

**WEST OF ENGLAND COMBINED AUTHORITY COMMITTEE AND  
WEST OF ENGLAND JOINT COMMITTEE**

**ITEM 11**

**25 June 2021**

**REPORT SUMMARY SHEET**

**CLIMATE EMERGENCY ACTION PLAN UPDATE**

**Purpose**

To set out the next phase of activity for tackling the climate emergency and protecting nature, including proposed activity in the lead up to COP26; and to provide an update on progress towards ambitions contained within the Climate Emergency Action Plan.

**Summary**

This report includes the following key information:

- An update on progress towards ambitions contained within the Climate Emergency Action Plan
- Details of the proposed regional activity in the lead up to COP 26. This reflects the Metro Mayor's priority on taking urgent action to address climate change and protect the natural environment and biodiversity within the region.

**Impact of Covid-19 pandemic**

The Combined Authority has actively reviewed its key activities and work programme to reflect changing priorities as a result of the Covid-19 pandemic. Specific issues relating to the Covid-19 situation that impact on or are addressed through this report are as follows:

- Ensuring that revised plans and new programmes geared towards supporting recovery also reflect our climate ambitions e.g. recovery funding to extend the Low Carbon Challenge Fund.
- Supporting positive behaviour change such as increased levels of cycling and walking that were induced by the pandemic but contribute towards overall emissions reduction to remain as the region re-opens and recovers.

**Recommendations**

Members of the Combined Authority Committee are asked to:

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- Note the commitment to establishing a green recovery fund that will tackle the climate emergency, protect biodiversity, and promote recovery

- Support and engage with plans for activity to stimulate a green recovery and in the lead up to COP26
- Support the participation of Solar Together
- Note the wide-ranging action that is being taken to tackle the climate emergency since its adoption in October 2020, including the range of service specific actions undertaken or currently being delivered as outlined in appendix 1.
- Note the development of key regional data benchmarks to help monitor impact going forward.

Members of the Joint Committee are asked to note the report.

**Contact officer:** Jessica Lee

**Position:** Head of Strategy & Policy

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**REPORT TO:** WEST OF ENGLAND COMBINED AUTHORITY COMMITTEE  
& WEST OF ENGLAND JOINT COMMITTEE

**DATE:** 25 June 2021

**REPORT TITLE:** CLIMATE EMERGENCY ACTION PLAN UPDATE

**DIRECTOR:** JESS LEE, HEAD OF STRATEGY & POLICY

**AUTHOR:** HELEN ILES, SENIOR POLICY OFFICER

### **Purpose of Report**

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### **Recommendation**

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specific actions undertaken or currently being delivered as outlined in appendix 1.

- Note the development of key regional data benchmarks to help monitor impact going forward

The Joint Committee is asked to note the report.

## **Background / Issues for Consideration**

The West of England Combined Authority declared a climate emergency in July 2019, making a commitment to work towards becoming carbon neutral by 2030.

The Climate Emergency Action Plan (CEAP) set out five challenges and associated and objectives for reducing emissions in the region and meeting this objective:

1. **Low carbon transport system** – Work to decarbonise the transport system and increase walking and cycling and the use of public transport; building on positive behaviour change following the covid-19 pandemic.
2. **Low carbon business** – Help business and local people benefit from growth in the green economy; maximising government investment in the region and supporting our businesses to build back better.
3. **Renewable energy** – Work to decarbonise the energy system and increase local renewable energy.
4. **Low carbon buildings and places** – Increase the energy efficiency performance of buildings and develop low carbon standards in new developments.
5. **The green environment** – Protect and enhance the environment through a proactive approach to green infrastructure.

The newly elected Metro Mayor of the West of England has been clear about the priority he places on taking action to address climate change and protect the natural environment and biodiversity within the region. If we are to meet our commitment to reach net-zero carbon emissions by 2030 while addressing the causes of climate change, we need to move fast and work in partnership with our unitary authorities, businesses and the national government.

Whilst progress has been made towards addressing climate change and protecting the environment, the time is now to take further, bolder action, inspire others to go further and push government to introduce the national measures required to achieve carbon neutrality.

To help facilitate this, the Metro Mayor has made a commitment to delivering a £20 million Green Recovery fund that will help stimulate local action to address climate change, further push government action and help stimulate economic recovery. The £1m headroom outlined in the Investment Fund report is intended to be the first tranche of the Recovery Fund. The £1m headroom outlined in the Investment Fund report will be used to develop and implement further measures to support economic

recovery in line with the Metro Mayor's manifesto commitments, including the Green Recovery Fund.

The UK will host the 26th UN Climate Change Conference of the Parties (COP26) at the Scottish Event Campus (SEC) in Glasgow on 1 – 12 November 2021. The climate talks will bring together heads of state, climate experts and campaigners to agree coordinated action to tackle climate change.

The key themes for COP26 align closely with our ambitions set out in the Climate Emergency Action Plan (CEAP), Local Industrial Strategy and Regional Recovery Plan.

This is an opportunity for the West of England to further promote our work on tackling the climate emergency and to work with partners to promote the behaviour change that will be needed to further meet our ambitions

### **A Green Recovery**

Achieving the ambitions of the Climate Emergency Action Plan to reduce emissions and protect the natural environment within the region will require wide-scale behaviour change and action from all our residents, businesses, communities and national government.

As we move towards re-opening and recovery, we have the unique opportunity to work together permanently effect behaviour change and grow in a way that strengthens our natural environment and addresses climate change.

To do this, we are proposing to run a series of events, projects and promotional activity that will tie in with the ambitions of our recovery programme and Green Recovery Fund to deliver sustainable outcomes in line with the CEAP and capitalise on the increased regional and national activity in the lead up to COP26.

We will develop a number of new strands of activity that will enhance the work that we are currently leading on and support the ambition of driving a green recovery within the region. This will include:

- Promoting **Green Skills** – Working with education providers, the Careers Hub, and key local employers to signpost green job opportunities available now and developing a range of Labour Market Information career pathways and information to help inspire 'green' jobs of the future and help to promote economic recovery.
- **Nature & Biodiversity** – work with partners to set challenges and roundtables to consider how to enhance the natural environment and invest in strategic GI projects, demonstrating the economic values of nature and biodiversity across a range of organisational needs. Joint challenges could include ways to finance and invest in Green Infrastructure via private sector funding, crowd sourced evidence mapping to help understand use and quality of green space to inform future developments.
- Run **Solar Together West of England** to increase the amount of renewable energy in the region – Solar Together is a solar panel collective purchase scheme to help increase the amount of solar panels within the region by

grouping together home owners within Bristol, B&NES, South Gloucestershire and North Somerset to achieve a better price for the energy supplied.

- **Retrofit feasibility** – in order to fully achieve carbon neutrality, we will need to ensure that all existing homes within the region are retrofitted to improve energy efficiency and equipped with net zero heating systems. Government have taken positive steps towards addressing this issue with the introduction of the Green Homes Grant, however, the lack of flexibility and short-term nature of the funding prevents systemic change. If we are to truly enable widescale retrofitting within the region, we will need to develop a sustainable, holistic approach. To help develop this approach, we will undertake a feasibility study to identify how to stimulate the retrofit market both on the supply and demand side and consider what a sustainable funding mechanism might look like. This feasibility study will build on experiences of previous retrofit schemes and seek to build on their successes and provide solutions as to why they failed to provide a sustainable retrofit model that will work across sectors and stakeholders.

In order to ensure the success of the new strands of activity and maximise the amount of behaviour change that could be achieved, we are proposing to earmark some of the headroom being made available to implement measures in line with the Mayor's manifesto commitments to fund this activity. As set out in the Investment Fund Report, approval of funding applications will be delegated to the WECA Chief Executive in consultation with the Chief Executives of the constituent councils.

## **COP26**

Many of the key themes of COP26 align closely with the ambitions of our CEAP and Local Industrial Strategies, including the key role of cities and regions can play in delivering net zero.

Where these ambitions align, the combined authority will utilise the increased political and national attention on climate change in the lead up to COP26 to drive forward our ambitions and call on others, including national government, to do similar.

Our partner Unitary Authorities, many of our key business partners, Western Gateway and the M10 group of combined authorities are co-ordinating events in the lead up to COP26. The Combined Authority will use our role as a regional convenor and work with these partners to promote events being held across the region to encourage wide scale participation.

## **Monitoring our CEAP ambitions**

The original climate emergency declaration, committed the combined authority to providing updates on progress against actions set out in our 5 challenge areas and in line with West of England CA's monitoring and evaluation framework every six months.

Delivering our regional goal will be complex and will require action by national government, unitary authorities, individuals, business and international government. The combined authority simply does not have the funding or levers to do it all alone.

Appendix One provides an update on key metrics and data for each of the grand challenges, providing information on regional data benchmarks and Combined authority led activity related to reducing emissions and helping the region to become net zero. Taken together they provide a comprehensive overview of activity under the climate emergency action plan and places them within the context of regional emissions and provides an indication of progress towards our net zero goal.

However, the progress report should not be viewed in isolation. It just one part of the picture of how our region is working together to achieve net zero. The action of unitary authorities, businesses, residents and national government all play a role in achieving our ambitions and are reported on separately. The inclusion of national and regional indicators within the progress report help to provide an evidence base that all stakeholders can use to inspire further action and understand the challenge ahead.

The regional and national datasets have been selected as key indicators that align with the ambitions of the CEAP and activity led by WECA. The indicators summarise the state of the region for each priority area, and we expect the activities of the CEAP to contribute to positive change. We do not have total control over these measures because many other factors play a role, but it is important we understand the current position.

Due to the time delay in the release of national datasets, the impact of action to date is not yet born out in the statistics. However, it is important to recognise and celebrate the importance and impact of all regional action. Whilst the national datasets do not yet show the impact of our action, we know from our own monitoring activities that progress towards the net zero ambitions is being made. The scale of the challenge to address climate change will require consistent, collective action, with the impact assessed according to our own regional indicators and metrics where possible.

It is proposed that the progress report is updated on a yearly basis as part of the updates to committee on the progress on activity related to the climate emergency

## **Our CEAP Achievements**

Since the adoption of the CEAP in October 2020, we have been working with our partners to:

- **Take action** - Driving forward key projects in line with CEAP ambitions through direct action and projects.
- **Enable structural changes** – working towards addressing underlying structural barriers to achieving our ambitions including building policy to facilitate long term change and putting climate change at the heart of WECA's policies & projects.

- **Working with partners to shape the debate** - Shaping regional and national debate, building reputation for green recovery and working with government for more powers and funding

Our progress towards achieving these ambitions is detailed in appendix one, including:

<p><b>Low carbon transport system</b></p>	<ul style="list-style-type: none"> <li>• Continued the roll out of <b>Future Transport Zones</b> trialling innovative new solutions, powered by digital technologies, to make public transport better including launching <b>e-scooter</b> scheme which supports <b>30,000+ weekly riders</b>.</li> <li>• <b>Committed £90,000</b> to develop a transport decarbonisation study and Electric vehicles evidence base</li> <li>• Continued to provide support to <b>bus service providers</b> to manage the impact of the pandemic and ensure a consistent service</li> </ul>
<p><b>Low carbon business</b></p>	<p>As part of our Regional Recovery plan, the <b>Low Carbon Challenge Fund</b> has been extended by a further <b>£1.895m</b>, including providing:</p> <ul style="list-style-type: none"> <li>▪ 91 small &amp; medium enterprises (SMEs) have received free Decarbonisation Reports.</li> <li>▪ 25 SMEs awarded over £200k grant for energy saving improvements.</li> <li>▪ 18 SMEs have completed energy saving projects,</li> <li>▪ saved 119 tCO<sub>2</sub>e annual greenhouse gas emissions</li> </ul>
<p><b>Renewable energy</b></p>	<ul style="list-style-type: none"> <li>• Supported local renewable energy generation through a <b>£500k</b> grant awarded to a community led wind turbine project. Introducing innovative technology to the UK.</li> <li>• £800k additional funding allocated from WECA's Recovery Fund for a second grant round.</li> </ul>
<p><b>Low carbon buildings and places</b></p>	<ul style="list-style-type: none"> <li>• <b>Secured £7.49M of Green Homes Grant (Local Authority Delivery)</b> funding secured for the West of England to be administered by SW Energy Hub to improve the energy efficiency of building stock, reduce fuel poverty and support the green economy.</li> <li>• Working with Wales &amp; West, WPD and Regen to establish the <b>Energy Planning Integrated in Councils</b> Project funded with <b>£500,000 from grid operators to align future investment with our strategic planning</b></li> </ul>
<p><b>The green environment</b></p>	<ul style="list-style-type: none"> <li>• Allocated £300,000 to support the development of Green Infrastructure Projects, including developing business cases for Bath River Line and Chew Valley Lake Recreational Trail.</li> <li>• Embedded an ecology and environment within our governance processes</li> <li>• Worked in partnership to develop The Forest of Avon Plan: A Tree and Woodland Strategy for the West of England</li> </ul>



## **Next steps in delivering the CEAP**

Over the course of the next year, we will continue to work with partners to deliver the ambitions of the CEAP and work with the new metro Mayor to realise his ambitions in protecting the environment, and promoting the green recovery.

