

# West Midlands Roadmap to a Sustainable Future in 2020

Annual Monitoring Report 2017

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**WEST MIDLANDS**  
COMBINED AUTHORITY

BIRMINGHAM • COVENTRY • DUDLEY • SANDWELL • SOLIHULL • WALSALL • WOLVERHAMPTON

### **Report information**

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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, 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 well 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.

[www.sustainabilitywestmidlands.org.uk](http://www.sustainabilitywestmidlands.org.uk)  
Registered company No.04390508

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## 1 Introduction

The purpose of this report is to provide evidence to policy makers within the West Midlands on progress on the economic, social and environmental sustainability goals and priorities for the region set out in the West Midlands Roadmap to a Sustainable Future in 2020.

It will also provide useful strategic context for organisations reviewing or developing their strategies within the West Midlands.

SWM uses this work to help inform our sustainability reviews for our members, developing cross-LEP programmes for funding and the sustainability support programme for the West Midlands Combined Authority.

### 1.1 Why is the Roadmap and Monitoring Important?

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

To deliver our mission, we have developed a set of sustainability priority actions for the West Midlands based on collaborative research worth around £1 million. Our **roadmap** identifies the current challenges facing the West Midlands, as well as the priority actions needed to make change happen. Through cross-sector working across local authority boundaries, we look to create a region with more low carbon jobs, reduced levels of carbon and improved life expectancy.

Since 2010 we have been the only region in the UK to have a clear vision, plan, action and annual monitoring to help achieve a more sustainable future. This has been possible due to our independent nature, our evidence based approach and the support of a range of partners and volunteers.

The roadmap and monitoring is important to help provide certainty and focus for local joint action and demonstrates commitment and credibility for inward investors. We are often requested to provide an independent voice and view on sustainability progress and opportunities within the West Midlands to national and international audiences.

We hope this existing work will also give the West Midlands Combined Authority a head start as it develops new plans for our future.

### 1.2 Background to the Roadmap and Monitoring

The timeline below provides the context for this report by setting out the development of the roadmap, annual monitoring and links to key documents.

**West Midlands Roadmap to a Sustainable Future in 2020 – timeline of development and monitoring:**  
**2009**

[A low carbon vision for the West Midlands](#) in 2020 published. Reflects the evidence base of the UK's first low carbon regional economic strategy 'Connecting to Success' published previously.

**2010**

[Key sustainability low carbon challenges for the West Midlands](#) published.

West Midlands sustainability priorities to deliver the Low Carbon Vision 2020 published.

#### **2011**

Vision, challenges and sustainability priorities research combined to form '2020 Roadmap.'

SWM annual customer survey incorporates questions on 2020 Roadmap sustainability priorities for first time.

First Annual Conference reporting on perception of progress on 2020 Roadmap sustainability priorities and workshops and good practice examples on each priority.

#### **2012**

Research on progress on the 2020 Roadmap testing local leaders' understanding and support.

Second Annual Conference reporting on perception of progress on 2020 Roadmap sustainability priorities and good practice examples on each priority.

#### **2013**

Third Annual Conference reporting on perception of progress on 2020 Roadmap sustainability priorities and good practice examples on each priority. Reconfirmation of Roadmap and sustainability priorities by guest speaker Jonathon Porritt and our stakeholders.

#### **2014**

Research on progress of the three 2020 Roadmap goals and broken down by Local Enterprise Partnership (LEP).

Fourth Annual Conference reporting for the first time on annual progress to the 2020 Roadmap goals. Report on perception of progress to Roadmap 2020 sustainability priorities and good practice examples.

#### **2015**

Research on progress of the three economic, social, environmental 2020 Roadmap goals and broken down by LEP. Roadmap monitoring report incorporating annual monitoring results on sustainability priorities published.

Research with Foresight for Cities produced key future issues for the West Midlands beyond 2020.

Fifth Annual Conference reporting on the annual progress on the 2020 Roadmap goals. Report on perception of progress on Roadmap 2020 sustainability priorities and good practice examples on each priority.

#### **2016**

Fit for the Future report published by SWM detailing first national review of all 39 LEPs' commitments to tackling climate change and embracing the low carbon economy, based on information from key strategies.

Research on progress of the three economic, social, environmental 2020 Roadmap goals and broken down by LEP. Roadmap monitoring report incorporating annual monitoring results on the goals and sustainability priorities published(this report).

Sixth Annual Conference reporting on the annual progress on the 2020 Roadmap goals.

### **1.3 Structure of the Report**

This report first looks at the progress of the three sustainability goals set out in the Roadmap, then the perception of progress on the eight sustainability priorities.

