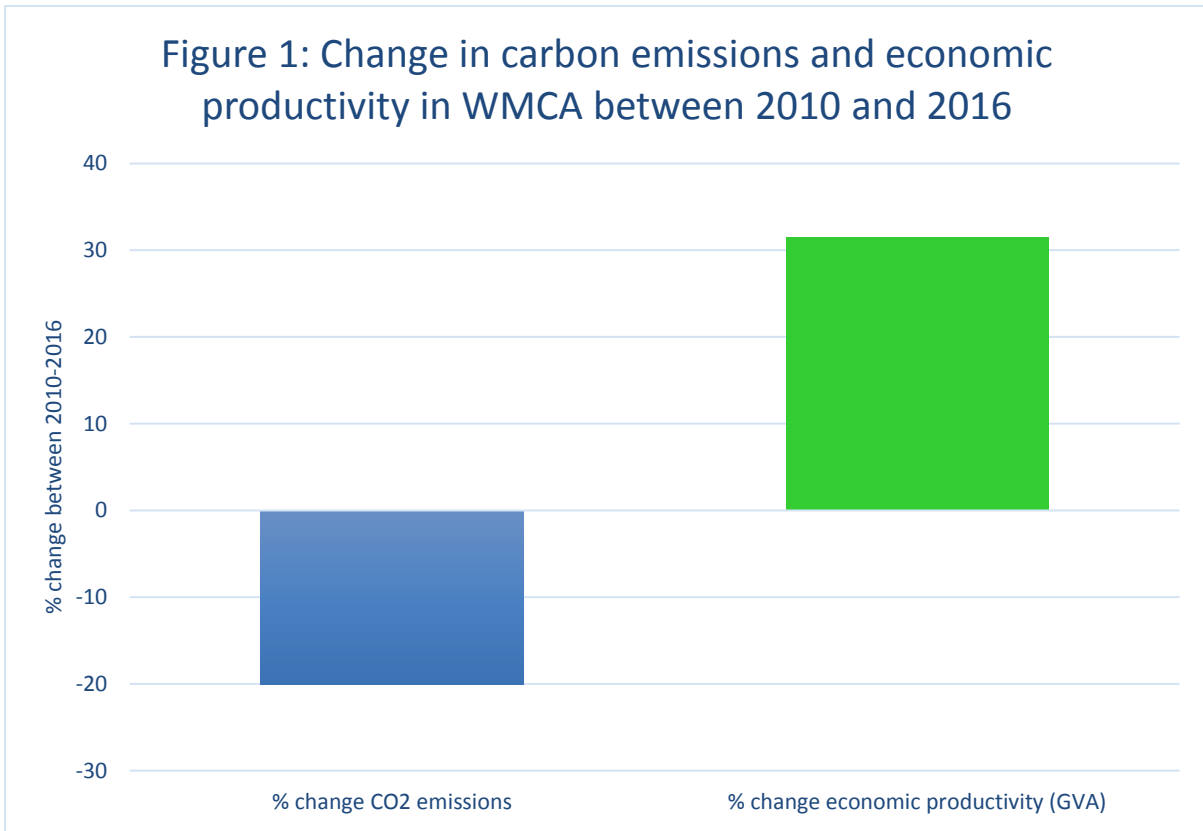


Figure 1 showing how the WMCA has increased productivity whilst reducing carbon emissions.

See full technical report for full suite of graphs.

2.2 Environment: Air quality

How can and why should the WMCA address the issue of poor air quality?

Air pollution is an increasing problem in the UK and is a leading or key contributory cause of health problems such as respiratory conditions and heart disease. Reducing emissions from transport and industry can have far-reaching effects and make the area a more pleasant place to live and invest.

Influencing factors: Due to its size, dense urbanisation and the concentrated networks of motorways crossing through the region, the WMCA experiences many days of poor air quality each year. Improvements are on the horizon due to the recently implemented national Clean Air Strategy³ and the forthcoming Birmingham Clean Air Zone.⁴ These, along with projects that can be directly influenced by the WMCA around improving transport emissions and good practice coordination within the forthcoming WMCA Low Emissions Strategy can all help to clean up the air in years to come.

Target: The WMCA has committed to reducing the number of days the area breaches air quality standards to zero days by 2030.

Current progress: The West Midlands breached air quality standards on 46 days in 2017, the third highest CA, and breached standards ten days more than the average across all CAs. This is likely due to the dry summer of 2018 where the associated high pressure system led to a static air mass, leading to pollutants remaining in the local area for longer and drier ground leading to more dust to begin with.

Recommendations: Use learning from the recently implemented London Low Emission Zone and the forthcoming Birmingham Clean Air Zone to enable other parts of the WMCA region to reduce their emissions on a par.

³ <https://www.gov.uk/government/publications/clean-air-strategy-2019>

⁴ https://www.birmingham.gov.uk/info/20076/pollution/1763/a_clean_air_zone_for_birmingham

2.3 Environment: Renewable electricity generation

How can and why should the WMCA make the transition to clean energy sources?

Transitioning from fossil fuels to renewable energy sources can have a positive impact on tackling climate change by reducing carbon emissions, improving health by improving air quality and on the economy, by attracting low carbon investment into the region.

Smaller-scale technologies implemented on a large-scale basis could have the biggest impact in the region.

Influencing factors: The main restriction to large scale rollout of renewable energy in the WMCA is a lack of a coastline, meaning that offshore wind is not an option. Our urbanisation also makes it more challenging to implement onshore wind and large scale solar farms, for example. However, there is huge potential for community scale renewable energy programmes and domestic and commercial properties to be built or retrofitted with renewable energy technologies.

Target: The WMCA has not set a target to date but could learn from Sheffield City Region, the nearest in geographical type to the West Midlands in this respect, which generated nearly three times more energy from renewables in 2017 than the WMCA area.

Current progress: The West Midlands has generated much less electricity from renewables than the CA average, but saw a 14% increase in renewable generation between 2016 and 2017, on a par with the CA average.

Local good practice: Sandwell has increased its renewable energy generation by over 800% since 2014. Learning should be sought from here to determine what could be replicated in other districts, especially primarily urban ones.

Local support required: Four local authorities, Bromsgrove, Rugby, Tamworth and Walsall, have seen generation from renewables decrease since 2014. Coventry also generates considerably little of its energy from renewables relative to its geographically similar authorities such as Birmingham and Sandwell.

Recommendations: The Energy Capital⁵ initiative can be the driver to ensuring that the region's future energy needs are met by renewables and can enable good practice to be shared between authorities such as Sandwell and Coventry.

⁵ <https://www.energycapital.org.uk/>

2.4 Environment: Recycling

How can and why should the WMCA contribute to fighting the plastics and litter crisis?