## **Solar Together West of England**

Solar Together is a solar panel collective purchase scheme whereby a volume of individual homeowners group together in order to achieve a better price for the solar panels and installation process.

It will enable the West of England support the declaration of a climate change emergency objective of creating a renewable and resilient energy system,

It will target home owners in Bristol, B&NES, South Gloucester and North Somerset.

The total cost for this project is estimated to be £41,000. Of this total amount, £32,000 will be funded using the climate emergency funding, with North Somerset contributing £9,000.

Collective purchasing has a direct impact on reducing the real cost of solar panel installations and technology. A collective purchasing programme has not yet been targeted in the region and therefore does not compete with existing programmes.

Similar schemes have been launched with local authorities and regional governments including the Greater London Authority, Greater Manchester Combined Authority, Devon, Hampshire, Kent and Cambridge County Councils and Suffolk and Norfolk Councils, stimulating local energy markets and providing high quality installations alongside average resident savings of 20% on market rates.

It is proposed WECA will procure a third party with an online platform to manage a reverse auction scheme aimed at home owners interested in installing solar panels on their property. The third party will also oversee and quality assure the installation and manage the installation process of the solar panels on people's homes.

The advantage of running a reverse auction across Bristol, B&NES, South Gloucestershire and North Somerset is that it can provide economies of scale, driving down the costs of the panels and installation to the home owner.

The provider will target home owners within the participating authorities through a marketing campaign. This will involve direct mail out to households and publicising the scheme on the council's website and relevant marketing channels [to be agreed by each participating UA]. Interested households will then be asked to register on the third party's website in order to take part in the scheme.

Once households are registered on the website, a quality assured installer will undertake a feasibility assessment on the property and provide the homeowner with options for installing solar panels including indicative costs and the estimated carbon savings. If the home owner agrees, the high-quality solar panels will be installed.

All costs associated with the installation of the solar panels will be the responsibility of the home owner.

### **Expected outcomes**

Expected outcomes are dependent on the uptake of the scheme. However, based on similar schemes operating elsewhere, it is anticipated that Solar Together West of England will target c.107,000 owner households across the participating authorities resulting in an anticipated 963 installations. This could achieve an approximate resident investment in the market of circa £4m.

This would also result in an annual emissions reduction of 900 tonnes of CO<sub>2</sub> and generate an estimated 3.18 MWh per year of additional renewable energy in the West of England.

### **Project Management & Responsibilities**

WECA, supported by the South West Energy Hub and the third party, will lead and co-ordinate the marketing campaign. Each participating unitary authority will engage with the programme by providing relevant data and seek the requisite internal approvals.

### **Cost and resource**

Support from the third party is not chargeable. They will make money from a small fee per installed solar panel, paid for by the selected solar panel provider – this fee will be the same and agreed with all suppliers who will participate in the reverse auction. As part of this business model, it is anticipated that part of the marketing costs will be recoverable through take up incentives offered by the third party. This will be dependent on the overall number of installations, but any funds recovered will be used to participate in another reverse auction or to fund similar projects aimed at mitigating the impact of climate change.

The sole cost for this project will be a marketing cost. WECA will fund, procure and manage the direct mail out to targeted residents. This is in line with other marketing campaigns managed by WECA in conjunction with UAs including the Careers Hub.

WECA will cover the additional marketing costs incurred by Unitary Authorities. Where North Somerset engage in the purchasing scheme, their costs will be paid for directly. All marketing materials will be published using the UA logos and branding, alongside the WECA branding.

The final cost of marketing will depend on the number of households targeted and costs of each mailshot. It is proposed that the most suitable households are targeted across the region, with a maximum total funding envelope of £41,000 allocated to the project.

North Somerset will be expected to fund their own contribution to the Solar Together project, at a total value of £9,000, with the remaining project costs covered by WECA climate emergency fund.

## Consultation

- UA sustainability officers – using the Energy Action Group that meets monthly
- Infrastructure Officers Group
- Infrastructure Directors group.

## Public Sector Equality Duties

- 6 The public sector equality duty created under the Equality Act 2010 means that public authorities must have due regard to the need to:
- Eliminate unlawful discrimination, harassment and victimization and other conduct prohibited by the Act.
  - Advance equality of opportunity between people who share a protected characteristic and those who do not.
  - Foster good relations between people who share a protected characteristic and those who do not.
- 6.1 The Act explains that having due regard for advancing equality involves:
- Removing or minimising disadvantages suffered by people due to their protected characteristics.
  - Taking steps to meet the needs of people from protected groups where these are different from the needs of other people.
  - Encouraging people from protected groups to participate in public life or in other activities where their participation is disproportionately low.
- 6.2 The general equality duty therefore requires organisations to consider how they could positively contribute to the advancement of equality and good relations. It requires equality considerations to be reflected in the design of policies and the delivery of services, including policies, and for these issues to be kept under review.

## Finance Implications, including economic impact assessment where appropriate:

- 7 In July 2019, the WECA committee allocated £250,000 towards climate emergency actions. January 2020 committee agreed that authority for this sum be delegated to WECA CEX in consultation with the UA CEXs and with political support and in line with CE and Energy Strategy objectives. Solar Together will be funded through this £250,000 allocation.

Advice given by: Malcolm Coe, Director of Finance

## Legal Implications:

- 8 The legislation and guidance being in relation to climate emergency will need to be kept under review as the actions outlined are implemented. This will ensure that the Combined Authority is complying with its statutory obligations.

Advice given by: Shahzia Daya, Director of Legal

## **Climate Change Implications**

- 9 On 19 July 2019, the West of England Combined Authority declared a climate emergency, recognising the huge significance of climate change and its impact on the health, safety and wellbeing of the region's residents. The Combined Authority is committed to taking climate change considerations fully into account as an integral part of its governance and decision making process.

Each report/proposal submitted for Combined Authority / Joint Committee approval is assessed in terms of the following:

Will the proposal impact positively or negatively on:

- \* The emission of climate changing gases?
- \* The region's resilience to the effects of climate change?
- \* Consumption of non-renewable resources?
- \* Pollution to land, water or air?

Particular projects will also be subject to more detailed environmental assessment/consideration as necessary as part of their detailed project-specific management arrangements

## **Human Resources Implications:**

- 11 There are no direct human resource implications arising from this report.

Advice given by: Alex Holly, Head of Human Resources

## **Appendices:**

Appendix 1 – Climate Emergency Action Plan progress report

## **Background papers:**

None.

## **West of England Combined Authority Contact:**

Any person seeking background information relating to this item should seek the assistance of the contact officer for the meeting who is Ian Hird on 07436 600313; email:

[democratic.services@westofengland-ca.gov.uk](mailto:democratic.services@westofengland-ca.gov.uk)

# CLIMATE EMERGENCY ACTION PLAN

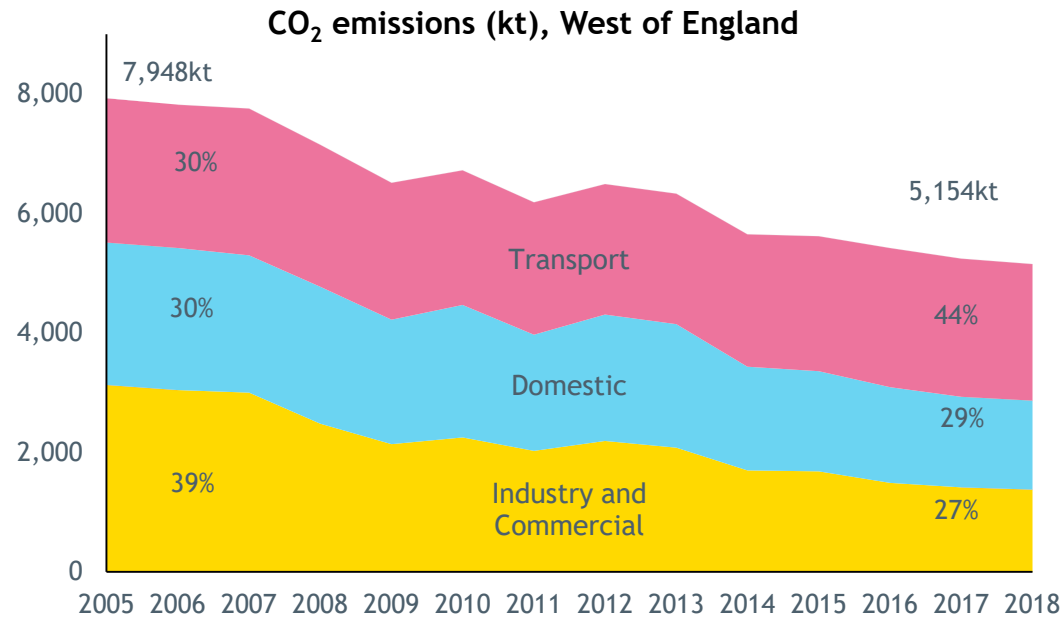
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PROGRESS REPORT

# CLIMATE EMERGENCY: THE CHALLENGE

In 2018, the region produced 5,154kt of CO<sub>2</sub>, which 35% from 2005:

- This represents 4.5 tonnes of CO<sub>2</sub> per person, compared with 5.2 tonnes per person across the UK
- Only CO<sub>2</sub> is included because data on other greenhouse gasses (approx. 20% of total UK emissions) are not available. Similarly, emissions ‘imported’ with the goods we consume are not included

## A significant emissions challenge remains

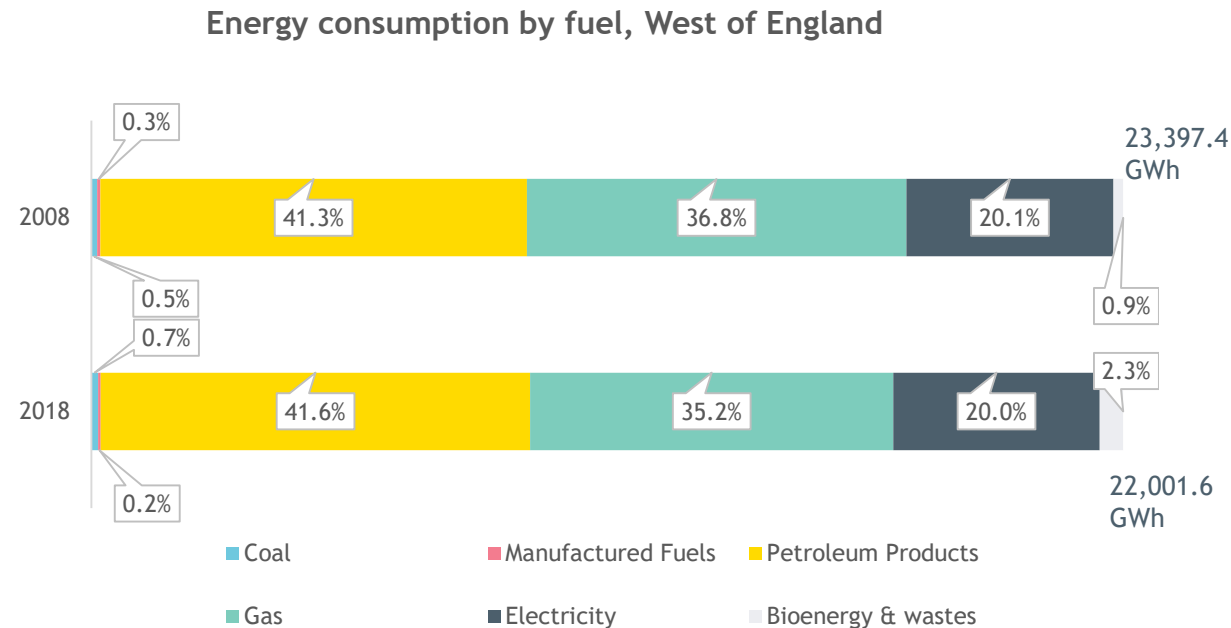


1. These data are only updated **annually**.
2. Includes emissions outside scope of local authorities e.g. large industry, motorways & rail, & land-use.