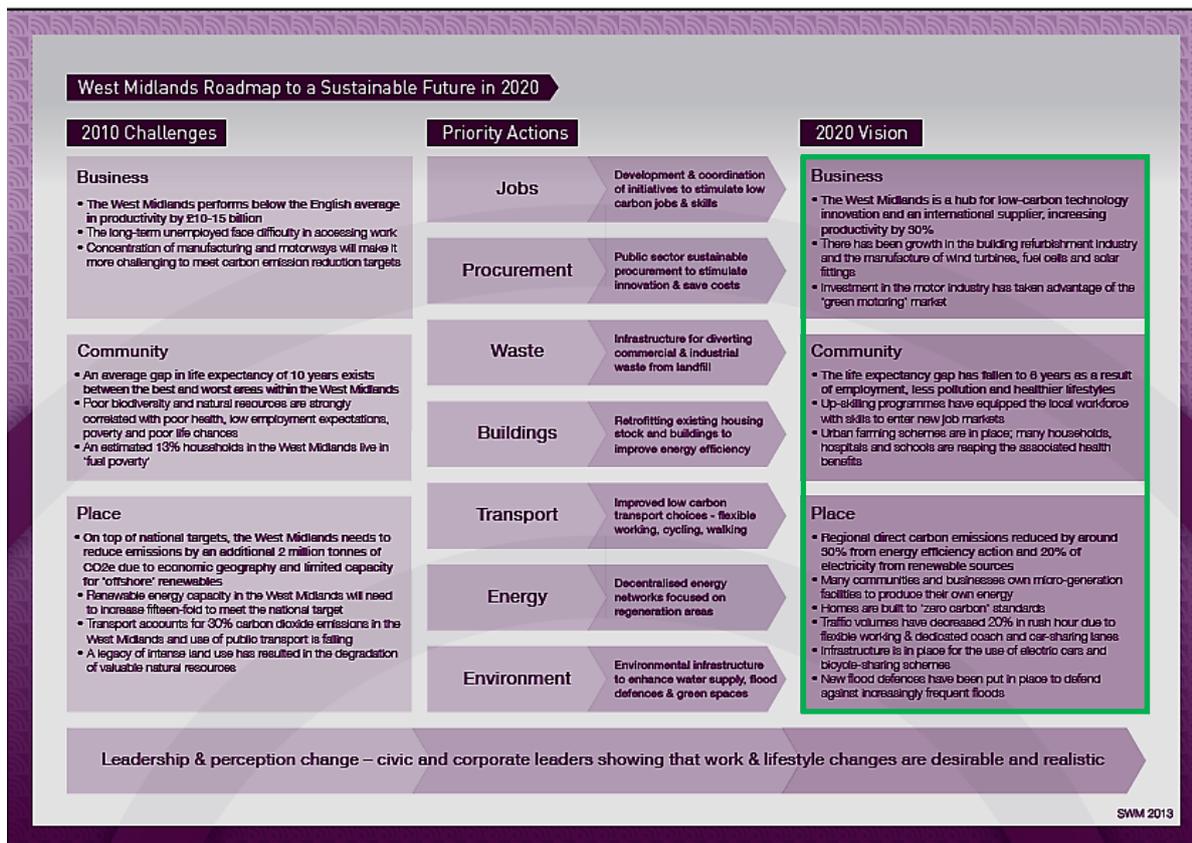


Figure 1 – The three Roadmap goals – business, community and place

## 2 Business: Economic Productivity

### 2.1 2020 Vision Statement

*“The West Midlands is a hub for low-carbon technology, innovation and an international supplier, increasing productivity by 30%.”*

The Sustainability West Midlands Roadmap to a Sustainable Future in 2020 outlines that the economic target for the region involves a 30% increase in economic productivity using 2010 as a baseline.

### 2.2 Methodology

The indicator GVA (Gross Value Added) was used to assess economic productivity; it refers to a measure in economics of the value of goods and services produced in an area or sector of the economy. Although not without its critics on the type of economic growth it measures, it is a recognised indicator used by Government and useful when considered along with other social and environmental measures.

Using the Office for National Statistics website,<sup>1</sup> the appropriate data was collected in order to illustrate economic productivity across the region. This involved the latest available GVA data which covered the years 2010-2015 for local authority areas within the West Midlands. Local authorities were then grouped by LEP boundary for each LEP (e.g. Wolverhampton,

<sup>1</sup> <http://www.ons.gov.uk/economy/grossvalueaddedgva/bulletins/regionalgrossvalueaddedincomeapproach/december2015/relateddata>

Dudley, Walsall and Sandwell data were merged, and an average given if appropriate, in order to give data for the Black Country LEP). Where LEP boundaries overlapped the nearest authority (unitary or county council) boundary was used to avoid double counting.

### 2.3 Findings

Figure 2 indicates the economic productivity of the West Midlands as a whole, with the projected vision for 2020. With the regions productivity growing from £101,325 million to £119,770 million from 2010-2015, it is indicative that the region is on target for its 30% increase in productivity by 2020. This is also highlighted by the trend line which shows at the current rates of increase the target should be exceeded.

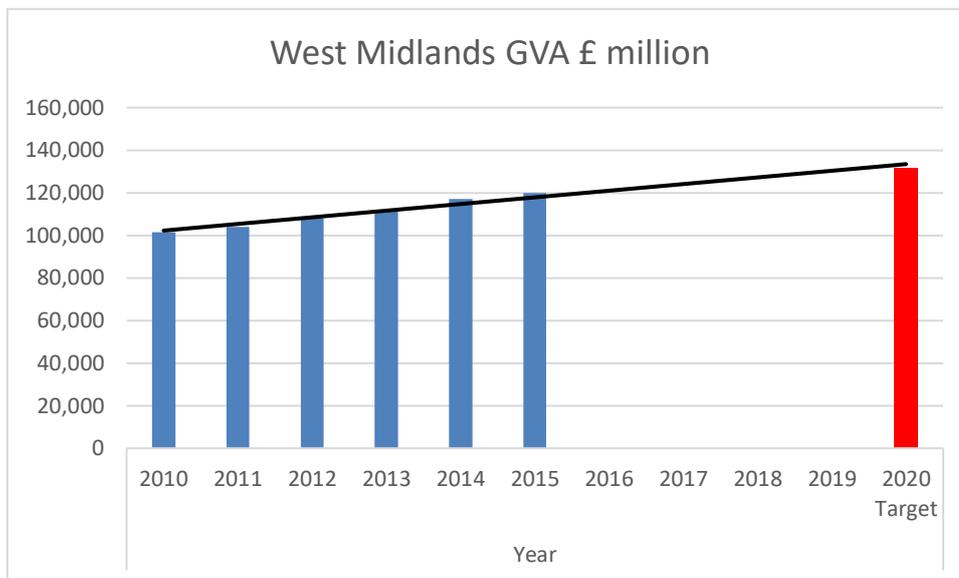


Figure 2 - Economic Productivity of West Midlands GVA (£million)

