



Contents

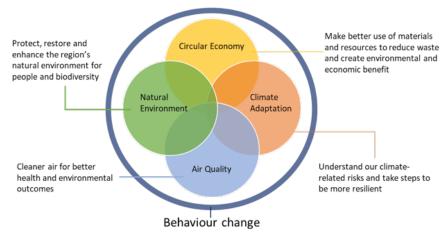
Introduction	5
WMCA environment behaviour change work to date	8
Designing behaviour change initiatives and the role of communications	9
Limitations to behaviour change	11
Behaviour change across the WMCA	12
Delivery plan	13
Cross cutting actions	15
Air quality	17
Climate adaptation	20
Natural environment	22
Circular economy	24
Monitoring impact	25
Plan Governance	25

Introduction

The West Midlands Combined Authority has an ambitious environment programme, which covers four thematic areas. Successful delivery will depend on several factors, including policy, regulation, standards and investment. It will also rely on taking people and communities on the journey with us. Delivering a better environment for the region depends on substantial social and behavioural changes, and that the right conditions are created for those changes to be both easy and possible.

The Environment Behaviour Change Plan will focus on the four areas of the environment programme, which works alongside WMCA's net zero agenda, to create a better environment and tackle climate change. Each programme theme has its own strategy or plan that provides the evidence to inform WMCA's priorities for delivery.

The Environment Programme supports the overall WMCA vision of "building a better connected, more prosperous, fairer, greener and healthier West Midlands"



Support and engage people and businesses on environmental issues in an inclusive way Circular Economy - The West Midlands, mirroring the UK more widely, is overly reliant on a 'take, make, waste approach' to the things that are used. Work done to create the **Circular Economy Routemap** has shown that changing behaviours to focus more on fixing and sharing to keep items in use for longer, could generate up to £2 billion pounds a year in added value for residents in the West Midlands. The Circular Economy Routemap outlines how this change can be supported through a combination of policy and regulatory changes to encourage reuse, and community-based initiatives such as Libraries of Things facilities and repair cafes to provide the infrastructure needed to drive behaviour change.

National policy example: WRAP has identified that 45% of UK emissions arise from the products we use and how we use them – behavioural change is a vital part of reaching net zero. In January 2022, they began working with a social enterprise, Behaviour Change, to accelerate work on waste reduction.

Climate Adaptation – As the climate continues to change, the West Midlands is projected to experience changing weather patterns including, warmer, wetter winters, hotter, drier summers and more extreme weather events. The WMCA's climate adaptation workstream has been established to respond to the likely impacts that climate change will have on the region. In 2022 a Summary of Climate Impacts was published, to highlight the risks that climate change will pose to our residents, infrastructure and natural environment. Adaptation communications and messaging continues to be developed with partners across the region.

The WMCA has produced an organisation-wide Adaptation Plan to kick start the adaptation approach by respective teams.

National policy example: the UK's Climate Change Committee state that the UK public are concerned about climate change and there is a widespread desire for action to be taken. In spring 2023, 82% of people said they were at least fairly concerned about climate change and 85% agreed that if everyone does their bit, we can reduce the effects of climate change. There have already been positive trends such as shifts in diets, purchasing behaviours and the growing uptake of electric vehicles. However, many people do not know what actions are the most effective in reducing emissions and environmental impact or appreciate the scale of change needed to reach net zero or adapt to climate change.

Air Quality – In the West Midlands, it is estimated annually, that long-term exposure to air pollution causes up to 2300 early deaths(source). The Air Quality Framework sets out 145 potential 'options' that could be enacted to address poor air quality and inequality. As these vary in terms of their likely impact, timescales for implementation and cost, a Framework Implementation Plan has been developed. Sitting alongside the main Framework, the Plan provides focus for work packages and measures to be prioritised in the next two years, including behavioural change.

In 2023 we were awarded a Defra air quality grant to deliver behaviour change and monitoring projects. We will deliver an air quality behaviour change campaign within each of the seven constituent authorities in the region to improve knowledge and awareness of air pollution and implement interventions to reduce exposure. Alongside this a regional public facing air quality website is being developed and an air quality literacy training course for councillors and local authority officers in the region. We are also installing 90 air quality sensors to accurately measure air pollution levels.

National policy example: Chris Witty, in launching the Chief Medical Officer's Annual Report (2022) stated 'Air pollution affects us all' with behaviour change required alongside interventions to remove or reduce air pollution indoors by removing barriers and finding motivators to enable individuals and organisations improvement indoor air quality.

Natural Environment - The Natural Environment Plan set out our vision for protecting, restoring, and enhancing our region's natural environment. Our Community Green Grants programme funded 23 projects to improve access and create greenspaces. We have been appointed as the Responsible Authority for a Local Nature Recovery Strategy (LNRS), which is an evidence-driven spatial plan for nature recovery and natural environment outcomes for the region. Through the West Midlands Forest Partnership, we are working to improve tree cover, by commissioning an i-tree survey to assess regional tree stock and a tree nursery for growing trees locally.

We have also secured £1m from DEFRA for the Local Investment in Natural Capital (LINC) project to develop an approach to unlock private investment.

National policy example: Natural England research found that 86% of adults believe that protecting the environment was important or very important to them and that by providing people with the opportunity to engage with nature can encourage pro-environmental behaviours.

House of Lords Environment and Climate Change Committee, 2022.

"In our hands: behaviour change for climate and environmental goals".