Between 2008 and 2018 there has been a decline in energy consumption from 23,397 GWh to 22,002 GWh due to improvements in energy efficiency.

Energy consumption still relies on fossil fuels. In 2018 fossil fuels accounted for 91.1% of energy consumption with 33.1% of grid electricity being generated from renewable sources.

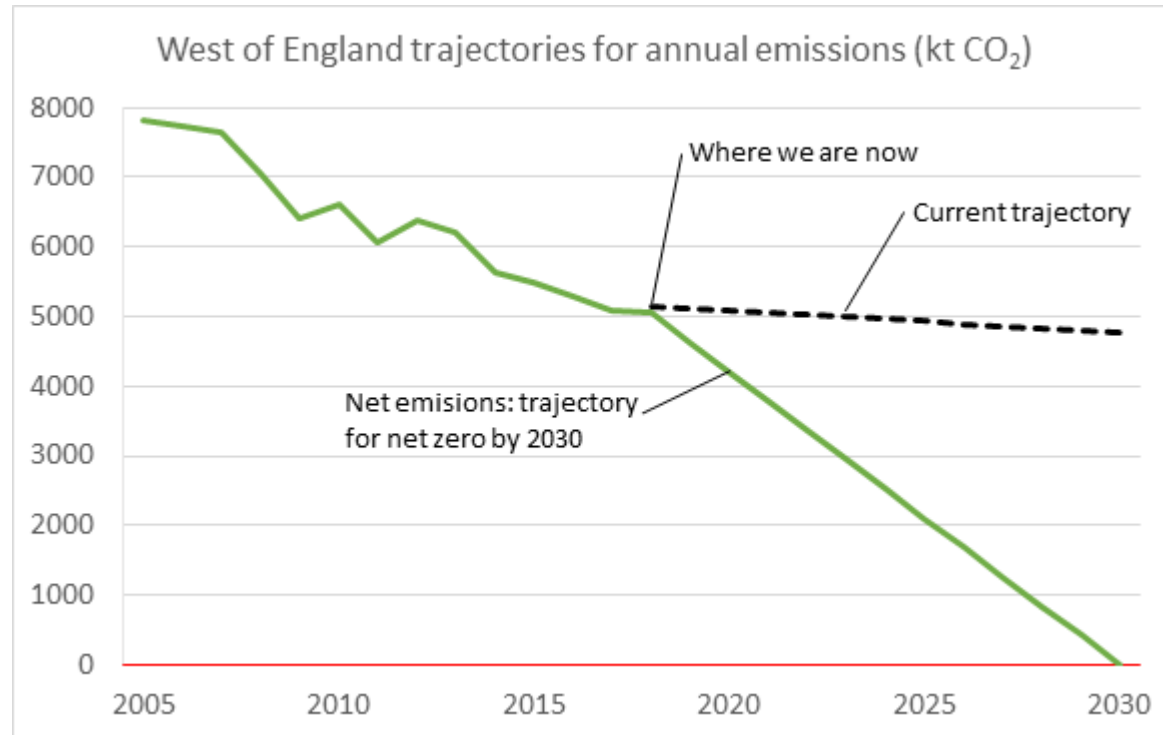
## Energy consumption relies on fossil fuels



Sources: BEIS ([emissions](#)), ([renewables](#)), ([energy consumption](#)), ([heat](#)), [DfT](#) (vehicles)

# TRAJECTORIES

To meet our carbon reduction goal by 2030, emissions must fall by 18% every year.



# DATA CONTEXT

This document provides an update on key metrics and data for each of the grand challenges, providing information on regional data benchmarks and WECA activity related to reducing emissions and helping the region to become net zero.

Taken together they provide a comprehensive overview of activity under the climate emergency action plan, places them within the context of regional emissions and provides an indication of progress towards our net zero goal.

The regional and national datasets have been chosen as key indicators that align with the ambitions of the CEAP and activity led by WECA. The indicators summarise the state of the region for each priority area, and we expect the activities of the CEAP to contribute to positive change. We do not have total control over these measures because many other factors play a role, but it is important we understand the current position.

Due to the time delay in the release of national datasets, it can be difficult to evidence direct correlations between regional activity and the national evidence base. Covid has also had a significant impact on many of the regional and national baselines, such as public transport usage. This further compounds the difficulty in directly evidencing regional activity amongst national datasets and in providing an up to date trajectory on progress towards our net zero ambitions.

It is proposed that this document is updated on a yearly basis as part of the updates to committee on the progress on activity related to the climate emergency.



# CLIMATE EMERGENCY ACTION PLAN



## Low carbon transport system

Work to decarbonise the transport system and increase cycling and walking and the use of public transport; building on positive behaviour change following the covid-19 lockdown period



## Low carbon business

Help business and local people benefit from growth in the green economy; maximising government investment in the region and supporting our businesses to build back better



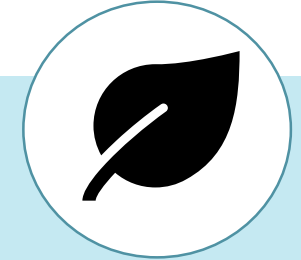
## Renewable energy

Work to decarbonise the energy system and increase local renewable energy



## Low carbon buildings and places

Increase the energy performance of buildings and develop low carbon standards in new developments



## The green environment

Protect and enhance the environment through a proactive approach to green infrastructure

# TAKING ACTION



## Low carbon transport system

Continued the roll out of **Future Transport Zones** trialling innovative new solutions, powered by digital technologies, to make public transport better including launching **e-scooter scheme** which supports **30,000+ weekly riders**.

Committed **£90,000** to develop a **transport decarbonisation study** and **Electric vehicles evidence base**

Continued to provide **support to bus service providers** to manage the impact of the pandemic and ensure a consistent service



## Low carbon business

As part of our Regional Recovery plan, the Low Carbon Challenge Fund has been extended by a further **£1.895m**, including providing:

- 91 small & medium enterprises (SMEs) have received free Decarbonisation Reports.
- 25 SMEs awarded over £200k grant for energy saving improvements.
- 18 SMEs have completed energy saving projects,
  - saved 119 tCO<sub>2</sub>e annual greenhouse gas emissions
  - added 22Kw renewable energy capacity



## Renewable energy

Supported local renewable energy generation through a **£500k** grant awarded to a community led **wind turbine** project. Introducing innovative technology to the UK.

£800k additional funding allocated from WECA's Recovery Fund for a second grant round.



## Low carbon buildings and places

**Secured £7.49M of Green Homes Grant** (Local Authority Delivery) funding secured for the West of England to be administered by SW Energy Hub to improve the energy efficiency of building stock, reduce fuel poverty and support the green economy.

Working with Wales & West, WPD and Regen to establish the **Energy Planning Integrated in Councils** Project funded with **£500,000 from grid operators** to align future investment with our strategic planning



## The green environment

Allocated **£300,000** to support the development of **Green Infrastructure Projects**, including developing business cases for **Bath River Line** and **Chew Valley Lake Recreational Trail**.

Embedded an ecology and environment plan within our governance processes

Developed **The Forest of Avon Plan: A Tree and Woodland Strategy** for the West of England

# LOW CARBON TRANSPORT SYSTEM

## *Grand Challenge Objectives:*

- Reduce the number of car trips
- Increase active travel

- Increase uptake of low carbon vehicles
- Increase the uptake of public transport

## Key Deliverables and interventions

### Reduce Number of car trips:

### Increase Active travel

- Joy of the Journey publicity campaign launched to encourage uptake of walking and cycling. Multi-channel and multi-phase, including a returning to school focus (Google ad)

### Increase uptake of low carbon vehicles

- Continued roll out of Future Transport Zones trialling innovative new solutions, powered by digital technologies, to make public transport better and more connected within our communities including the Successful launch of E-Scooters and continued expansion of programme:
  - 663,749+ rides have been completed
  - 1.5million+ kilometres travelled
  - 30,000+ individual riders per week
  - Approx. 4,500 new registrations per week

### Increase uptake of public transport

- Continued to provide support to bus service providers to manage the impact of the pandemic and ensure a consistent service so that providers remain viable.
- In discussion with network providers to provide enhanced bus timetable services from December 2021
- Agreed a 10-year rail delivery plan that will extend services and fund station enhancement
- Commissioned Mass transit studies to ensure we have a sustainable transport system for the future

## Strategic Work

- Committed £90,000 to develop a transport decarbonisation study and EV strategy to provide evidence base and options for the decarbonisation of transport within the region
- Working with Western Gateway to develop a transport carbon baseline across regional boundaries
- As part of 'Bus back better', developing an ambitious Bus Service Improvement Plan (BSIP) in collaboration with local bus operators, highway authorities, community transport bodies and local businesses, services and people. The final plan will be submitted to Government by 31 October 2021

## Key regional data/benchmarks

- Electric Vehicle Charging Devices
- Low Emissions Vehicles
- Passenger journeys on local bus services per head
- Percentage of adults who cycle for travel at least one a week
- Percentage of adults who walk for travel at least one a week
- Transport, CO<sub>2</sub> Emissions (kt), West of England
- Transport CO<sub>2</sub> Emissions as a percentage of all emissions
- Volume of train use (journeys to and from stations)

# LOW CARBON BUSINESS

## *Grand Challenge Objectives*

- Stimulate zero carbon innovation
- Support businesses to transition to energy resource efficient practices
- Support local people to develop their skills and access new green jobs
- Develop and strengthen local green business

## **Key Deliverables and Interventions within West of England**

### **Stimulate zero and low carbon innovation**

- LCCF Local Energy Scheme
  - £500k grant awarded to a wind turbine project (innovative blade technology, first time used in the UK).
- Committed to developing an enhanced West of England Business Innovation Fund & Influence Fund to:
  - Stimulate renewed growth through enabling new, challenge based and mission-focused research and development activity that wouldn't otherwise have happened, tackling systemic crises, including the climate emergency.

### **Support businesses to transition to energy resource efficient practises**

#### LCCF Green Business Grants

- 91 small & medium enterprises (SMEs) have received free Decarbonisation Reports.
- 25 SMEs awarded over £200k grant for energy saving improvements.
- 18 SMEs have completed energy saving projects, with £150k total grant funding.

#### This has:

- saved 119 tCO<sub>2</sub>e annual greenhouse gas emissions
- added 22Kw renewable energy capacity
- reduced the annual energy bills of local business by £25k in total
- levered in £288k private match for low carbon works.

### **Support local people to develop their skills and access new green jobs**

- Retrofit and Green Skills market analysis completed to better understand the pathway to net zero and associated skills and jobs requirements.

### **Develop and strengthen local green business**

- LCCF Green Business Grants - £428k total value of works created for the low carbon economy from Green Business Grants

## **Strategic Work**

- Digital Engineering and Technology Institute (DETI)
- Business Innovation Fund
- Employment and skills plan

## **Key data/benchmarks**

- Number of Green Job adverts posted with the WoE
- Top 10 employers by volume of green jobs advertised
- KtCO<sub>2</sub> emitted by the industry and commercial sector

# RENEWABLE ENERGY

## *Grand Challenge Objectives*

- *Work in partnership to develop new smart approaches to the distribution of energy*
- *Increase local renewable energy generation*

## Key Deliverables and Interventions

### **Work in partnership to develop new smart approaches to the distribution of energy**

- Through the Rural Community Energy fund four community energy projects have been funded totalling **£121,586**. The funding is being used to support the development of projects including community renewable energy generation and low carbon car clubs

### **Increase local renewable energy generation**

- The South West Energy Hub has supported local councils with assessment of potential for low carbon generation on the council owned estate. This has included **42 sites** with the collective potential for **12.5MW** of low carbon generation capacity

### **LCCF Local Energy Scheme**

- £500k grant awarded to a community-led wind turbine project in Avonmouth, 150m tall with 3-5MW capacity, due to be operational in late 2022 .
- £800k additional funding allocated from WECA's Recovery Fund for a second grant round.