It has been strongly highlighted in recent high profile documentaries how we have reached a crisis point with regards to waste. The WMCA can work with local authorities to improve recycling rates in the region, leading to the area being a more attractive place to, live, visit, work and invest. Also, improved resource use or 'the circular economy' can help drive productivity gains in business.

Influencing factors: The new national Resources and Waste Strategy⁶ should help to improve the ability of organisations and individuals to recycle their waste and minimise its use in the first place. Local authorities have been stifled of resources to deal with this problem and an easing of pressures on them will significantly contribute.

Target: The WMCA has not set a target to date but can learn from West of England CA which has recycled a greater quantity of its non-household (70%) and its household (50%) waste than any other CA (36% and 10% greater respectively than in the WMCA).

Current progress: The West Midlands recycles slightly less of its non-household waste than the CA average although there was a small increase in recycling rates between 2016 and 2017. West Midland household waste recycling rates have generally declined over time and are lower than the CA average (figure 2).

Local good practice: North Warwickshire and Lichfield local authorities perform well in terms of the amount of both non- and household waste that they recycle.

Local support required: Birmingham only recycles 21% of its household waste, one of the poorest performers in the country. The county councils of Warwickshire and Staffordshire have also seen significant reductions in the amount of non-household waste they recycle in recent years.

Recommendations: Local authority recycling is one of the most basic starting points to ensuring the WMCA area is doing all it can to minimise waste going to landfill. It has the potential to bring together LAs across the region to implement the ambitions of the Resources and Waste Strategy and reduce the disparity in local authority recycling rates by increasing them all overall. The business opportunities around the circular economy should also be progressed as part of the Local Industrial Strategy implementation.

⁶ <https://www.gov.uk/government/publications/resources-and-waste-strategy-for-england>

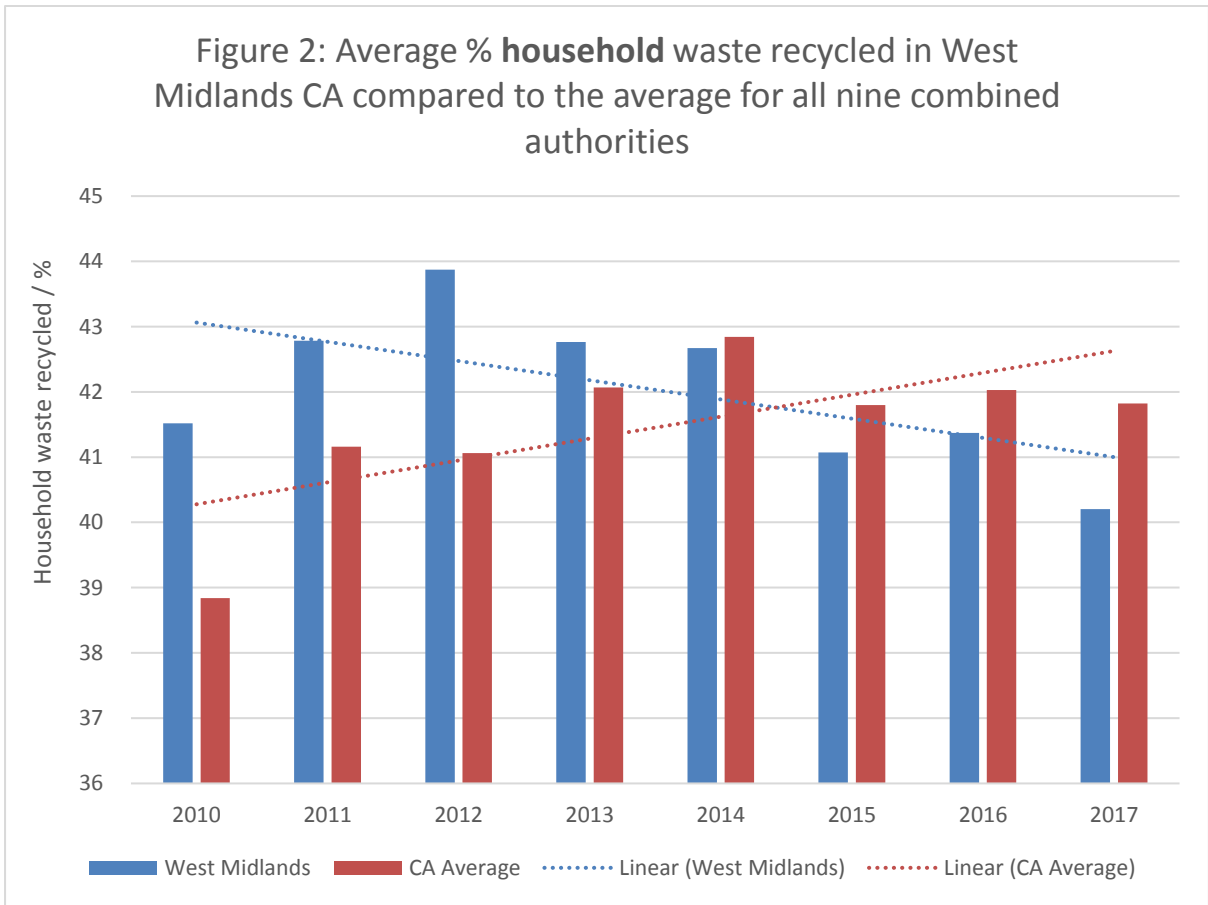


Figure 2 showing how the CA average amount of household waste recycled has increased, but levels of household waste recycling have been decreasing in the WMCA over the same time period.

See full technical report for full suite of graphs.

2.5 Environment: Sites in positive conservation management

How can and why should the WMCA conserve nature?

Biodiversity is in decline and it is increasingly well known that the benefits of improving ecologically rich areas have far reaching benefits to the local economic (e.g. through higher tourism levels) environmental (e.g. flood alleviation) and social (e.g. more pleasant, safer spaces to walk and cycle) priorities. The WMCA has the power to integrate nature into all its decision making.

Influencing factors: The Government's 25 Year Environment Plan⁷ sets out the importance of this issue and how authorities can contribute to meeting the Plan's ambitions. The largely urban nature of the WMCA provides an opportunity to put nature at the heart of town and city planning to reap the various benefits that green infrastructure can bring.

Target: The WMCA has not set a target to date but should aim for 70% or more of its designated sites for substantive nature conservation importance to be in positive conservation management; this would currently represent best in class and is 30 percentage points better than in the WMCA.

Current progress: The percentage of sites in positive conservation management has increased in the West Midlands since 2010, but remains low compared to the average.