This trend is also identifiable within each LEP, where the GVA for each is steadily increasing towards the 2020 vision of a 30% increase in productivity. Of the six LEPs, Greater Birmingham and Solihull contributes the most by far to the West Midlands region, rising from £25,877 million in 2010 to £31,462 million in 2015. Housing the city of Birmingham and the industry within, this is perhaps unsurprising.

In contrast, the LEP with the smallest contribution to the GVA of the West Midlands is Worcestershire, contributing £9,780 million in 2010 and £11,796 million in 2015, which can be attributed to its widely rural nature. Whilst its contribution may be small, it is important to note that this LEP, like all others in the West Midlands region, continues to steadily increase.

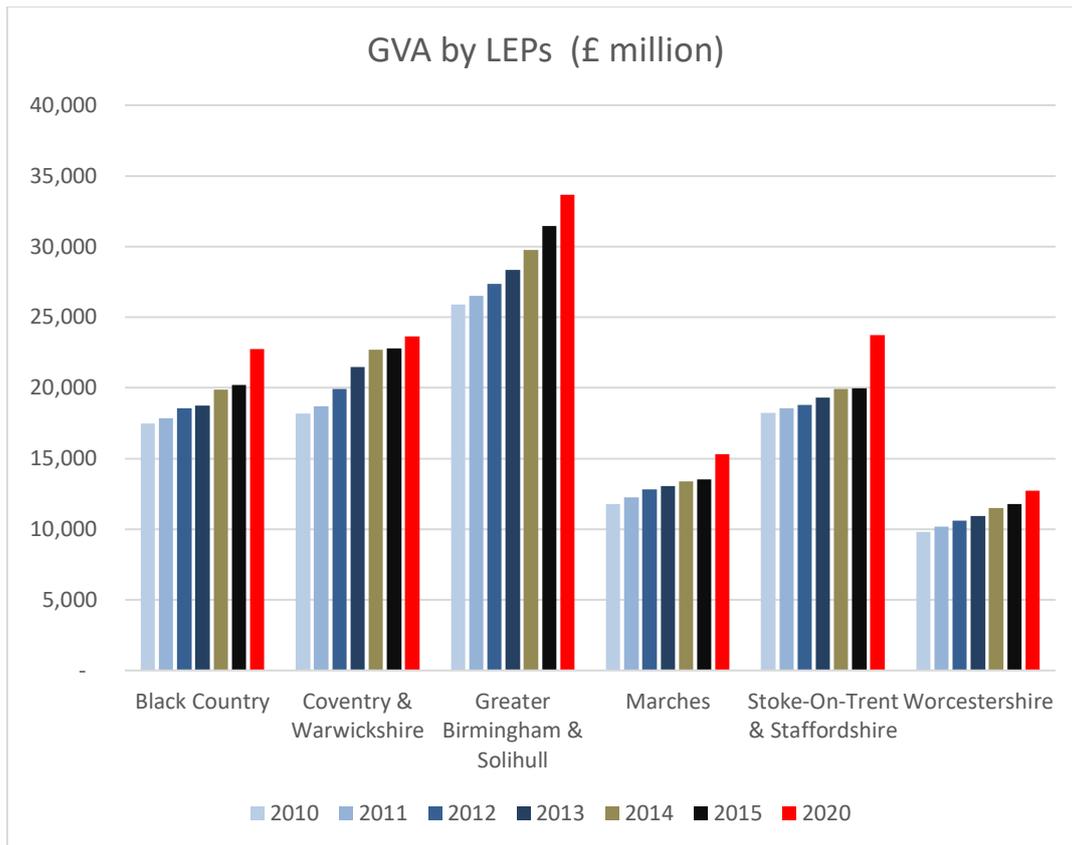


Figure 2 - Economic Productivity of GVA by LEPs (£million)

It is also important to consider the % increase in growth between 2010 and 2015 which can be summarised in the table below:

Local Enterprise Partnership	% growth in GVA between 2010 and 2015
Coventry & Warwickshire	25.2%
Worcestershire	20.6%
Marches	15.0%
Greater Birmingham & Solihull	21.6%
Stoke-on-Trent & Staffordshire	9.9%
Black Country	15.7%

The figures demonstrate that GVA has increased proportionally the most in Coventry & Warwickshire, followed by Greater Birmingham & Solihull and Worcestershire.

## 2.4 Future research

Feedback on this research has indicated that the next annual monitoring report could include comparisons on performance with other meaningful criteria such as the UK average or similar size or type of regions. It would also be beneficial to consider the GVA contribution from low carbon goods and services within each region although these organisations can be hard to identify.

## 2.5 Summary

Economic productivity is on track for a 30% increase by 2020 across the region.