## Strategic Work

Working with WPD, Wales & West Utilities and Regen to establish the Energy Planning Integrated in Councils (EPIC) project. £0.5m from grid operators to align the future investment with our strategic planning

## Key Data/Benchmarks

- Installed capacity of sites generating electricity from renewable sources (MW)
- Locally generated renewable electricity as a proportion of total regional electricity consumption
- MWh of renewable electricity generated in the West of England

# LOW CARBON BUILDINGS AND PLACES

## **Grand Challenge Objectives**

- Increase the number of new carbon neutral homes and developments in the region
- Increase the energy efficiency performance of existing homes
- Increase the energy efficiency performance of existing buildings and businesses

## **Key Deliverables and Interventions**

### **Increase the number of new carbon neutral homes and developments in the region**

- Continued to help inform the development of an evidence base for the spatial development
- Provided support to partner UAs in their approaches to refreshing their local plans

### **Increase the energy efficiency performance of existing homes**

- Social Housing Technical Assistance Pilot - Final plans and reports have been provided to the social housing providers taking part. As next steps we are looking at ways to share the learning of the pilot more widely.
- £7.49M of Green Homes Grant Local Authority Delivery funding secured in Phase 2 allocation for the WoE, distributed via the South West Energy Hub
- WECA has been awarded just under £20,000 from the Local Government Association, Housing Advisors Fund to investigate the barriers local authorities face in engaging private domestic landlords with the Minimum Energy Efficiency Standards. The Authority has provided match funding to deliver a wider scope on the research area and provide greater value for money

### **Increase the energy efficiency performance of existing buildings and businesses**

- LCCF Green Business Grants - 12 SMEs have completed energy savings works to commercial buildings

## **Strategic Work**

- Continued to work with partners to develop an evidence base for the spatial development strategy

## **Key Data/Benchmarks**

- Photovoltaic installations per 10,000 households
- Energy Company Obligation (ECO) measures installed
- Domestic CO<sub>2</sub> Emissions (kt)
- Number of homes and buildings rated EPC band C+
- Microgeneration Certification Scheme (MCS) installations

# THE GREEN ENVIRONMENT

## *Grand Challenge Objectives*

- *Work with partners through the Green Infrastructure Strategy to develop climate resilience*
- *Work with partners to protect and enhance the environment*

## Key Deliverables and Interventions

### **Work with partners through the Green Infrastructure Strategy to develop climate resilience**

- £300,000 WECA Investment Fund allocation to support the development of Green Infrastructure Projects including development of outline business cases for:
  - **Bath River Line** - Creating a continuous 5km walking and cycling connection between Bath City Centre and the Western City Limits, together with a series of improved public access hard landscaped and green spaces.
  - **Chew Valley Lake Recreational Trail** - to create a circular walking and cycling trail around the whole lake to open this natural amenity for all whilst taking account of its international, national and local landscape and wildlife designations and form part of a green active travel network in the WoE

### **Work with partners to protect and enhance the environment**

- Working with WENP to deliver the GI Strategy incl. appointing a dedicated staff resource
- Worked with partners to develop The Forest of Avon Plan: A Tree and Woodland Strategy for the West of England to guide collective action to deliver an agreed vision for better managed and connected trees and woodland making a vital contribution to a thriving natural environment, society and economy in the West of England.

## Strategic Work

Embedded ecology and environment within our governance processes

- Continuing to work with Defra & key partners to understand the implications of the Environment Bill (now delayed)

## Key Data/Benchmarks

- Progress towards 10% biodiversity net gain
- Accessible green space, woodland and public rights of way
- % Tree canopy cover
- % of population walking and cycling for leisure

# 2021 PRIORITIES & ACTIONS

## Taking action

### **Green Recovery**

- Create a Green Recovery Fund to help address the issues of climate change and promote economic recovery

### **Low carbon transport system**

- Provide innovative low carbon transport solutions through implementation of Future Transport Zones
- Promote low carbon transport through joy of the Journey publicity campaign
- Build in-depth evidence base for options on transport schemes to deliver carbon neutrality by 2030

### **Low carbon buildings & places**

Work with SW Energy Hub & UA partners to promote & deliver Green Homes Grant LAD scheme

- Incorporate energy planning within new developments working with Wales & West & WPD into energy planning within 2 major development areas in the region
- Develop & implement a carbon assessment tool to help assess carbon impact of future transport and housing developments

### **Low carbon businesses**

- Build an understanding of the skills gaps in low carbon sector and potential growth areas for the region through Green Skills Commission and use the evidence base to work with learning providers to tailor their offer.
- Continue to offer more direct support to SMEs within the region to become carbon neutral through Green Business Grants

### **Renewable Energy**

- Develop a range of schemes to increase the amount of renewable energy within the region incl. Solar Together, RCEF

### **The Green Environment**

- Publish the Tree and Woodland Strategy.



# 2021 PRIORITIES & ACTIONS

## **Enabling structural changes**

Working towards addressing underlying or structural barriers within the organisation and across the region to achieving carbon neutrality ambitions

- Decision making processes - putting low carbon considerations at the heart of the combined authority decision making processes. Including, considering running carbon literacy training for key departments and developing carbon assessment l for decision making across the combined authority - with a particular focus on business & Skills and finance. framework
- Ensuring that key strategic documents prioritise low carbon issues incl. SDS and future transport plans

## **Working with Partners to shape the low carbon debate:**

Shaping regional and national debate, building reputation for green recovery and working with government for more powers/funding.

- UAs - work in partnership to deliver net zero ambitions, collaborate on projects that will deliver economy of scale or innovation in relation to our ambitions
- COP26 - work with key stakeholders to represent region as leader in green growth and innovation (TBC)
- SW Energy Hub - incl. implementation of Green Homes Grant

# CLIMATE EMERGENCY ACTION PLAN

KEY DATA AND REGIONAL  
BENCHMARKS

# LOW CARBON TRANSPORT

## CO<sub>2</sub> EMISSIONS

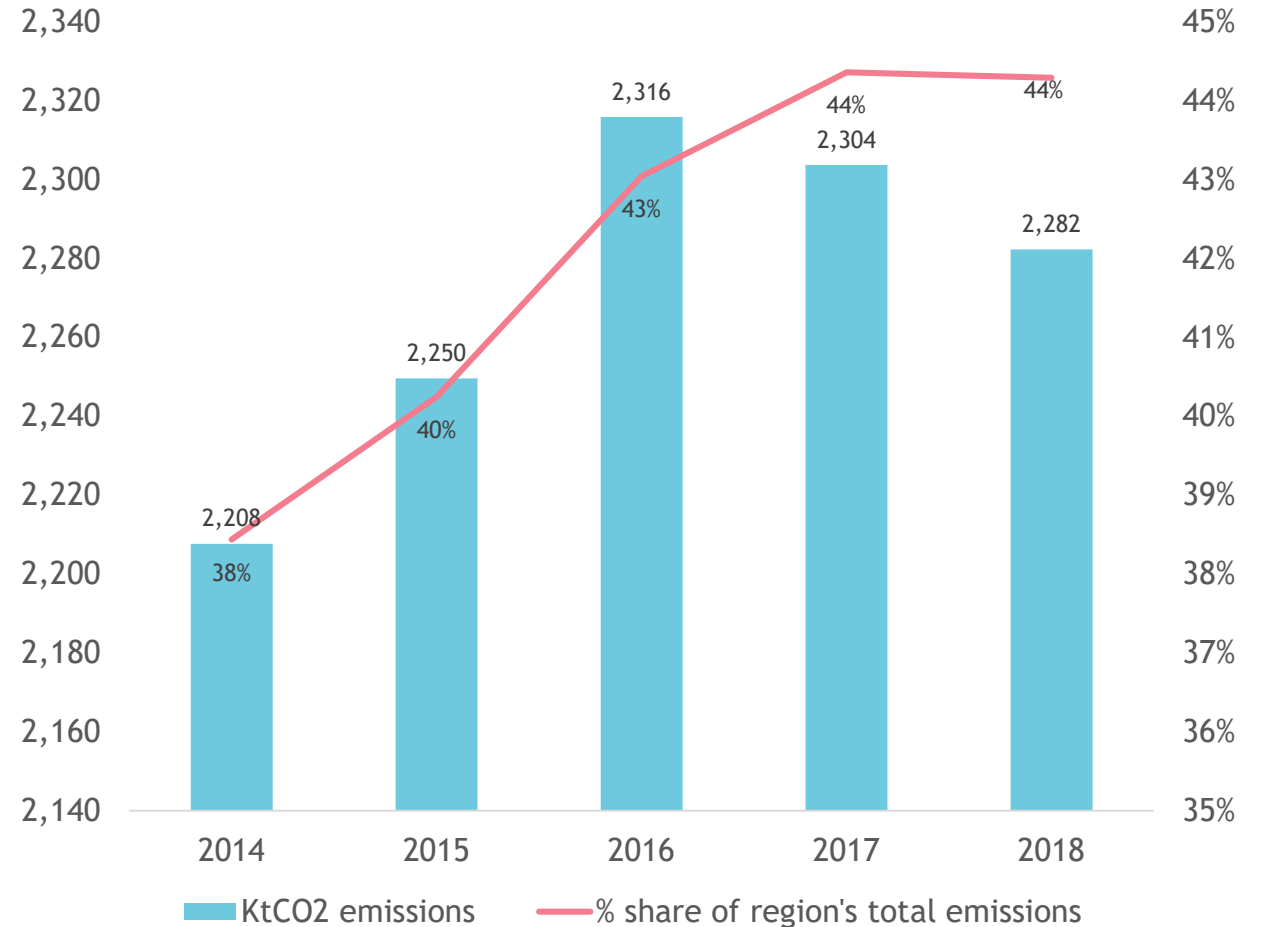
**2,882.3** KtCO<sub>2</sub> emitted by the transport sector in 2018.  
-0.9% since 2017.

CO<sub>2</sub> emissions from the transport sector increased between 2014 and 2016, but have decreased since then. The sector's share of total emissions\* increased between 2014 and 2017, and the share has remained flat since 2017.

*\*The three sectors that make up the total are industrial and commercial, domestic, and transport. See the other slides for the other two sectors.*

Source: [Department for Business, Energy and Industrial Strategy \(BEIS\)](#).

Transport CO<sub>2</sub> emissions, West of England LEP



# LOW CARBON TRANSPORT

## LOW EMISSIONS VEHICLES AND CHARGING INFRASTRUCTURE

**17,237** low emission vehicles licensed in the West of England LEP at the end of 2020 Q3. Ultra-low emissions vehicles (ULEVs) accounted for 8,763 of these vehicles.  
**+66.9% low emissions vehicles since the end of 2019 Q3.**

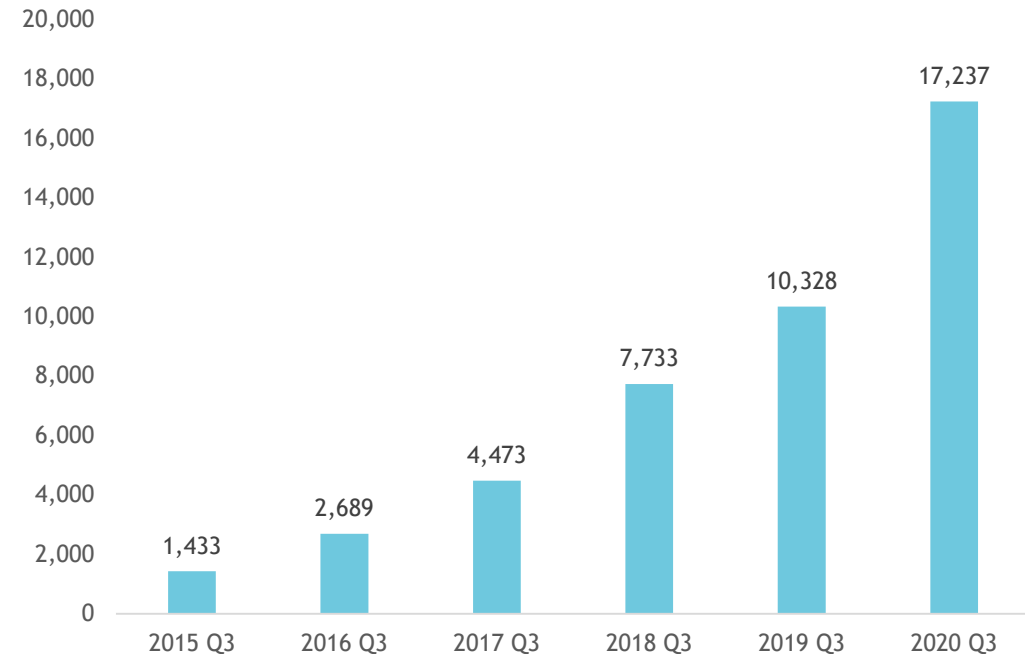
**323** public electric vehicle charging devices (all speeds) in the West of England LEP as of October 2020.  
**+12 since October 2019.**

In October 2020 there were 30 electric vehicle charging devices per 100,000 people in region. This is +2 per 100,000 compared to October 2019 (28). These figures compare to 22.4 and 29.2 for England in October 2019 and October 2020 respectively.