Local good practice: Currently, 61% of Birmingham's ecologically important sites are in positive conservation management, followed closely by Coventry.

Local support required: Most Black Country local authorities have few sites in positive conservation management, or no data has recently been reported, and improvements have been slower.

Recommendations: Enabling local authorities to report on this metric, which is currently haphazard, and supporting those authorities that may require improvements to their ecologically important sites is the first step to ensuring nature is considered a genuine priority by the WMCA.

⁷ <https://www.gov.uk/government/publications/25-year-environment-plan>

2.6 Environment: Water quality and flood risk metrics (NEW)

How can and why should the WMCA improve water quality?

Along with supporting the reverse in decline of biodiversity, improving water quality can attract more visitors to the area by making key tourist locations more attractive. It can also help to protect and improve the usability of our water resources which will become even more important due to future climate changes.

Influencing factors: Cooperation between authorities outside and inside the WMCA boundaries are vital, given that most water courses cut through many different localities. This is not easy, but the Environment Agency (EA) can influence this through being the leading national agency on this agenda and their position on the WMCA Environment Advisory and Delivery Group and WMCA Housing and Land Board.

Target: The WMCA has not set a target to date but should aim for the majority of its water courses to achieve a 'good' or higher status.

Current progress: Most water courses within the WMCA recorded a quality status of between moderate and good, but there is significant variation in different areas.

Recommendations: The first step is to undertake a more detailed analysis of water quality in regional catchments to determine areas that need specific improvements, then link this to the planned WMCA Natural Capital strategy.

How can and why should the WMCA alleviate flooding?

Flooding can cause huge economic impacts if it is not mitigated against. This is particularly relevant with climate change in mind, given the likely increase to pluvial (surface water) flooding which is exacerbated in urban areas by poor run-off and a greater value of assets. The WMCA, with the EA, should undertake a detailed assessment of flood risk in the region as a first step.

Influencing factors: Flooding, especially that of a pluvial nature, is very unpredictable. EA is the lead authority in terms of alleviating and supporting businesses and communities with the impacts of flooding and their expertise can be sought to determine where to implement resource.

Target: The WMCA has not set a target to date but should aim to reduce the number of properties currently at risk of flooding.

Current progress: There are 109,000 properties at risk of flooding in the WMCA conurbation authorities and this does not factor in increases due to climate change.

Recommendations: The first step is to undertake a more detailed analysis of flood risk across the region to determine areas that need specific improvements.

2.7 Social: Health inequality

How can and why should the WMCA improve health inequality?

Health inequality is a measure of the social impacts of wealth and quality of the environment on the region as indicated by the life expectancy between the richest and poorest areas. To have a low health inequality means to have an evenly spread economy and skills base, as well as more equal opportunities for all and access to a good quality local environment. These factors should be more integrated into the rest of the WMCA's activities to deliver its overall inclusive growth priorities.

Influencing factors: Pockets of deprivation and variations in demographics caused by a combination of reasons stretching back in time largely influence this metric. The WMCA can work with local authorities and Public Health England to ensure such areas are targeted with relevant interventions. Positive interventions take a while to be picked up within the monitoring.

Target: Reduction in average male health inequality gap by 5.3 years and female gap by 3.9 years by 2030.

Current progress: Health inequality is slightly lower in the WMCA than in other CA areas, but remains high overall and has increased between 2015 and 2016. The gap between male and female health inequality is low in the WMCA compared to other CA areas.

Local good practice: Health inequality is generally lower in the fringe, more rural districts of the WMCA such as North Warwickshire and Bromsgrove.

Local support required: Areas where wealth is unevenly distributed have the highest health inequality gap; Solihull is the worst example with a 13 year gap for men and 11 year gap for women, with localities such as Walsall and Coventry following close behind.

Recommendations: Use the data to target interventions in areas with a greater health inequality gap by encouraging improvements in contributory factors to lower life expectancies, such as access to work, diet, exercise levels, housing quality and access to a good local environment.

2.8 Social: Fraction of mortality attributable to particulate air pollution (NEW)

How can and why should the WMCA address the issue of poor air quality?

Air pollution is an increasing problem in the UK and is a leading or contributory cause of health problems such as respiratory conditions and heart disease. Reducing emissions from transport and industry can have far-reaching effects and make the area a more pleasant place to live and invest.

Influencing factors: Due to its size, dense urbanisation and the concentrated network of motorways crossing through the region, the WMCA experiences a significant number of deaths that are attributable to poor air quality each year. Improvements are on the horizon due to the recently implemented national Clean Air Strategy and the forthcoming Birmingham City Council Birmingham Clean Air Zone. These, along with projects that can be directly influenced by the WMCA around improving transport emissions, can all help to clean up the air in years to come.

Target: No target set to date that focuses specifically on reducing mortality from air pollution, but reducing the rate to 3.5% (WMCA currently 5.1%) in terms of cause of death attributable to exposure to PM2.5's would currently represent best in class compared to other CA areas.

Current progress: The percentage of people who die as a result of exposure to particulate air pollution is higher in the West Midlands than the CA average, but has slightly declined since 2010.

Local good practice: The fraction of mortality as a result of particulate air pollution is understandably lower in the fringe, more rural districts of the WMCA such as North Warwickshire and Bromsgrove. The best progress over time in the urbanised areas has been made in the Black Country.

Local support required: 5.7% of people die as a consequence of poor air quality in Sandwell, closely followed by Birmingham.

Recommendations: Use learning from the recently implemented London Low Emission Zone and the forthcoming Birmingham Clean Air Zone to spread enable other parts of the WMCA region to reduce their emissions on a par. Educate people, especially those with pre-existing medical conditions, on how best to adapt during days when the air quality is poorer.

2.9 Social: Fuel poverty

How can and why should the WMCA reduce the number of people in fuel poor homes?

There is still a significant number of people in the West Midlands who have to choose between heating and eating during the winter months. Improving the housing quality of those in fuel poor homes and providing opportunities for them to work and more evenly distribute wealth will result in a greater proportion of people able to contribute to the local economy.

Influencing factors: Housing quality, wealth distribution and energy usage are primary contributors to this metric, changes to which can all be driven nationally and locally, along with whether those affected have any pre-existing health problems.

Target: No target set to date but reducing the number of households in fuel poverty to 9% would currently represent best in class compared to other CAs and require a reduction of 3.6 percentage points.

Current progress: Fuel poverty levels in the West Midlands are worse than the average across all CAs, albeit the gap has narrowed, and the number of people in fuel poverty in the WMCA has increased between 2015 and 2016 (figure 3).

Local good practice: Solihull is the only local authority with less than 10% of households in fuel poverty. The suburban districts are generally the best performers.