### 3 Place: Carbon Emissions

#### 3.1 2020 Vision Statement

*“Regional direct carbon emissions reduced by around 30% from energy efficiency action and 20% of electricity generated from renewable sources.”*

The Roadmap outlines that the environment target for the region involves a 30% decrease in direct carbon dioxide (CO<sub>2</sub>) or equivalent (CO<sub>2</sub>e) emissions using 2010 as a baseline. This is to be achieved through energy efficient actions and a 20% increase of renewable electricity generation within the region against a 2010 baseline.

#### 3.2 Methodology

The periods studied for this report were the years 2010-2015. The choice of this period was influenced by the availability of data. The latest data was obtained from the UK Government website, in particular the ‘UK Local Authority and Regional Carbon Dioxide National Statistics’<sup>2</sup> section. Data for the 30 strategic local authority areas was extracted in order to paint a picture of the emissions situation in the West Midlands.

This includes a range of emissions allocated to local authority boundaries by the national inventory. Therefore it **does** include transport, land use, industry and domestic sources, but **not** aviation, shipping, or military transport from the inventory. Also it does not include ‘embedded’ carbon associated with goods and services produced for the UK or produced within the UK but used and disposed outside the country. However, these existing figures provide a useful starting point for understanding our local challenges and trends.

Local authority data was then grouped by LEP boundary for each LEP and an average given. Where LEP boundaries overlapped the nearest authority (unitary or county council) boundary was used to avoid double counting.

#### 3.3 Findings

Figure 3 illustrates the release of emissions across the West Midlands from 2010-2015. It indicates a general drop in emissions levels across the West Midlands, from 40,388 tonnes of CO<sub>2</sub> emissions in 2010, to 33,470 tonnes in 2015. The analysis of the data shows that the general trend although decreasing is not in line with the 2020 vision for a 30% decrease in emissions and more would need to be done to reduce rates in the future.

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<sup>2</sup> <https://www.gov.uk/government/statistics/uk-local-authority-and-regional-carbon-dioxide-emissions-national-statistics-2005-2014>

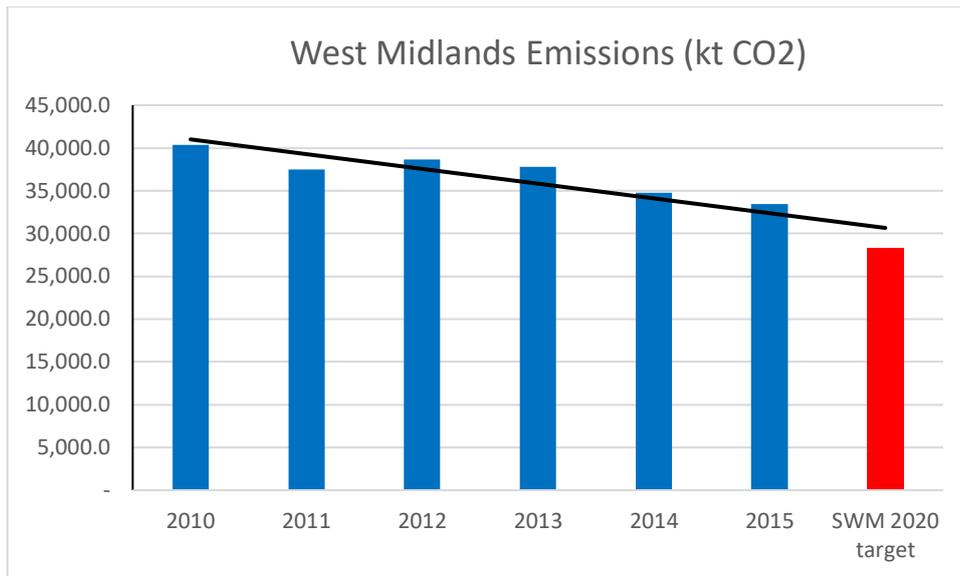


Figure 3 - West Midlands Emissions (tonnes of CO<sub>2</sub>)

Figure 4 illustrates that perhaps surprisingly, Stoke-on-Trent and Staffordshire contributes the most emissions in the West Midlands, emitting 7,640 tonnes of CO<sub>2</sub> in 2015. Despite housing the city of Birmingham and the industry within, Greater Birmingham & Solihull LEP in comparison contributed only 5,948 tonnes of CO<sub>2</sub> in 2015. This can be better understood when considering initiatives implemented by Birmingham City Council which have attempted to alleviate greenhouse gas emissions in the transport and private sectors. Other areas in the region have emitted significantly less, such as Worcestershire which, comparatively, emitted 3,532 tonnes in 2015, the least in the region. Regarding this, it is important to take note of the industry and contributors from each area which dictates its total contribution to the West Midlands emissions. This can be attributed to the nature of the industrial activity which is housed here. Staffordshire for example, is home to coal burning power stations, which will naturally increase its emissions.

It is important to note however, that though fluctuations are present within each LEP, with increases observed in 2010 and 2012 across the board. The then Department of Energy and Climate Change (DECC) has attributed this trend to the increased use of gas for heating, as 2012 was relatively colder than 2011. Initially the state of the local economy may have contributed, although there have been significant improvements in energy efficiency within the manufacturing sector in recent years. In 2015 a decrease in emissions was recorded across all LEPs within the region.

With regards to the target of a 30% carbon reduction by 2020, the West Midlands must continue to work hard as a region to reach this goal. In part this is because the region has a large number of motorways, power stations and industries. To date, considerable progress has been made, though the region may miss the target if the focus on carbon emissions is not increased. Therefore, additional national, regional and local initiatives will need to be implemented on top of existing ones to reach this goal.