*Note: Low emissions vehicles includes plug-in cars, LGVs, quadricycles and ultra-low emissions vehicles (ULEVs).*

Source: Department for Transport- [Charging Device statistics](#) and [All Vehicles statistics](#).

Number of low emissions vehicles licensed in the West of England LEP.



The number of low emissions vehicles has increased approximately 12 fold since 2015 Q3.

Low emission vehicles accounted for 1.3% of all vehicles in the West of England LEP in 2020 Q3, +0.3% since 2019 Q3. This is in line with the figure for England (1.3%) in 2020 Q3.

# LOW CARBON TRANSPORT

## ACTIVE TRAVEL FOR NON-LEISURE

**10%** of people in the West of England LEP cycle at least once per week for travel in 2018/19.

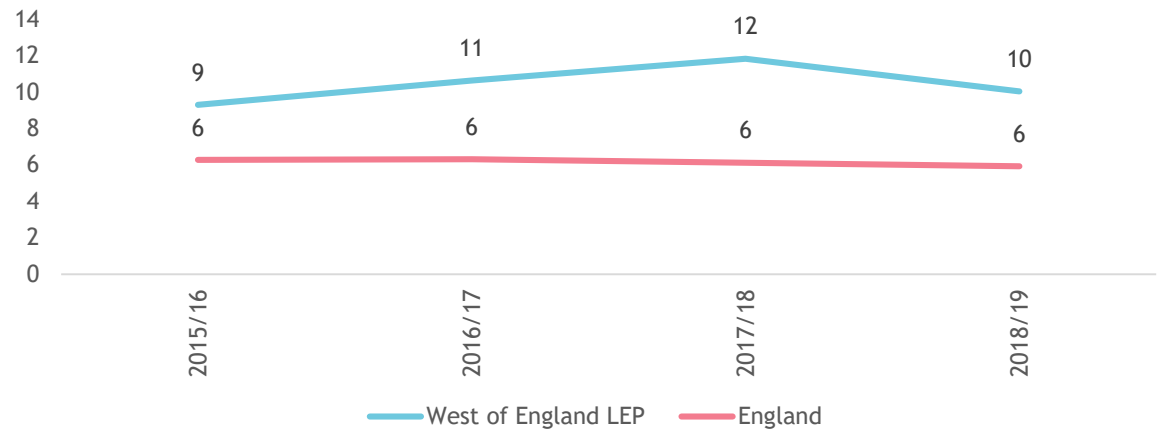
-2% since 2017/18.

**47%** of people in the West of England LEP walk at least once per week for travel in 2018/19.

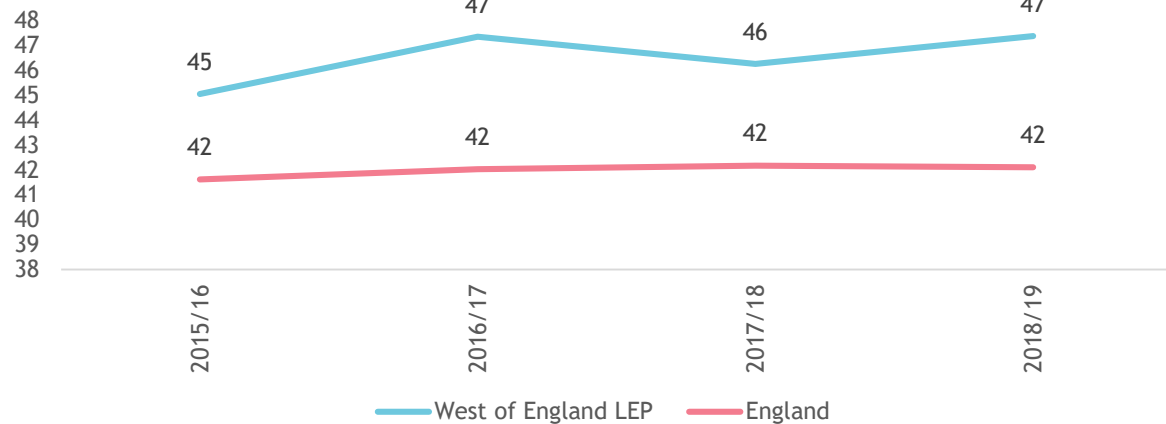
+1% since 2017/18.

For all years between 2015/16 and 2018/19 both percentages are above those for England. In 2018/19 the percentage for cycling was 4% above the percentage for England, and for walking it was 5% above.

% of population who cycle at least once per week for travel



% of population who walk at least once per week for travel



# LOW CARBON TRANSPORT

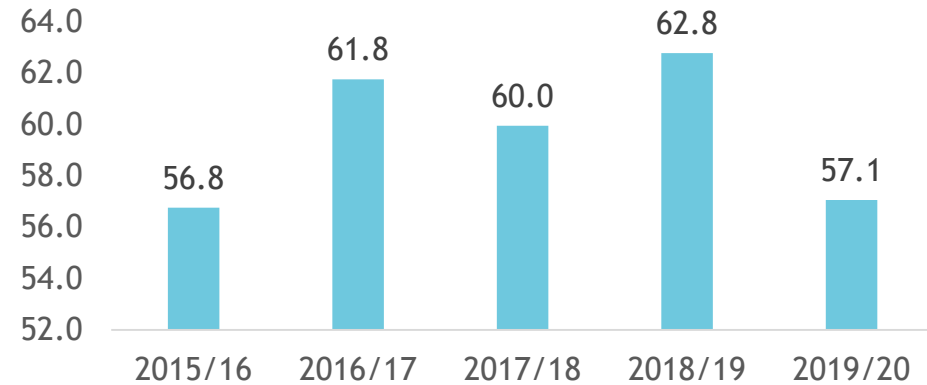
## PUBLIC TRANSPORT

**57.1** bus journeys per head of the West of England LEP population in 2019/20.  
-5.7 per head since 2018/19.

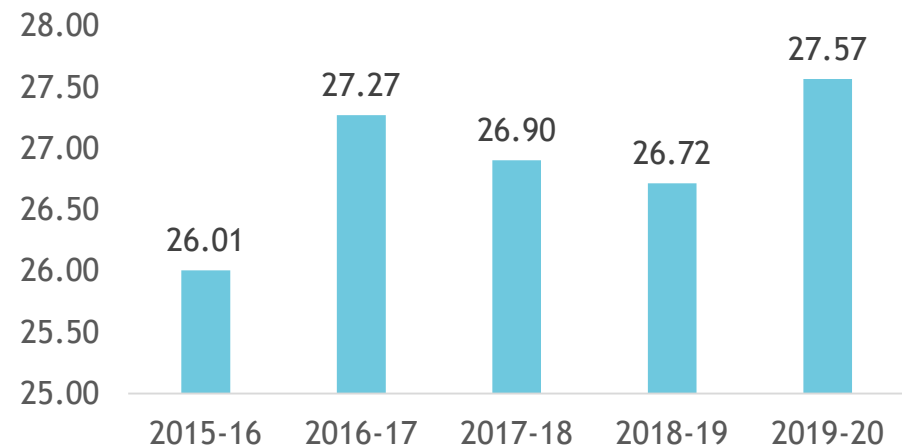
**27.57** million train passengers in the West of England LEP in 2019/20.  
+3.2% since 2018/19.

The bus journeys per head in 2019/20 was 15.2 per head lower than the figure for England (72.3 per head). However, within the region there was variation with a low of 24.4 per head (North Somerset) and a high of 87.0 per head (Bristol).

Bus journeys per head of the West of England LEP population



Train passenger entries, exits and interchanges for stations in the West of England LEP (millions of passengers)



# LOW CARBON TRANSPORT

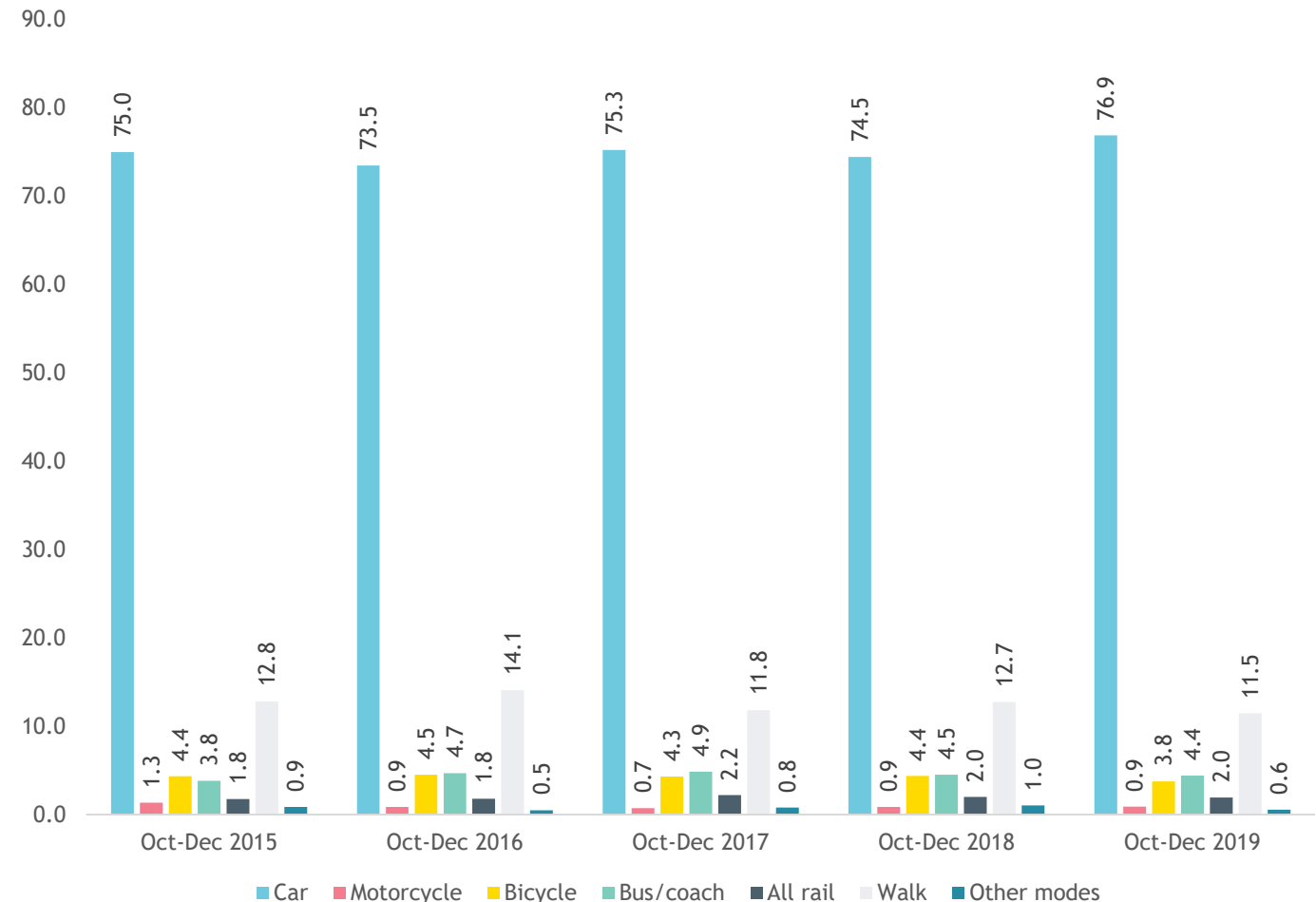
## ALL TRANSPORT MODES

**76.9%** of people resident in the South West of England usually travel to work by car in October- December 2019.

+2.4% compared to October- December 2019.

In October-December 2019, travel to work by car was the most popular followed by walking (11.5%), bus/coach (4.4%), bicycle (3.8%), rail (2.0%), motorcycle (0.9%), and other modes (0.6%).