Local support required: The major conurbations have the largest number of households in fuel poverty, as high as nearly 17% in Sandwell and Birmingham.

Recommendations: Use learning from areas that have made the best improvements to the number of households in fuel poverty, such as Rugby and Bromsgrove, to determine any scalable success measures. Enable the Energy Capital initiative to tackle fuel poverty in priority areas.

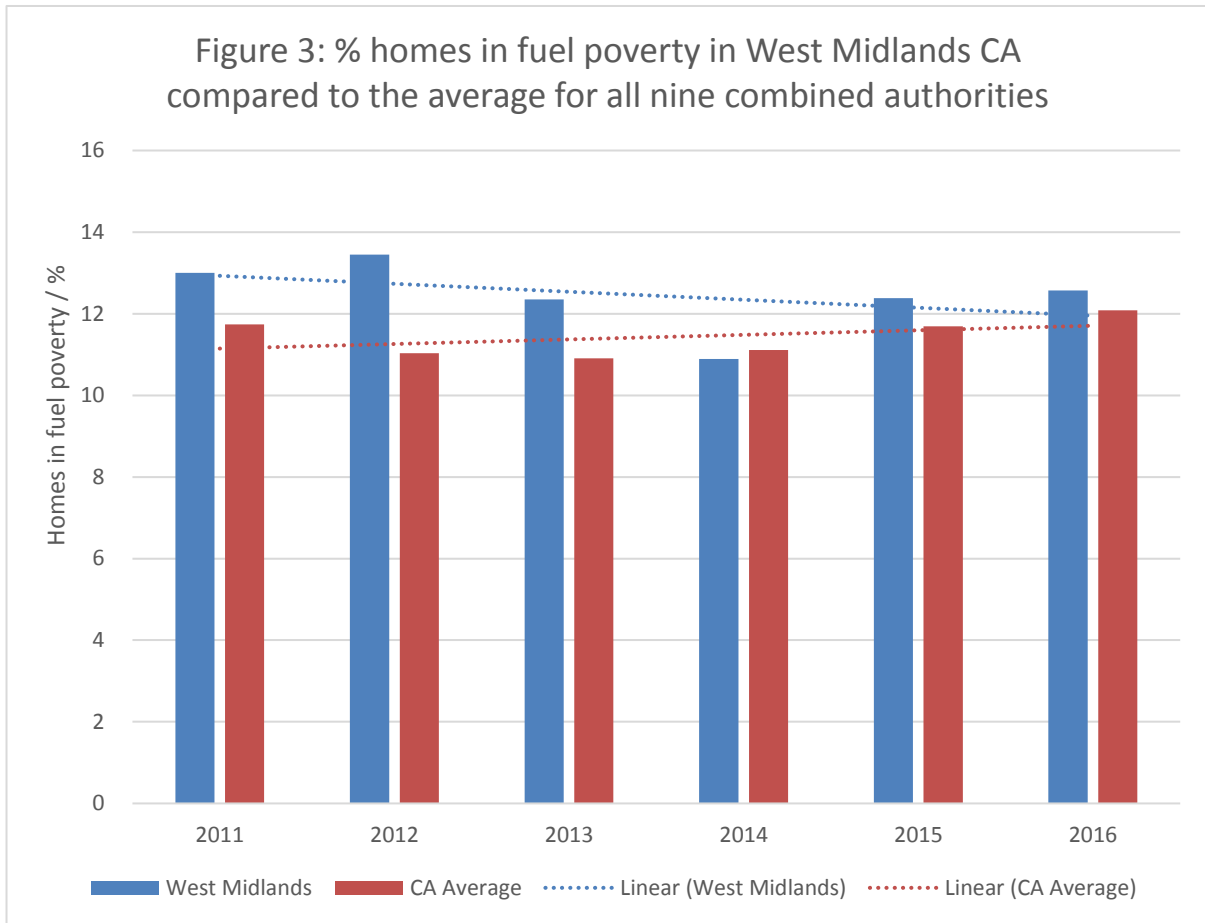


Figure 3 showing how, over time, the WMCA has reduced its fuel poverty levels quicker than the CA average, to the point where it is now nearly on a par with the average, albeit levels increased between 2015 and 2016.

See full technical report for full suite of graphs.

2.10 Economic: Productivity

How can and why should the WMCA continue to improve economic productivity?

For investment to be attracted in the region, continuing to boost economic productivity is a must. There is strong potential based on recent studies to focus economic growth on areas related to sustainability, such as low carbon energy, next generation transport and sustainable construction.

Influencing factors: Key growth sectors such as the above, business clusters and proximity to key networks such as motorways and railways. The government's Industrial Strategy and new Local Industrial Strategies also contribute to local growth.

Target: Increase to £33,604 per capita by 2030.

Current progress: The West Midlands is performing well in economic productivity compared to other CA areas and also has a slightly above average performance per head (figure 4).

Local good practice: Birmingham has comfortably the highest economic productivity and Solihull has the strongest economic productivity per head.

Local support required: Poorest performance on both absolute and per head economic productivity are consistently in the Black Country authorities.

Recommendations: A more even distribution of productivity will address some of the other issues outlined in this report, such as health inequality and fuel poverty, so lessons learnt from places such as Solihull should be sought for Black Country areas. All economic growth should be sustainable to ensure it is not at the detriment of the environment, which itself can bring huge benefits to the local economy. The implementation of the new Local Industrial Strategy should ensure future growth successes are inclusive and the benefits more evenly distributed.