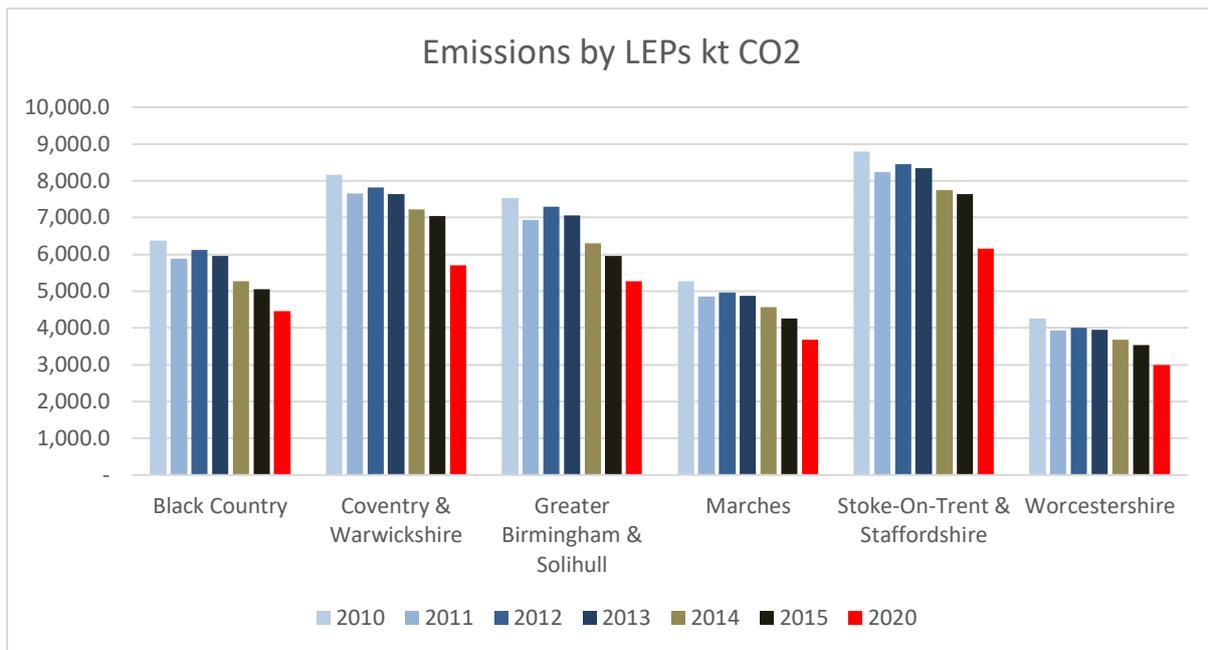


Figure 4 - West Midlands Emissions by LEP

### 3.4 Future research

Feedback on this research has indicated that the next annual monitoring report should include comparisons on performance with other meaningful criteria such as the UK average or similar size or type of regions.

A breakdown by emissions source would be helpful at the LEP level to illustrate the variation within the region. Research on the progress on the renewable energy generation target would also be helpful.

### 3.5 Summary

A general drop in emissions has been observed from 2010 across the West Midlands.

Whilst initiatives have already been put in place and are having an effect, this momentum needs to be maintained and improved in order to reach the reduction goal set out in the 2020 vision.

## 4 Community: Health Inequality

### 4.1 2020 Vision Statement

*“The life expectancy gap has fallen from 10 to 5 years for men and 3 years for women as a result of employment, less pollution and healthier lifestyles.”*

The Roadmap outlines that the social target for the region involves an improvement in health inequalities using 2010 as a baseline. Inequality in life expectancy is an important and revealing measure; it is a culmination of, and is influenced by, several factors linking to

personal relationships, access to resources, education, employment and income and quality of the environment.

The focus of health inequalities is not on the absolute but relative life expectancy between the best and worst performing areas. There will always be people that live longer than others, however a more sustainable and socially just society would expect this gap to be reducing over time.

## 4.2 Methodology

Using the Public Health profiles on the Public Health England website<sup>3</sup>, a profile of the West Midlands and each local authority within the region was selected. Each appropriate year (2010-2015) and the information regarding life expectancy inequalities between the most and least deprived areas within each local authority was selected from each profile.

Local authorities were then grouped by LEP boundary for each LEP (e.g. Wolverhampton, Dudley, Walsall and Sandwell data were merged, and an average given if appropriate, in order to give data for the Black Country LEP). Where LEP boundaries overlapped the nearest authority (unitary or county council) boundary was used to avoid double counting.

## 4.3 Findings

In order to measure health inequalities across the region, the difference between life expectancy in both males and females in the most and least deprived areas in each LEP have been recorded then summarised as a regional total. The results for males are illustrated in Figures 5 and 6.