Usual method of travel to work by people resident in the South West of England (%)



# LOW CARBON BUSINESS

## INDUSTRY AND COMMERCIAL SECTOR CO<sub>2</sub> EMISSIONS

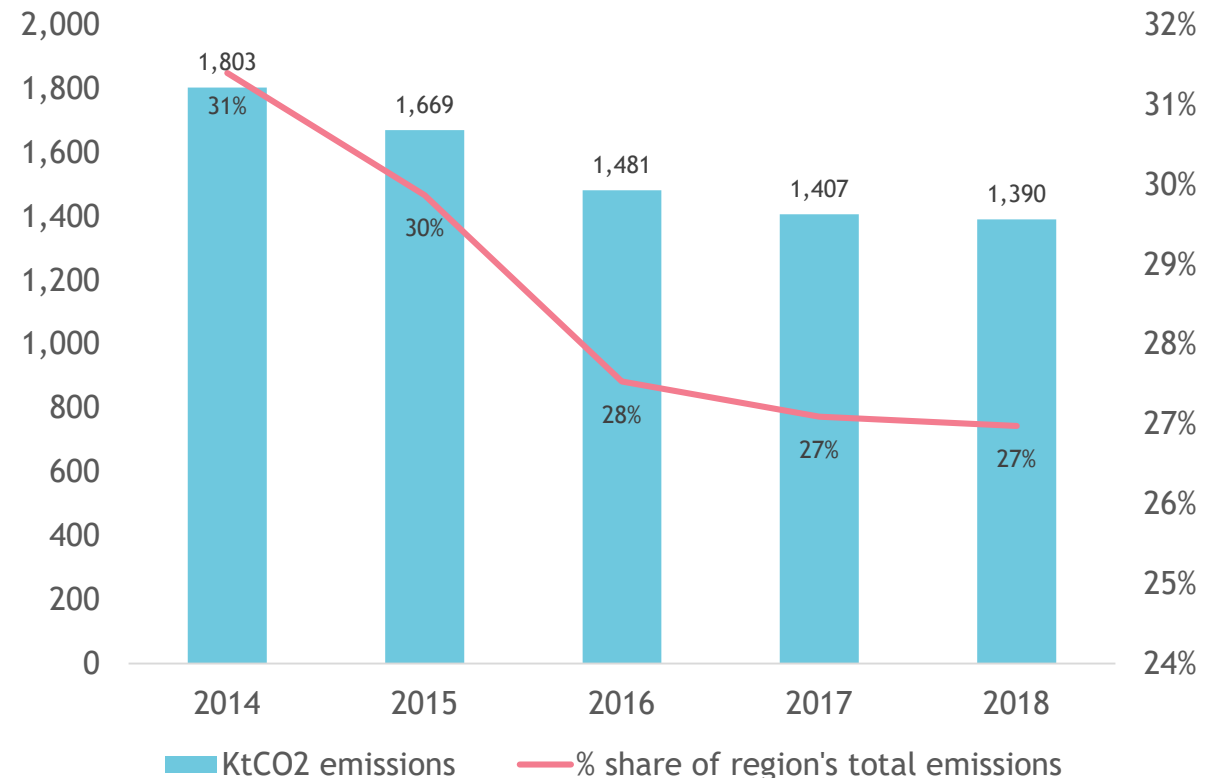
**1,390** KtCO<sub>2</sub> emitted by the industry and commercial sector in 2018.  
-1.2% since 2017.

CO<sub>2</sub> emissions from the industry and commercial sector have decreased in every year since 2014. The sector's share of total emissions has also decreased in all years between 2014 and 2018.

*\*The three sectors that make up the total are industrial and commercial, domestic, and transport. See the other slides for the other two sectors.*

Source: [Department for Business, Energy and Industrial Strategy \(BEIS\)](#).

Industry and Commercial CO<sub>2</sub> emissions, West of England LEP





# LOW CARBON BUSINESS

## GREEN JOBS

**3,495** green job advert postings in the West of England LEP in 2020.  
+7.9% since 2019.

In 2020, green job advert postings accounted for 2.5% of all job advert postings in the region. This compares to 1.7% for the whole of England. The region's green jobs location quotient is 1.47 for 2020, which shows that the region has a higher proportion of green jobs compared to the whole of England.

In 2020 the top ten employers of green job advert postings in the West of England LEP accounted for 435 of the 3,495 green job advert postings in the region.

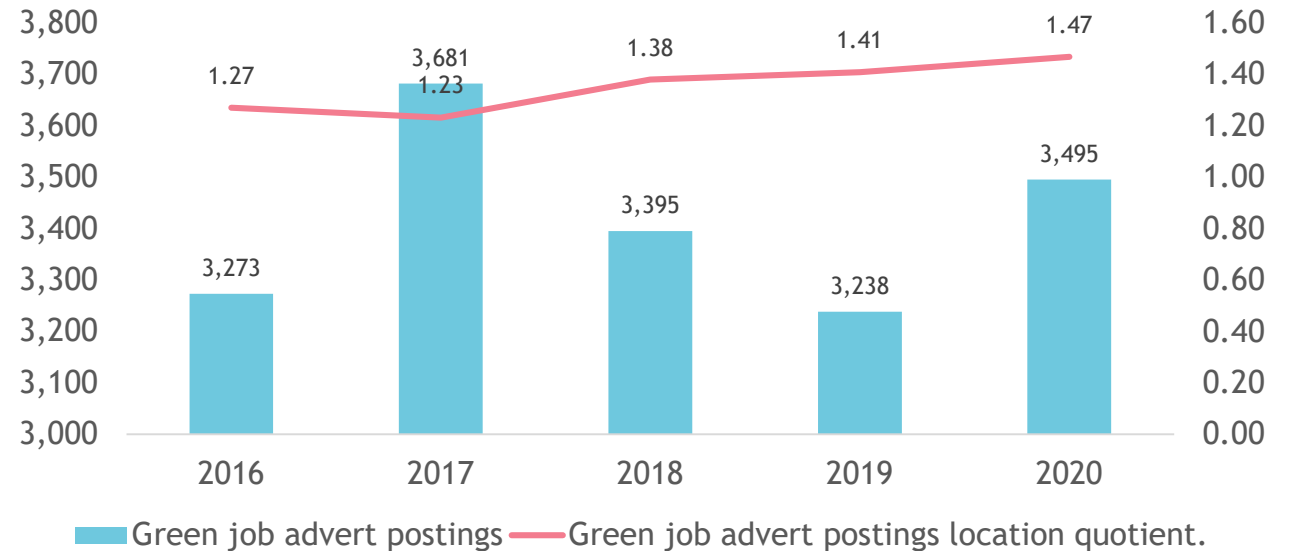
*Note: The green job definition is the one used by Burning Glass Labour Insights. The green jobs location quotient is calculated by dividing 'green job adverts in the West of England LEP as a % of all job adverts in the LEP' by 'green job adverts in England as a % of all green job adverts in England'.*

Source: [Burning Glass Labour Insights](#).

### Top ten employers of green job advert postings in 2020

- 1. EDF Energy (65).
- 2. AECOM (52).
- 3. Jacobs Limited (50).
- 4. University of Bath (44).
- 5. University of Bristol (40).
- 6. SNC Lavalin Inc (39).
- 7. OVO Energy (39).
- 8. Penguin Recongrad Consulting (37).
- 9. Wise Ltd (35).
- 10. National Health Service (34).

Green job advert postings in the West of England LEP

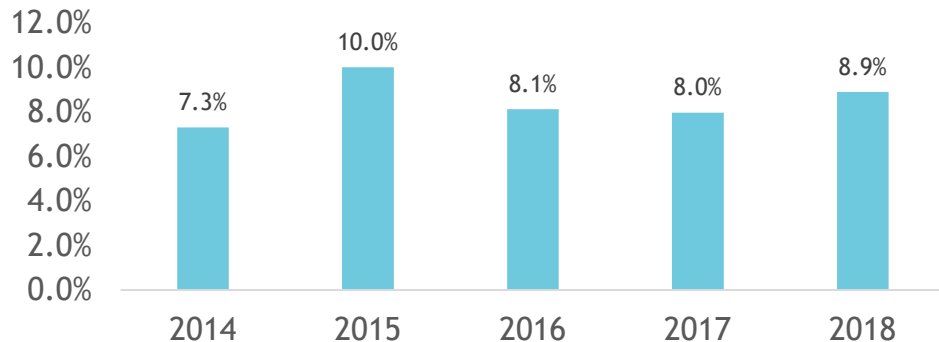


# RENEWABLE ENERGY

## ALL ENERGY

**8.9%** of energy consumption in the West of England LEP in 2018 was met from renewable sources.  
**+0.9%** since 2017.

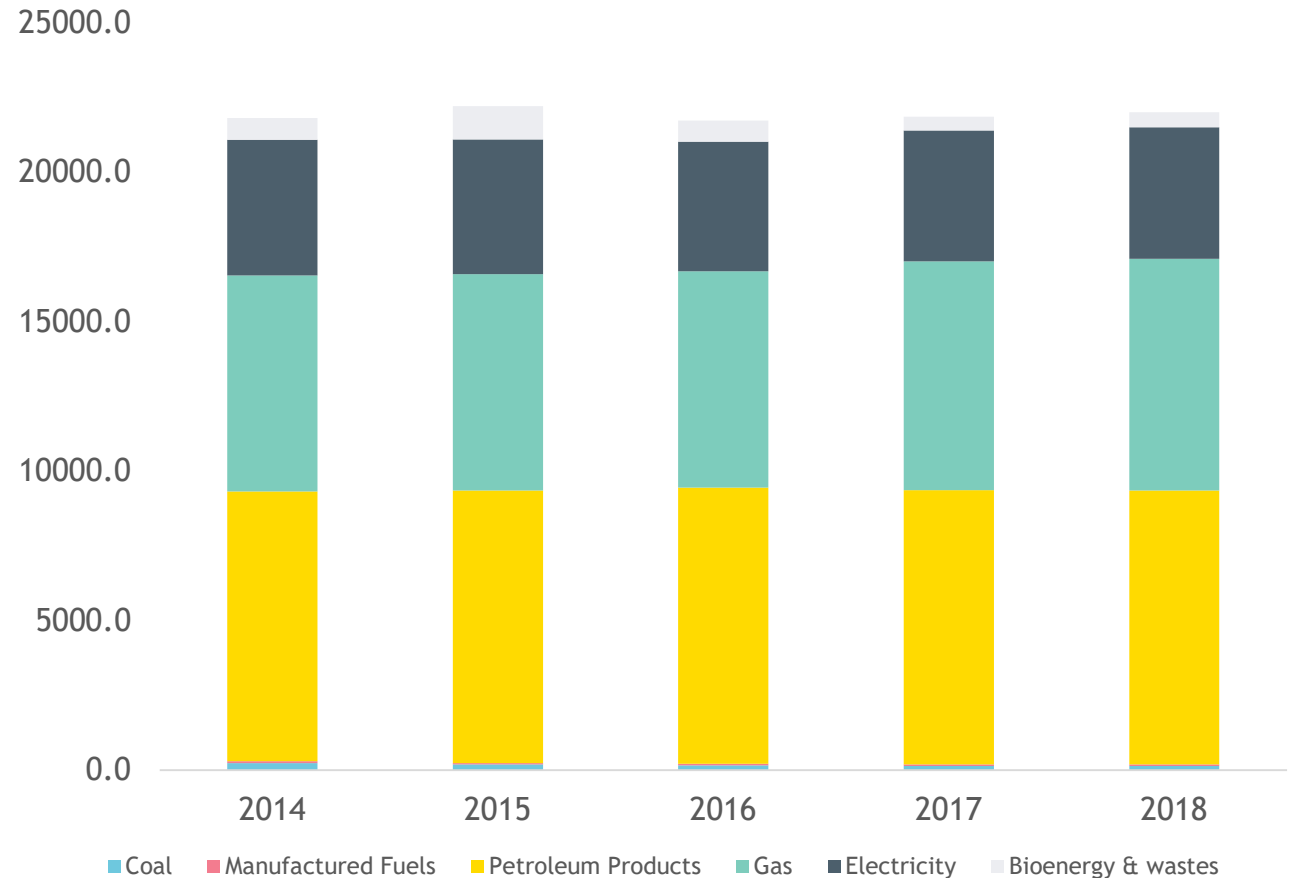
Share of the region's electricity consumption from renewable sources.



In 2018, 1,956.8 GWh energy consumption in the West of England LEP was met from renewable sources. This compares to 20,044.8 GWh for non-renewable sources. Compared to 2017 this is a 12.3% increase in renewables and 0.3% decrease in non-renewables.

Source: [BEIS sub-national energy statistics](#) and [BEIS renewable energy trends](#).

West of England LEP energy consumption by source (GWh)



Energy consumption has remained relatively static over time and the proportion of renewables has slowly increased due to the decarbonisation of the electricity grid. In 2014, 19.1% of grid electricity was generated from renewable sources, and in 2018 this figure was 33.1%.