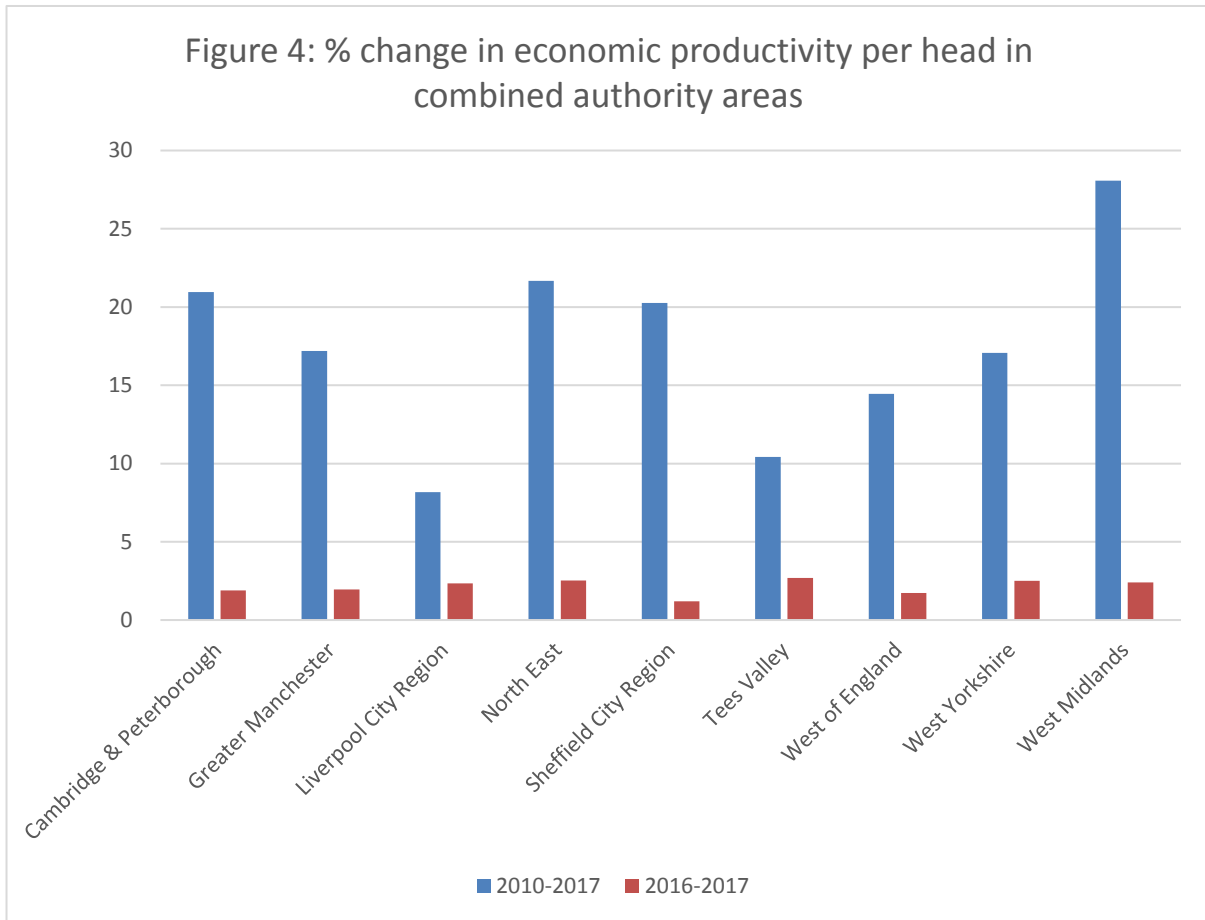


Figure 4 showing how economic productivity per head has grown faster in the WMCA compared to all other combined authority areas.

See full technical report for full suite of graphs.

2.11 Economic: Emissions Intensity Ratio (NEW)

How can and why should the WMCA measure an Emissions Intensity Ratio?

In essence, an Emissions Intensity Ratio measures the impact of economic growth on carbon emissions. In other words, it is a way of assessing whether the economic growth in an area is being achieved in a sustainable manner with the environment in mind.

Influencing factors: This is largely down to the type and operation of local business and whether local investment decisions have considered environmental outcomes.

Target: No target set to date but best in class is represented by West of England CA, whose emissions intensity is 163 tCO₂/£m, 52 units lower than in the West Midlands.

Current progress: The West Midlands emits slightly less CO₂ on average per £million GVA and has seen a 39% improvement in this since 2010, the second-most successful CA, while being the most successful in largest overall economic growth whilst reducing carbon emissions.

Local good practice: Coventry and Birmingham local authority areas have an EIR which is on a par with the West of England 'best-in-class' average, of 162 and 163 units. Both of these areas have made strong improvements since 2010.

Local support required: Warwickshire is the poorest performing area by some distance, not helped by the higher per capita carbon emissions in Rugby and North Warwickshire.

Recommendations: Ensure the existing good progress is built on by factoring in environmental decisions into all investments. The newly published WMCA Local Industrial Strategy⁸ recognises the importance of this which is encouraging; it now needs to be translated into action.

⁸ <https://bit.ly/2wfv6cd>

2.12 Summary of key findings

Environment Progress

- The WMCA has reduced its overall and per capita emissions between the years 2010 to 2016 albeit slightly less than the average, but remains the CA region that emits more carbon than any other due to its size. It is also the region that has achieved the highest rate of economic growth, whilst still reducing carbon emissions.
- The West Midlands breached air quality standards on 46 days in 2017, the third highest CA, and breached standards ten days more than the average across all CAs. This is likely due to the dry summer of 2018.
- The West Midlands has generated much less electricity from renewables than the CA average, but saw a 14% increase in renewable generation between 2016 and 2017, on a par with the CA average.
- The West Midlands recycles slightly less of its non-household waste than the CA average although there was a small increase in recycling rates between 2016 and 2017.
- West Midland household waste recycling rates have generally declined over time and are lower than the CA average.
- The percentage of sites in positive conservation management has increased in the West Midlands since 2010, but remains low compared to the CA average.

Social Progress

- Health inequality is slightly lower in the WMCA than in other CA areas, but remains high overall and has increased between 2015 and 2016. The gap between male and female health inequality is low in the WMCA compared to other CA areas.
- The percentage of people who die as a result of exposure to particulate air pollution is higher in the West Midlands than the CA average, but has slightly declined since 2010.
- Fuel poverty levels in the West Midlands are worse than the average across all CAs and the number of people in fuel poverty in the WMCA has increased between 2015 and 2016.

Economic Progress

- The West Midlands is performing well in economic productivity compared to other CA areas with the highest economic growth rate and also has a slightly above average performance per head.
- The West Midlands emits slightly less CO₂ on average per £million GVA and has seen a 39% improvement in this since 2010, the second-most successful CA in this respect.

The below table provides a summary of the metrics including how they correlate to the relevant targets that the WMCA has in place and the ranking with other CAs.