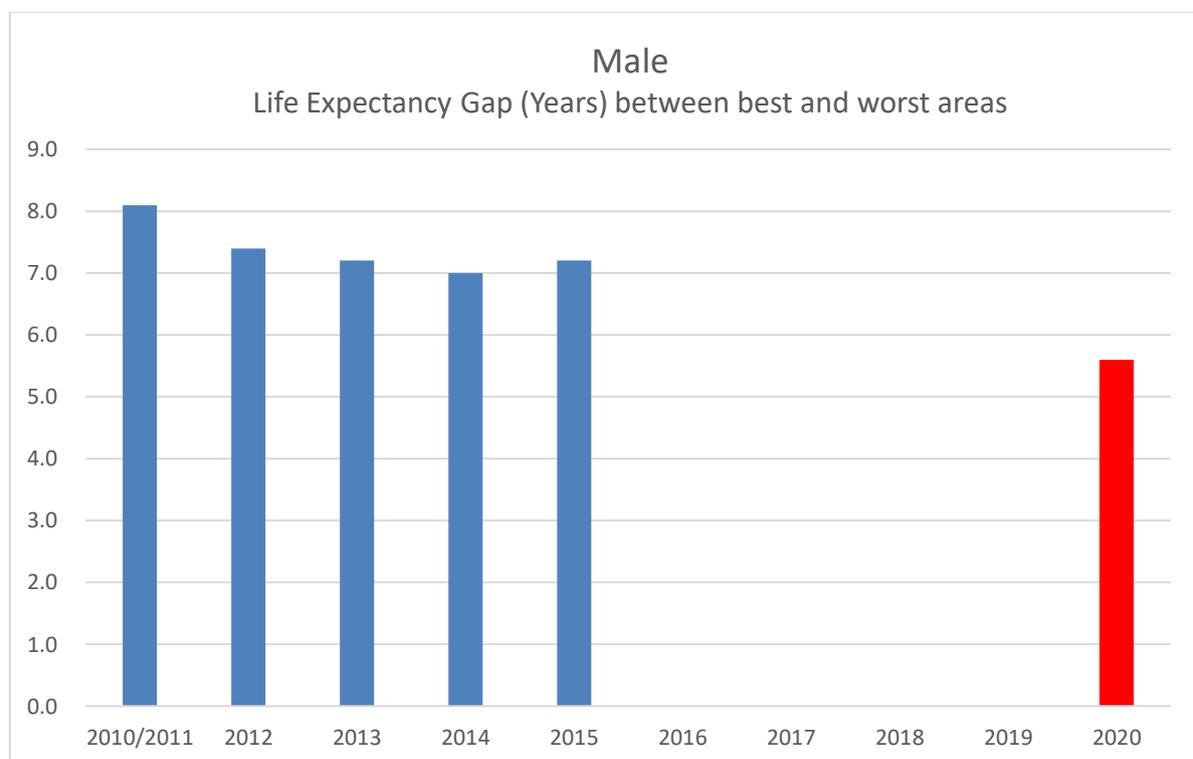


Figure 5 – Male Life Expectancy Inequalities across the West Midlands (years)

<sup>3</sup> <http://fingertips.phe.org.uk/>

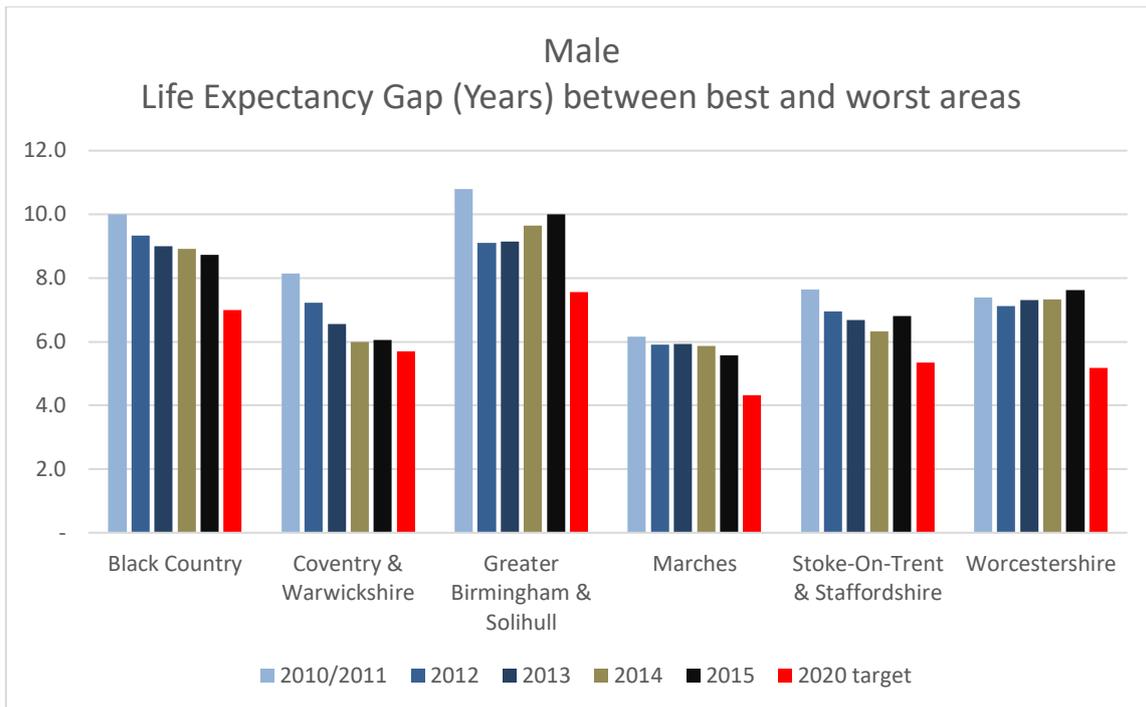


Figure 6 – Male Life Expectancy Inequalities across the West Midlands LEPs (years)

The target for 2020 set out that life expectancy inequality should fall for men and women. Figure 5 shows that this appears to be the case for men with the difference between the best and worst areas showing a gradual decline since 2011. However, it does not appear to be falling at a rate that would result in the 2020 target being met. The results shown in Figure 6 show that the regional trend is not consistent across each LEP. Indeed, in Greater Birmingham & Solihull LEP life expectancy inequality has increased from 2013 to 2015. The results for females are illustrated in Figures 7 and 8.