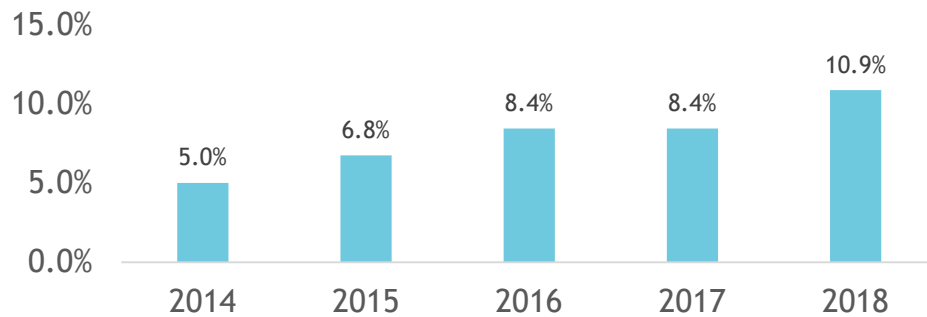
*Note: Bioenergy and wastes are renewable sources. Electricity is both renewable and non-renewable. In 2018 33.1% of national grid electricity was generated from renewable sources. All other sources of energy are non-renewable.*

# RENEWABLE ENERGY

## ELECTRICITY

**494,274** MWh of renewable electricity generated in the West of England LEP in 2019.  
+3.4% since 2018.

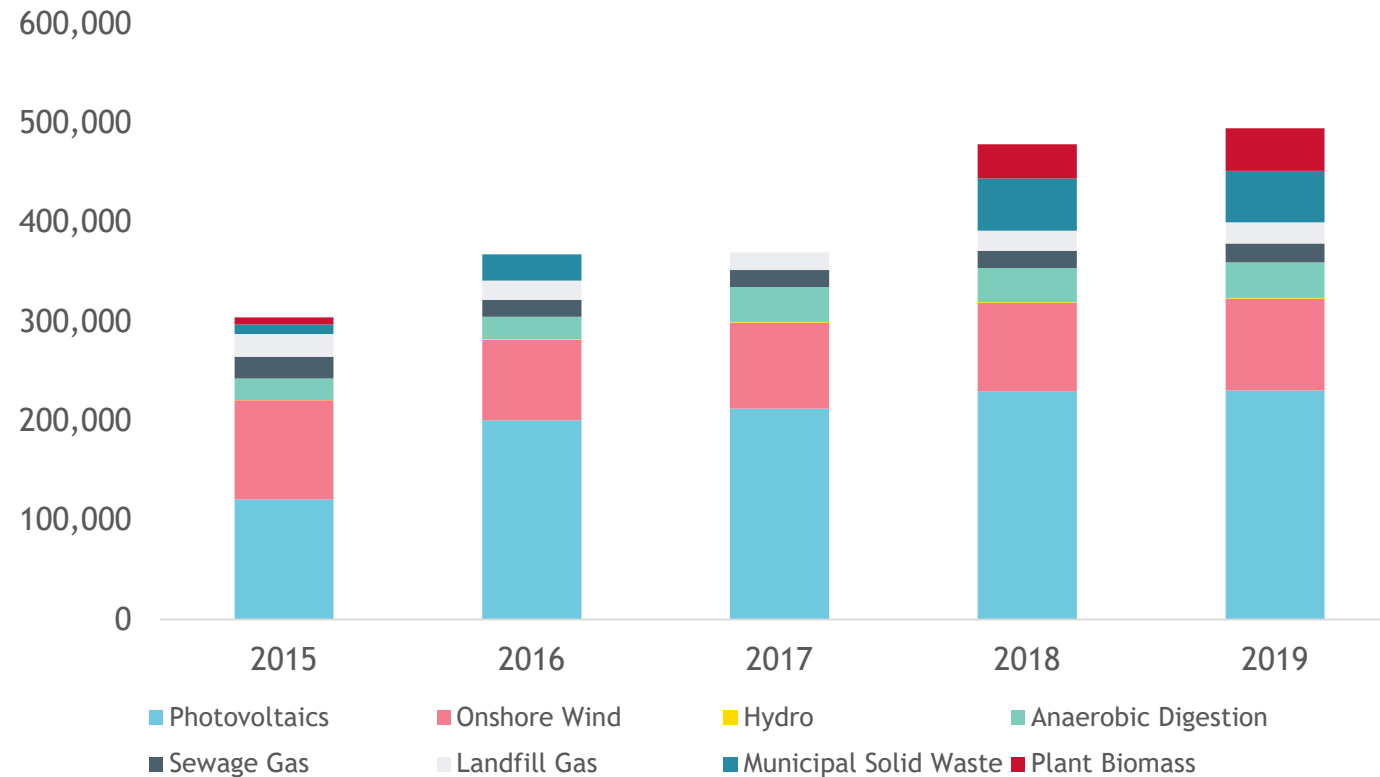
West of England LEP generated renewable electricity as a proportion of total LEP electricity consumption



The share of renewable electricity generated in the region as a proportion of total electricity consumption has increased in all years between 2014 and 2018. In 2018, the share was 10.9%. This was mainly due to increases in renewable energy generation.

Source: [BEIS sub-national statistics](#) and [BEIS regional renewable statistics](#).

Renewable electricity generation (MWh) in the West of England LEP by renewable source.



Renewable electricity generation within the region has increased in all years between 2015 and 2019. In 2019, photovoltaics (PV) accounted for 46.7% followed by onshore wind (18.7%), municipal solid waste (10.5%), plant biomass (8.7%), anaerobic digestion (7.2%), landfill gas (4.2%), sewage gas (3.9%), and hydro (0.1%).

# LOW CARBON BUILDINGS AND PLACES

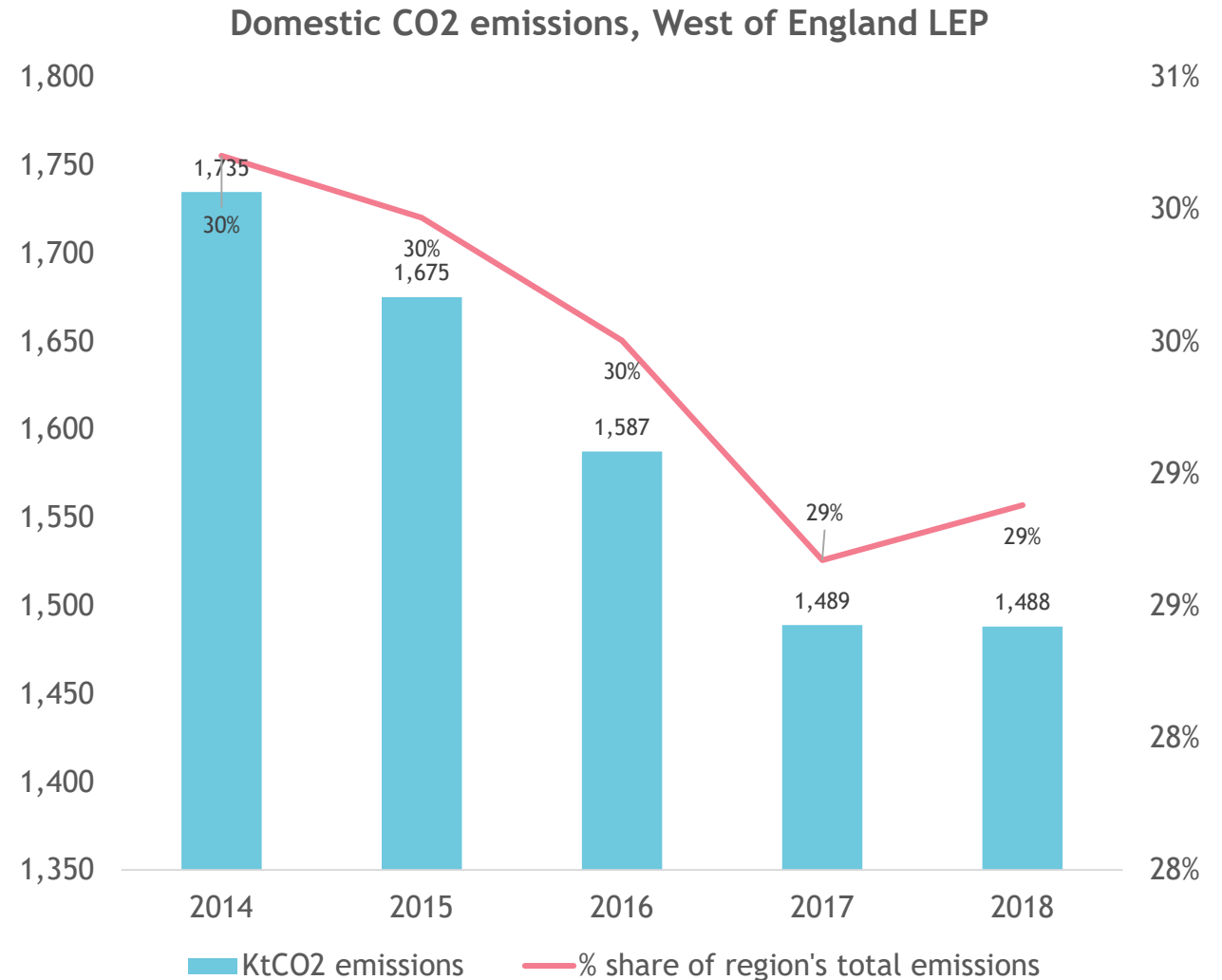
## DOMESTIC SECTOR CO2 EMISSIONS

**1,488.1** KtCO<sub>2</sub> emitted by the domestic sector in 2018.  
-1.2% since 2017.

CO<sub>2</sub> emissions from the domestic sector have decreased in every year since 2014. The sector's share of total emissions\* also decreased between 2014 and 2017. It remained at around 29% between 2017 and 2018.

*\*The three sectors that make up the total are industrial and commercial, domestic, and transport. See the other slides for the other two sectors.*

Source: [Department for Business, Energy and Industrial Strategy \(BEIS\)](#).



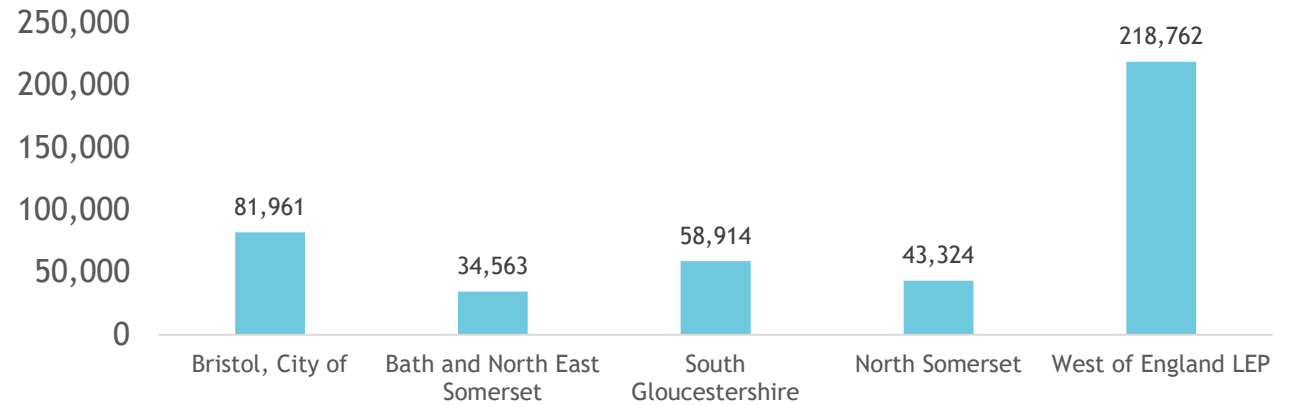
# LOW CARBON BUILDINGS AND PLACES

## ENERGY PERFORMANCE CERTIFICATES (EPC)

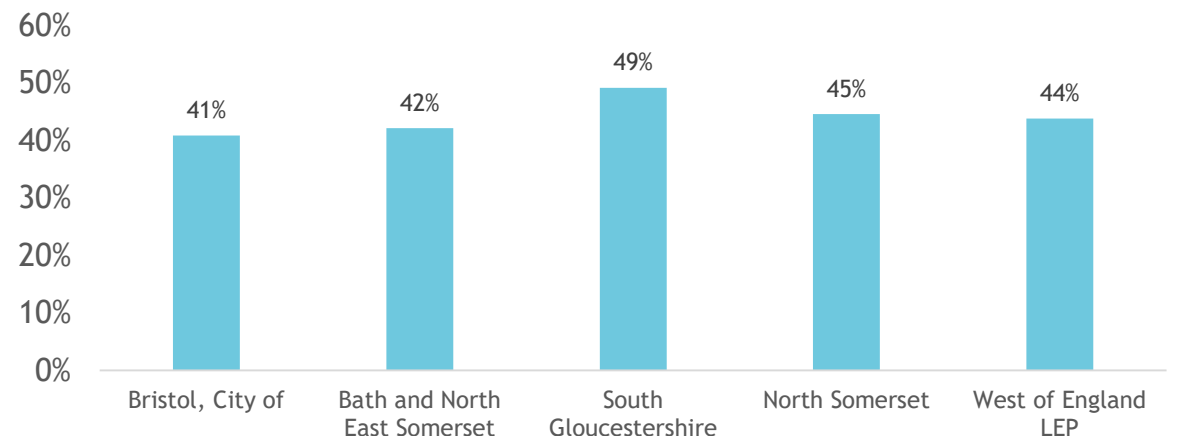
**218,762** dwellings in the West of England LEP are estimated to have an Energy Performance Certificate (EPC) rating of C or above\*:

**44%** of all dwellings in the region

Estimated number of dwellings with EPC rating C or above in the West of England LEP



Estimated number of dwellings with EPC rating C or above in the West of England LEP



*\*Estimates calculated by taking the percentage of dwellings given an EPC rating of C or above between Q3 2015 and Q2 2020, and then multiplying these percentage by all the dwellings in the region.*

Sources: [MHCLG dwellings stock tables](#) and [MHCLG EPC tables](#).