| Metric (Strategic link: PMF = WMCA Performance Management Framework, EBP = WMCA Environment Board Priority) | Latest figure in specified year | Ranking out of 9 CAs (Change compared to last year) | Rate of change since specified year | Rate of change ranking out of 9 CAs | WMCA target | Scale of challenge |
|--|--|--|--|--|---|--|
| Environment | | | | | | |
| Total carbon emissions (PMF E.1) (EBP) | 21,043 ktCO ₂ (2016) | 9 (-) | -20.1% (2010) | 7 (↓2) | 40% reduction from 2010 to 2030 | By 2030, emissions should be ≤15,795 ktCO ₂ |
| Per capita carbon emissions (EBP) | 5.1 ktCO ₂ (2016) | 4 (-) | -22.9% (2010) | 6 (-) | - | - |
| Air quality (PMF E.2) (EBP) | 46 days breached (2018) | 6 (↑1) | +8 days breached (2010) | 4= (↓1) | Reduction to 1 day breached by 2030 | 45 less days breached per year by 2030 |
| Renewable electricity generation (EBP) | 52,959 MWh (2017) | 8 (-) | +68.9% (2014) | 3 (↑1) | - | - |
| Waste Recycled – Household (EBP) | 40.2% (2017) | 6 (-) | -1.3% (2010) | 8 (↓1) | - | - |
| Waste Recycled – Non-household (EBP) | 34.8% (2017) | 5 (-) | -1.7% (2014) | 6 (↑2) | - | - |
| Sites in positive conservation management (EBP) | 40.2% (2017) | 8 (-) | +4.2% (2010) | 7 (↑1) | - | - |
| Social | | | | | | |
| Health inequality (males) (PMF P.14) | 8.3 years (2016) | 4 (↓1) | -0.5 years (2010) | 6 (-) | Reduction in average health inequality gap by 5.3 years by 2030 | Further reduction of 3.0 years required by 2030 |

| Metric (Strategic link: PMF = WMCA Performance Management Framework, EBP = WMCA Environment Board Priority) | Latest figure in specified year | Ranking out of 9 CAs (Change compared to last year) | Rate of change since specified year | Rate of change ranking out of 9 CAs | WMCA target | Scale of challenge |
|---|---|--|---|---|---|---|
| Health inequality (females) (PMF P.14) | 6.8 years (2016) | 4 (-) | +0.3 years (2010) | 4= (↓1) | Reduction in average health inequality gap by 3.9 years by 2030 | Further reduction of 2.9 years required by 2030 |
| Fraction of mortality attributable to particulate air pollution (NEW – EBP) | 5.1% (2017) | 8 (↑1) | -0.3% (2011) | 5= (↑3) | - | - |
| Fuel poverty (EBP) | 12.6% (2016) | 6 (↑1) | -0.4% (2011) | 2= (↓2) | - | - |
| Economic | | | | | | |
| Total economic productivity (EBP) | £83,894m (2017) | 1 (-) | +35.9% (2010) | 1 (-) | - | - |
| Per capita economic productivity (PMF O.1) | £23,731 (2017) | 4 (-) | +28.1% (2010) | 1 (-) | £33,604 by 2030 | 41.6% increase required by 2030 |
| Emissions intensity ratio (NEW – EBP) | 215.4 tCO ₂ per £ million GVA (2016) | 5 (-) | -39.2% (2010) | 2 (-) | - | - |

Key to colours:

| | | |
|---|---|---|
| Green = Rank 1-3 Near to, or best in class and where this a set target making good progress | Amber = Rank 4-6 Progress but improvements required to be best in class, or to meet target if set | Red = Rank 7-9 Significant improvements required to be best in class, or meet target if set |
|---|---|---|

2.13 Overall sustainability metrics league tables of all combined authorities

The league tables overleaf represent the ranking of all combined authorities based on their rankings given for each individual metric. The first is the snapshot of their sustainability achievement in the latest available year (2016-2018 depending on data source) and the

second is a snapshot of their progress since the baseline data (2010-2014 depending on data source). The full technical report details how these rankings have been derived.

These tables shows that, when compared to other combined authorities, the WMCA is excelling in economic productivity while still managing to reduce its carbon emissions. It also shows encouraging improvements in tackling fuel poverty, where it ranks second out of nine CAs for change over time, and generating electricity from renewable energy, where it ranks third in change over time. However, there are still significant opportunities for improvement, especially in improving air quality and reducing deaths attributed to pollution (ranked 8th out of 9 CAs in most recent year), sites with high conservation levels being well managed (ranked 8th) and improving the amount of household waste recycled (ranked 6th and 8th when factoring in change over time).

However, the overall ranking of fourth out of nine CAs reflecting change over time is encouraging and should be celebrated, showing that activities and programmes being delivered in the WMCA area are slowly having a positive impact.

Overall league table reflecting CA area sustainability progress in the latest available year (2016-2018 depending on data source)

| Rank | CA | Environmental | | | | | | | Social | | | | Economic | | | Total | Average ranking | Change since last year | |
|------|--------------------------|-----------------|-------------------------|-------------|-------------------------|-------------------|---------------|---------------------|--------------------|--------------------|-----------------|--------------|--------------|----------------------|------------------|-------|-----------------|------------------------|-----------------|
| | | CO ₂ | CO ₂ per cap | Air quality | Renew Electric (-Drax)* | Recycle non-house | Recycle house | Positive Cons. Mgt. | Health Inequal (F) | Health inequal (M) | Partic. mortal. | Fuel poverty | Econ product | Econ product per cap | Emission intens. | | | Average ranking | Overall Ranking |
| 1 | West of England | 1 | 3 | 4 | 5 | 1 | 1 | 3 | 2 | 2 | 7 | 1 | 5 | 1 | 1 | 37 | 2.6 | +0.1 | - |
| 2 | Cambridge & Peterborough | 2 | 8 | 8 | 1 | 7 | 2 | 1 | 1 | 1 | 9 | 2 | 8 | 2 | 6 | 58 | 4.1 | +0.3 | - |
| 3 | North East | 5 | 1 | 3 | 2 | 2 | 9 | 4 | 6 | 6 | 1 | 7 | 4 | 7 | 3 | 60 | 4.3 | -0.7 | ↑2 |
| 4 | West Yorkshire | 8 | 6 | 7 | 7 | 6 | 5 | 5 | 3 | 3 | 3 | 3 | 3 | 5 | 4 | 68 | 4.9 | 0.0 | - |
| 5 | Greater Manchester | 7 | 2 | 2 | 9 | 9 | 3 | 6 | 7 | 7 | 5 | 5 | 2 | 3 | 2 | 69 | 4.9 | +0.1 | ↓2 |
| 6 | West Midlands | 9 | 4 | 6 | 8 | 5 | 6 | 8 | 4 | 4 | 8 | 6 | 1 | 4 | 5 | 78 | 5.6 | -0.2 | ↑2 |
| 7 | Sheffield City Region | 6 | 7 | 5 | 3 | 8 | 4 | 9 | 5 | 5 | 4 | 4 | 6 | 8 | 8 | 82 | 5.9 | +0.5 | ↓1 |
| 8 | Liverpool City Region | 3 | 5 | 1 | 6 | 3 | 7 | 7 | 8 | 8 | 5 | 8 | 7 | 9 | 7 | 84 | 6.0 | +0.6 | ↓2 |
| 9 | Tees Valley | 4 | 9 | 3 | 4 | 4 | 8 | 2 | 9 | 9 | 2 | 9 | 9 | 6 | 9 | 87 | 6.2 | -0.4 | - |

*Note – where Drax power plant data under renewable electricity are included, overall rank remains the same, albeit with minor changes to the total/average scores.