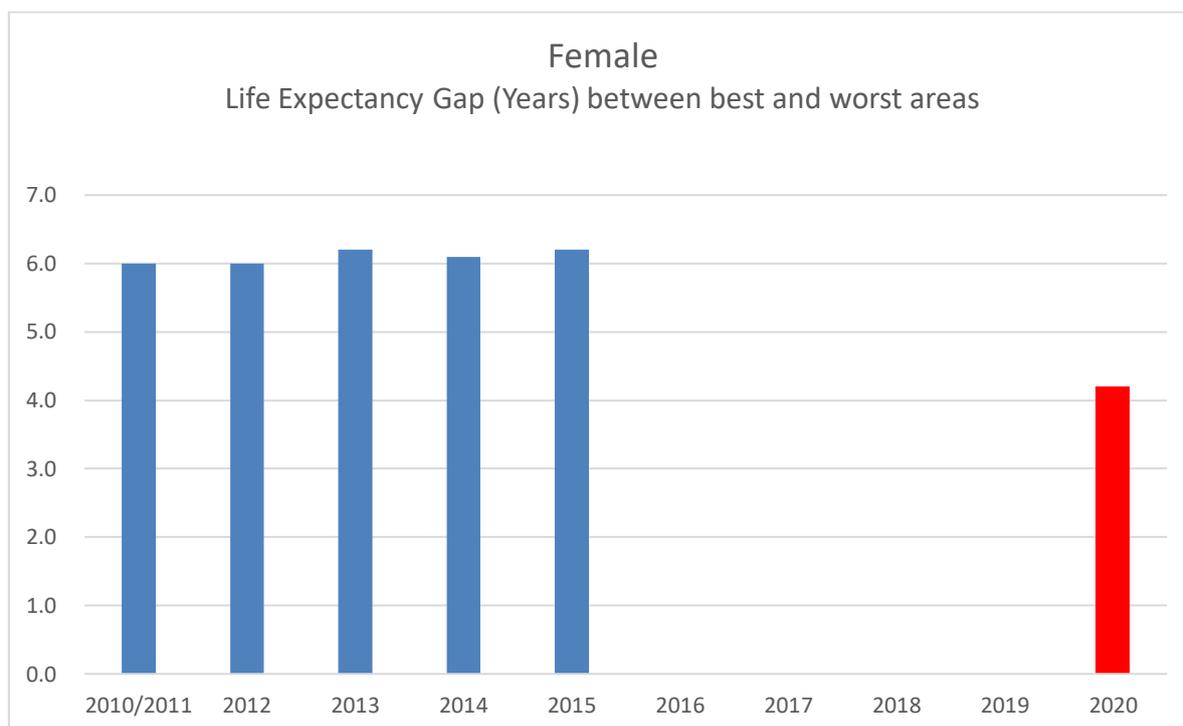


Figure 7 – Female Life Expectancy Inequalities across the West Midlands (years)

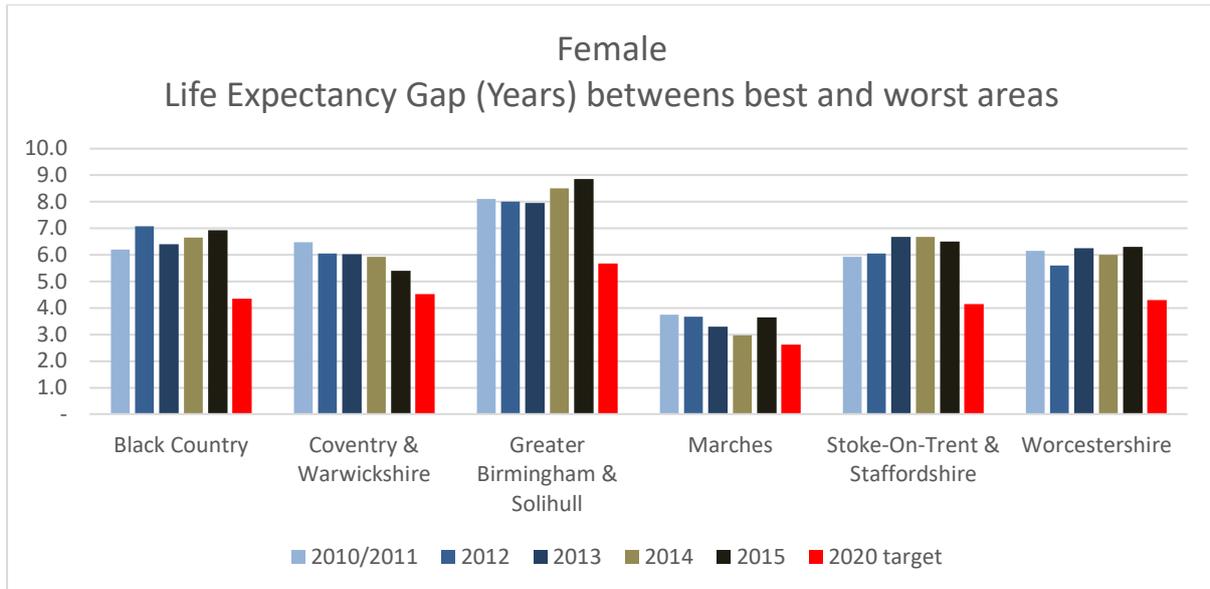


Figure 8 – Female Life Expectancy Inequalities across the West Midlands LEPs (years)

Figure 7 shows that the situation is different for females where life expectancy inequality appears to have hardly changed across the West Midlands. This trend is common across all LEPs within the West Midlands as shown in Figure 8. This indicates that with this particular parameter, the West Midlands is failing at achieving the 2020 vision and the issue needs to be addressed urgently.