# LOW CARBON BUILDINGS AND PLACES

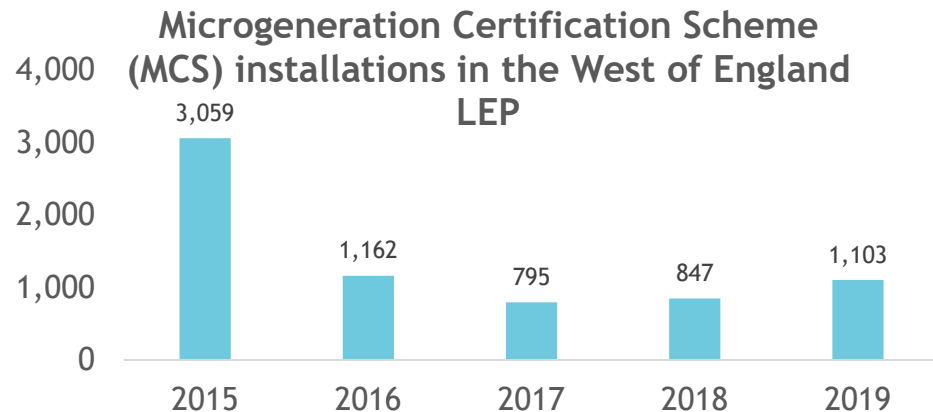
## ENERGY COMPANIES OBLIGATION (ECO) AND MICROGENERATION CERTIFICATION SCHEME (MCS)

**32,044** measures installed in the West of England LEP under the Energy Companies Obligation (ECO) up to the end of December 2020.

+8.4% since up to the end of December 2019.

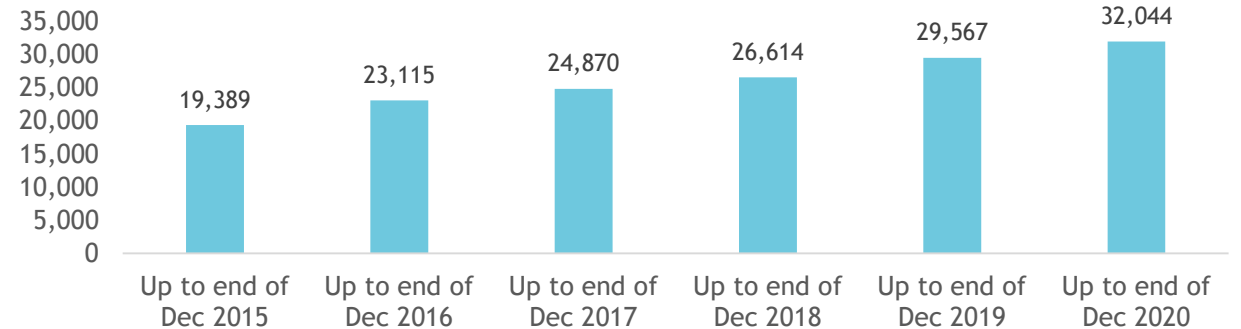
**1,103** measures installed in the West of England LEP under the Microgeneration Certification Scheme (MCS).

+30.2% since 2019.

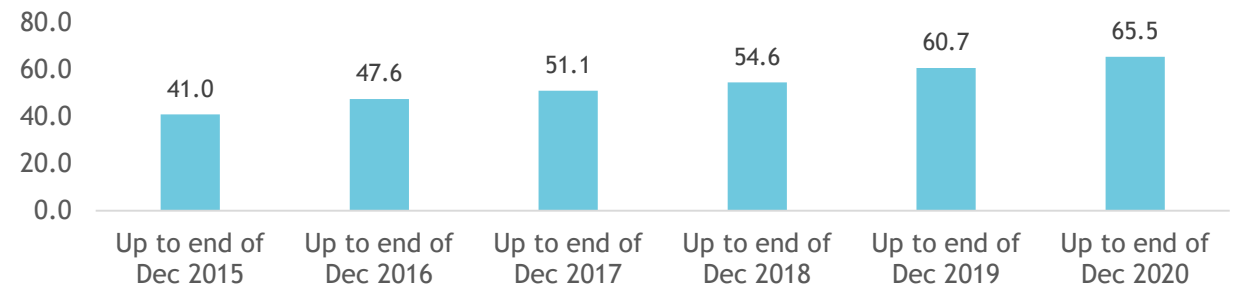


Source: [MCS](#) and [Department for Business, Energy and Industrial Strategy \(BEIS\)](#)

### ECO measures installed in the West of England LEP



### ECO measures per 1,000 households in the West of England LEP



The number of ECO measures per 1,000 households has increased in all years between 2015 and 2020. The 2020 figure of 65.5 compares to 108.0 for England.

*Note: The Energy Companies Obligation (ECO) is a government energy efficiency scheme in Great Britain to help reduce carbon emissions and tackle fuel poverty. The Microgeneration Certification Scheme (MCS) certifies low-carbon products and installations used to produce electricity and heat from renewable sources. MCS certifies the following technology types: Air Source Heat Pumps, Gas Absorption Heat Pumps, Solar Assisted Heat Pump, Wind, Biomass, Ground/Water source Heat Pumps, Solar PV, Exhaust Air Heat Pumps, Micro CHP, and Solar Thermal.*

# GREEN ENVIRONMENT

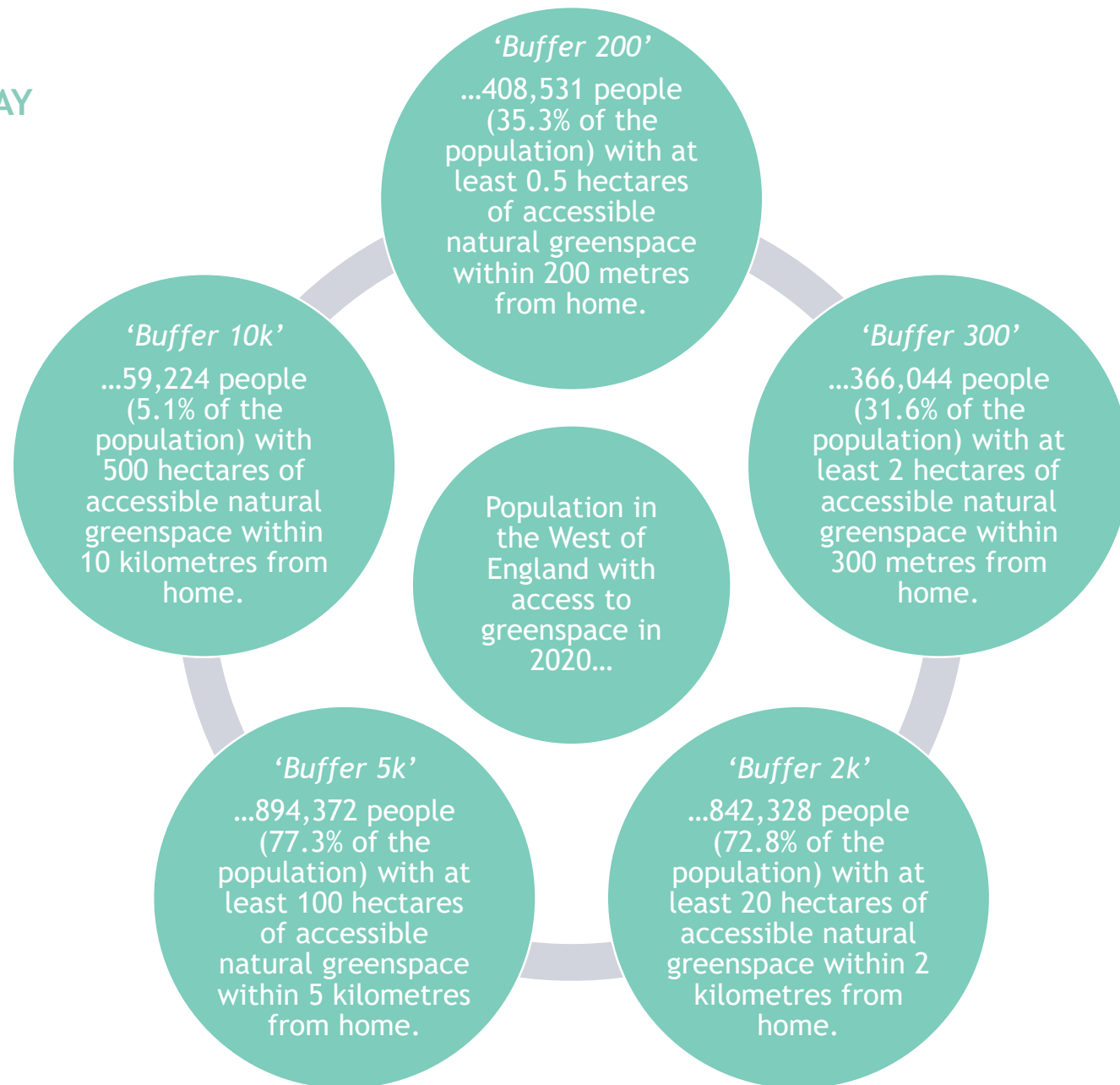
## GREENSPACE, WOODLAND AND PUBLIC RIGHTS OF WAY

**8,565** hectares of accessible green space in 2020.

**5.0** hectares of natural green space per person in 2020.

**9,763** hectares of existing woodland in 2020.

**3,194** kilometres of public rights of way access.



Source: Ordnance Survey Open Space, Natural England, and Public Rights of Way Network.

# GREEN ENVIRONMENT

## ACTIVE TRAVEL FOR LEISURE

**8%** of the West of England LEP population cycle at least once per week for leisure in 2018/19.

-1% since 2017/18.

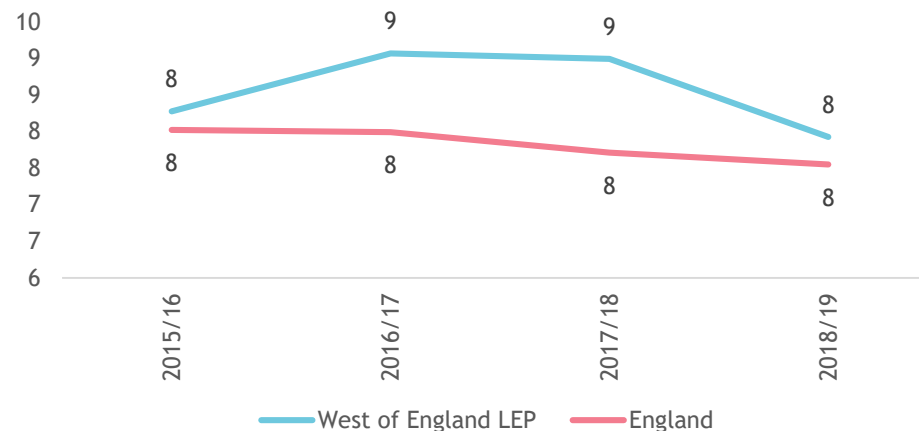
**52%** of the West of England LEP population walk at least once per week for leisure in 2018/19.

-2% since 2017/18.

For all years between 2015/16 and 2018/19 both percentages are above those for England. In 2018/19 the percentage for cycling was in line with the percentage for England, and for walking it was 1% above.

Source: [Department for Transport \(DfT\)](#).

% of population who cycle at least once per week for leisure



% of population who walk at least once per week for leisure