Key to colours:

| | | |
|---|---|---|
| Green = Rank 1-3 Near to, or best in class and where this a set target making good progress | Amber = Rank 4-6 Progress but improvements required to be best in class, or to meet target if set | Red = Rank 7-9 Significant improvements required to be best in class, or meet target if set |
|---|---|---|

Overall league table reflecting CA area overall sustainability progress since the baseline year (2010-2014 depending on data source) up to latest available data

| Rank | CA | Environmental | | | | | | | Social | | | | Economic | | | Total | Average ranking | Change since last year | |
|------|--------------------------|-----------------|-------------------------|-------------|-------------------------|-------------------|---------------|---------------------|--------------------|--------------------|-----------------|--------------|--------------|----------------------|------------------|-------|-----------------|------------------------|-----------------|
| | | CO ₂ | CO ₂ per cap | Air quality | Renew Electric (-Drax)* | Recycle non-house | Recycle house | Positive Cons. Mgt. | Health Inequal (F) | Health Inequal (M) | Partic. mortal. | Fuel poverty | Econ product | Econ product per cap | Emission intens. | | | Average ranking | Overall Ranking |
| 1 | Greater Manchester | 4 | 4 | 6 | 6 | 5 | 1 | 2 | 3 | 3 | 1 | 5 | 3 | 5 | 3 | 51 | 3.6 | -0.6 | - |
| 2 | North East | 1 | 1 | 3 | 8 | 3 | 9 | 3 | 8 | 3 | 4 | 8 | 5 | 2 | 1 | 59 | 4.2 | -0.6 | ↑2 |
| 3 | Cambridge & Peterborough | 8 | 7 | 1 | 7 | 1 | 5 | 8 | 1 | 5 | 8 | 1 | 2 | 3 | 4 | 61 | 4.4 | +0.2 | ↓2 |
| 4 | West Midlands | 7 | 6 | 4 | 3 | 6 | 8 | 7 | 4 | 6 | 5 | 2 | 1 | 1 | 2 | 62 | 4.4 | -0.8 | ↑2 |
| 5 | West Yorkshire | 6 | 8 | 4 | 4 | 4 | 4 | 9 | 2 | 2 | 3 | 6 | 6 | 6 | 6 | 70 | 5.0 | +0.8 | ↓4 |
| 6 | Tees Valley | 2 | 3 | 3 | 5 | 9 | 7 | 1 | 6 | 1 | 7 | 7 | 8 | 8 | 5 | 72 | 5.1 | -1.3 | ↑3 |
| 7 | West of England | 5 | 5 | 7 | 2 | 8 | 2 | 4 | 6 | 6 | 8 | 2 | 7 | 7 | 7 | 76 | 5.4 | 0.0 | - |
| 8 | Liverpool City Region | 3 | 2 | 2 | 9 | 2 | 5 | 5 | 4 | 7 | 5 | 8 | 9 | 9 | 8 | 78 | 5.6 | +0.8 | ↓4 |
| 9 | Sheffield City Region | 9 | 9 | 8 | 1 | 7 | 3 | 6 | 9 | 8 | 1 | 2 | 4 | 4 | 9 | 80 | 5.7 | +0.3 | ↓1 |

*Note – where Drax power plant data under renewable electricity are included, West Yorkshire is ranked sixth and Tees Valley fifth, with minor changes to the total/average scores against most CAs.

Key to colours:

| | | |
|---|---|---|
| Green = Rank 1-3 Near to, or best in class and where this a set target making good progress | Amber = Rank 4-6 Progress but improvements required to be best in class, or to meet target if set | Red = Rank 7-9 Significant improvements required to be best in class, or meet target if set |
|---|---|---|

3 Recommendations for the West Midlands Combined Authority

3.1 Addressed recommendations

Last year's recommendations that have been addressed are:

Investigate improvements to air quality data

As presented in this report, a new metric which analyses the mortality impacts of air pollution (specifically PM2.5 emissions) is now included. The data used to present this metric are more granular than those used in the existing metric reflecting air pollution levels and is therefore a more useful way of monitoring how many people in the WMCA are affected by air quality. In addition, both SWM and the WMCA have convened discussions with the newly established WM Air team based out of the University of Birmingham. Part of their activity involves establishing new ways of monitoring air quality which may be useful in years to come.

Resource to drive reporting of metrics into the WMCA project systems

The WMCA has now appointed a Head of Environment post. Part of this role is to ensure that the metrics presented in this report can be reported and embedded into WMCA systems. This is reflected in the identification by the Environment Board to establish the majority of these metrics as a priority going forward. The next step is to establish targets and implement activities aimed to address poorer performance, as outlined above.

Consistency of data and presentation

Previously, some of the data used to form targets in the WMCA SEP and PMF and the WMCA update of the PMF were not consistent. To address this, the WMCA environment team has worked with the Environment Advisory and Delivery Group to agree a core set of indicators linked to the PMF or Environment Board responsibilities, which the Environment Board agreed in February 2018. This fed into the brief for the WMCA's latest annual monitoring by SWM, the annual state of the region report and the WMCA annual plan.

It should be noted that, despite there still being much work to do, as a result of addressing the above recommendations and due to the support of the WMCA and the work of local partners, the WMCA area is beginning to show an overall improvement in a range of areas. Compared to last year's equivalent report, the WMCA has moved up from sixth to fourth in its overall progress since 2010 compared to other Combined Authorities areas.

This year's recommendations for the WMCA are:

3.2 New metrics should be embedded into its reporting mechanisms

Whilst it is encouraging that the WMCA Environment Board has stated that the majority of the metrics presented in previous iterations of this report are a priority, at present, the metrics of renewable electricity, recycling, mortality rates as a result of air pollution, sites in positive conservation management, flood risk, water quality and fuel poverty are not reported on by the WMCA. The data underpinning these metrics show significant room for improvement when compared to other CA areas – the West Midlands is ranked no higher than fifth on any of them in the latest available year of data – and so to ensure the WMCA becomes 'best in class' in overall sustainability, these metrics should be monitored to ensure that actions can be taken to improve them. All these metrics should, therefore, be embedded or linked to headline indicators in the Performance Management Framework (PMF).

Key projects and programmes that have been partly or wholly established to address improvements to one or more of the metrics used in this report should ensure that their impact is being measured and monitored to determine success.

Responsibility: WMCA should lead on this integration process as part of any forthcoming update to the PMF.

Next step: To be discussed at a future Environment Board meeting.

3.3 Targets should be set for all metrics

In line with the above, the WMCA currently does not have targets related to any of the new metrics included in this report.