#### 4.4 Summary

The West Midlands is extremely unlikely to reach the 2020 vision of life expectancy inequalities being reduced for both men and women.

Inequalities in the region are on the rise for women, instead of declining. Therefore action needs to be taken immediately to reverse this trend.

#### 4.5 Comparison with other areas

The feedback from 2016 monitoring report highlighted the need to compare performance with other areas outside the West Midlands. Therefore this year we have also produced a [combined authority sustainability benchmarking technical report](#) which compares the West Midlands Combined Authority with the eight other combined authorities across the country on various indicators including: carbon emissions, health inequality, economic productivity, air quality and LEPs progress on tackling climate change.

The WMCA only covers three of the six LEPs that make up the West Midlands monitored in this report, and the other combined authorities often only cover one LEP in their part of the country. Therefore the report often uses GVA per head or Carbon efficiency to allow more accurate comparisons as the sizes of the different combined authority boundaries varies considerably.

Figure 9 – Extract of Summary Table of Sustainability Metrics Across 9 Combined Authorities

Metric	Latest figure in specified year	Ranking out of 9 CAs	Rate of Change since 2010	Ranking out of 9 CAs	WMCA target	Scale of challenge
<b>Environment</b>						
<b>Total carbon emissions</b>	22,708 ktCO <sub>2</sub> (2014)	9	-14.5%	6	40% reduction from 2010 to 2030	By 2030, emissions should be ≤15,930 ktCO <sub>2</sub>
<b>Per capita carbon emissions</b>	5.6 ktCO <sub>2</sub> (2014))	4	-16.0%	7	-	
<b>Air quality</b>	40 days breached (2016)	9	+2 days breached	9=	Reduction to 1 day breached by 2030	39 less days breached per year
<b>Social</b>						
<b>Health inequality (males)</b>	8.2 years (2014)	5	-1 years	3=	Reduction in average health inequality gap by 5.9 years by 2030	Further reduction of 2.3 years
<b>Health inequality (females)</b>	7.2 years (2014)	4	+0.5 years	8	Reduction in average health inequality gap by 3.9 years by 2030	Further reduction of 3.3 years
<b>Economic</b>						
<b>Total economic productivity</b>	£74,461m (2015)	1	+21.0%	2	-	Currently much better than average
<b>Per capita economic productivity</b>	£18,780 (2015)	7	+1.0%	9	£33,604 by 2030	78.9% increase required by 2030

By comparing the WMCA to the eight other combined authorities across England we can see how we are performing in comparison.

### Carbon emissions:

The WMCA has made better than average progress at reducing its overall and per capita emissions in the years 2010 to 2014 but remains the CA region that emits more carbon than any other due to its size.

**Health inequality:**

Health inequality is slightly lower in the WMCA than in other CA areas, but remains high overall. The gap between male and female health inequality is lower in the WMCA than in any other CA area.

**Economic productivity:**

The West Midlands is performing well in economic productivity compared to other CA areas; but has a lower than average performance per head.

#### 4.6 Future research

In previous years we have also monitored the perception of stakeholders in how well local partners are working together on the eight sustainability priorities in the 2020 roadmap, for example in areas such as retrofitting housing. This information was gathered through our annual customer survey.

However in 2017 we have experimented in changing our [customer survey](#) to a more targeted range of stakeholders and solely focused on our services offer rather than a wider sustainability priorities progress perception.

As a result we will rethink how we monitor and report progress on the 2020 roadmap eight sustainability priorities in 2018..

## 5 Conclusions

Since 2010 we have been the only region in the UK to have a clear vision, plan, action and annual monitoring for a more sustainable future. This has been possible due to our independent nature, our evidence based approach and the support of a range of partners and volunteers.

This report has demonstrated the mixed progress made within the West Midlands towards a more sustainable future between 2010 and 2017.

In terms of the goals, despite good progress on the economic and environmental goals, the social outcomes to date are poor. We would expect a more productive and efficient economy to share these benefits more evenly to communities and therefore see a reduction in health inequality as people accessed work, green spaces, healthy life styles and lower pollution. This is not currently occurring and therefore should be made more of a priority by policy makers.

This year we have done a comparison with other combined authority areas across England. These all have an urban core and rural hinterland, although the WMCA area is the largest by far. The West Midlands appears to be performing above average across the majority of metrics. The exceptions are individual measures of productivity are poor, despite strong overall growth. Also despite poor progress locally on reducing the health inequality gap – the

region has the overall lowest health inequality gap, and the lowest gap between men and women.

In terms of the sustainability priorities, we did not measure and report on the perception on the progress this year, but will review other ways of measuring meaningful progress.

The certainty created by the roadmap and monitoring during these challenging last seven years has paid off. As the WMCA have integrated our Roadmap 2020 objectives and indicators within their Strategic Economic Plan and Monitoring Framework, as well as many of the sustainability priorities. As a result our annual research now not only benefits our annual conference, but the WMCA annual progress report.

This year we reported progress not only to our members, but the newly elected Mayor for our region, at our annual conference in November 2017.

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