A draft set of targets was developed by the Environment Advisory and Delivery Board based on good practice in other CAs and proposed to the Environment Board in February 2018. However the Board recommended that instead of 'hard' targets there should be the aspiration of being 'best in class.' This is commended, however one must consider the challenges that WMCA has and its unique circumstances that makes this extremely difficult to achieve; for example, it is always likely to emit more carbon emissions in absolute terms than other CAs due to various factors, including its geographic and population size.

Therefore, targets should be established to make monitoring easier and to ensure actions are delivered to address them. They should fit with the existing targets around carbon emissions, economic productivity and air quality, for example by setting the same baseline and timeframes where possible. Again, these should then be embedded into the PMF.

Responsibility: WMCA should have overall responsibility to put together new targets and integrate these into the PMF, however SWM can support with the establishment of these

targets. Now is an excellent time to do this given the current refresh of SWM's Roadmap,⁹ which itself will include a fresh set of sustainability targets for the West Midlands region as a whole. The WMCA can use this as a starting point.

Next step: SWM is meeting WMCA Head of Environment to discuss in early June 2019.

3.4 Establish flood risk metric and take action on climate change adaptation

With an increasingly clear narrative around the likely impacts of climate change on the economy and society, the WMCA should prioritise ensuring that services, businesses and residents in the area are fully adapted to the impacts of climate change, be it flooding, storms or overheating. A starting point would be to obtain flood risk data for all combined authorities to determine progress and how this has changed over time, something which could not be obtained within the timescales of this year's report. There should then be a push to work with organisations such as the UK Town Planning Institute, UK Green Buildings Council, SWM and others to embed climate resilience into decision making.

Responsibility: WMCA, with support from SWM and EA, to obtain full flood risk data. SWM to be considered by WMCA to enable brokerage between key partners to further develop work on adaptation.

Next step: Continued liaison with EA regarding flood risk data. Wider adaptation issue to be discussed at future Environment Board meeting.

3.5 Natural environment metrics need to be established/improved

At present, data reflecting progress around the state of the natural environment and natural capital are very difficult to come by and are currently inadequate. To be best in class, the WMCA should work with the WMCA Environment Board to implement a target that can help to monitor where improvements in the natural environment are required and how natural capital can be embedded across the WMCA to help achieve sustainability outcomes. At the very least, one of the natural environment based metrics used in this report, sites in positive conservation management, should be made mandatory at the local level and reported on by all local authorities in the WMCA area each year.

Water quality data, partly obtained for this report, should be included in greater detail for all combined authorities when this exercise is repeated next year. This would go part way to providing a solution to the above recommendation.

Responsibility: WMCA should liaise with Environment Advisory and Delivery Group Board members the Environment Agency and Birmingham and Black Country Wildlife Trust, along with any other key partners, to determine further natural environment metrics that may be obtainable and useful and to ensure water quality data can be fully obtained for next year.

⁹ <https://www.sustainabilitywestmidlands.org.uk/priorities/>

Next step: To be discussed at future Environment Advisory and Delivery Group meeting.

3.6 Investigate establishing a Low Carbon Business Growth metric

One remaining gap in the metrics analysed is that of low carbon business growth and the strengths of the Low Carbon and Environmental Goods and Services (LCEGS) sector in the region. It transpires that data reflecting the strengths of the LCEGS sector used to be collated nationally but this ceased a few years ago. Analysing this metric could help to strengthen the area's economy by aligning activities to improve economic growth whilst at the same time reducing carbon emissions – both of which contribute to existing WMCA targets. The WMCA should investigate whether it can monitor LCEGS locally. It is understood that a new green business growth target is being considered for implementation from November 2019, but no further details have been provided to date.

Responsibility: WMCA should liaise with appropriate Environment Advisory and Delivery Group members, along with any other key partners, such as LEPs, to determine what metrics may already exist that makes monitoring the strength of the LCEGS sector a simple task.

Next step: To be discussed at future Environment Advisory and Delivery Group meeting.

3.7 Clear accountability and integrated working

The Mayor and WMCA Board, although collectively responsible for the performance of the WMCA, should be clearly responsible for specific PMF objectives and indicators that closely align to their delegated areas of responsibility. There is likely to be some clear environmental indicators taken from the PMF monitoring included in the forthcoming Annual Plan which will be linked to the Environment Portfolio holder's role. This will also be incorporated into the WMCA's project system, however due to an improvement review this has yet to be implemented.

Moreover, other portfolio holders should have ownership of other relevant targets and liaise with each other to check that projects that are being commissioned under their portfolio theme address some or all the metrics/targets.

Responsibility: WMCA project system improvements provide the opportunity to include better accountability on environmental metrics.

Next step: WMCA Environment team to liaise with project system team.

3.8 Clear annual reporting

At the time of writing the WMCA 2017/18 annual review and forward plan had been published, but only contained selective PMF indicators. In the future to help accountability

and transparency, a consistent full set of PMF indicators should be published annually with commentary and links to the relevant WMCA portfolio holder. The next annual review is due for publication later in June 2019 at the WMCA AGM, at which point it can be determined whether this has happened.

Next step: Determine if the above recommendation has been included in the new annual review.

Responsibility: WMCA

3.9 More action required on many metrics

Projects are already underway that deal with specific aspects of air quality and health inequality, such as the WMCA's Mental Health Commission¹⁰ and the Low Emissions Bus Strategy¹¹ respectively. Recent success in some of these issues have been achieved, such as Transport for West Midlands and Coventry City Council who have both received funding from the government to implement low emission buses into their fleets¹² and the WMCA's support to the new WM-Air¹³ programme based out of the University of Birmingham.

However, given that the West Midlands performs below average on metrics including fuel poverty, recycling, natural environment, renewable electricity generation and health inequality, further activities still need to be undertaken to ensure that an improvement in these metrics can be realised.

Responsibility: WMCA Environment Advisory and Delivery Group to look at activities that can help to deliver projects that address poorer performing metrics.

Next step: For discussion at future Environment Board meeting.

Future improvements

If you have any comments and suggestions for future improvements, please send them to enquiries@swm.org.uk before April 2020. Then, resources permitting, we will seek to review them and incorporate any improvements and clarifications into the fourth annual monitoring report.

-END-

¹⁰ <https://www.wmca.org.uk/what-we-do/mental-health-commission/>

¹¹ <http://bit.ly/2tuKfVo>

¹² <http://www.sustainabilitywestmidlands.org.uk/news/improving-air-quality-within-the-bus-industry/>

¹³ <https://www.birmingham.ac.uk/schools/gees/research/projects/wm-air/index.aspx>