Chief Medical Officer, 2022. "Chief Medical Officer's Annual Report 2022 Air Pollution".

Natural England, 2022. "Written evidence, Natural England".

Our approach to behaviour change

Solutions to climate change lie within individual actions and choices, shaped by motivation, knowledge, and capabilities. These are influenced by economic, social and material 'choice environments' that can make behaviour change easier, normal and affordable. The Centre for Climate Change and Social Transformations found that individual factors such as knowledge tend to be less influential in changing behaviour than wider social or practical factors.

Our approach to environment behaviour change projects will be influenced by designing not only 'downstream' interventions which target individual's decision-making or motivation, but also designing and implementing 'midstream' interventions to make a behaviour easier, more attractive or the default choice and 'upstream' interventions, which seek to shift norms, within the West Midlands.

This is why the WMCA and local authorities in the region are leading on environmental behaviour change; to support people and businesses in the region to make better choices for themselves and for the environment. For this plan, we refer to behaviour change as interventions that make it easier for people and businesses to make sustainable behavioural changes.

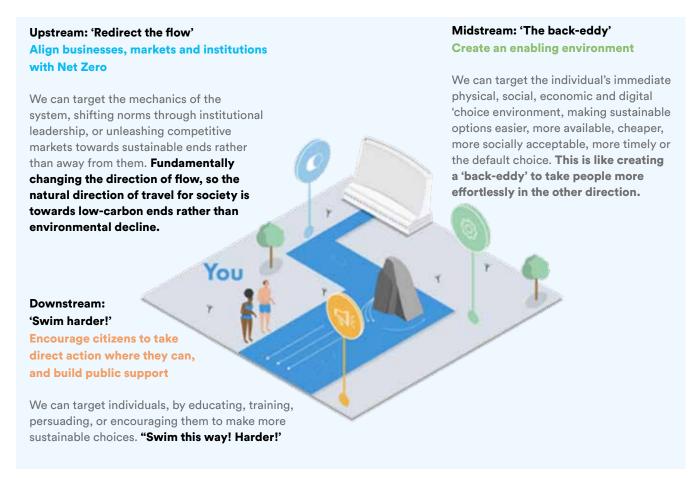


Figure 1: Upstream-downstream model of behaviour

The Behavioural Insights Teams, 2023. "How to build a Net Zero society" How to build a Net Zero society | The Behavioural Insights Team (bi.team)

WMCA environment behaviour change work to date

The environment behaviour change programme has developed alongside the environment programme and involves both citizen engagement to shape policy and share information, as well as more evidence-based approaches to inform our approach, through surveys and campaign planning. Ensuring delivery of our programme is fair and the co-benefits are well understood and felt by everyone within the community is critical. Engaging the public increases the mandate to act and improves the effectiveness of policies and interventions.

In 2021 WMCA commissioned The Behavioural Insights Team (BIT) to develop WMCA's understanding of how it can most effectively communicate its ambitions and positively influence people's behaviour to achieve the region's net zero carbon goals by 2041. BIT completed an evidence review and trialled key messaging and visuals with 1,989 adults in the region. People were personally more inclined to do relatively low-impact environmental actions (e.g. recycle more rather than eat less meat), but they supported the WMCA focusing their efforts on delivering high-impact environmental policies (e.g. energy efficient housing).

From this research, the WMCA adopted "West Midlands Greener Together" as the tagline for its energy and environment work as these performed best with the public.

Greener Together Citizens' Panel

In March 2023, working with Involve UK, we launched the Greener Together Citizens' Panel, which brings together 30 residents from across the region to deliberate and provide actions for the WMCA to take. The Panel focuses on key areas within our environment and net zero programmes such as how can we improve the quality of our air; how to improve the energy efficiency of our homes; or thinking about how we

protect nature and communities from the effects of climate change. The Panel is initially running for 2 years and was selected through the process of sortition to ensure the members are broadly representative of the West Midlands. The outcomes from the Panel are being used to inform our next steps in relation to delivery of a range of topics. These are still open for influence and collaboration with all stakeholders, including West Midlands communities.

Greener Together Quarterly Forum

The West Midlands Greener Together Forum was formed in March 2022 and brings together people and organisations from across our region, committed to creating a sustainable and net zero carbon future. The Forum aims to help share knowledge and collaborate in support of the environment. As the membership to the Forum is open, any member of the public can join and have their voice heard. The Forum meets four times a year, with topics chosen by Forum members and the Forum's Advisory Board.

Each meeting focuses on a different topic, where topic experts are invited to present, with breakout rooms and plenary discussions allowing citizens to ask questions, network with others and they can input into.

Environment Attitude Tracking Survey

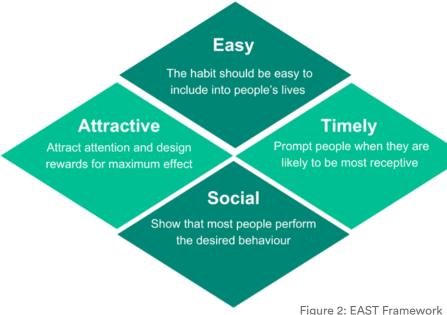
In 2023 we commissioned a longitudinal environmental attitudes survey to understand the public's perceptions, barriers and motivations for changing their behaviour for pro-environmental reasons. Over the next 3-years, 2000 people will be surveyed each year with the insights shaping our environment work programmes to ensure they are informed by evidence.

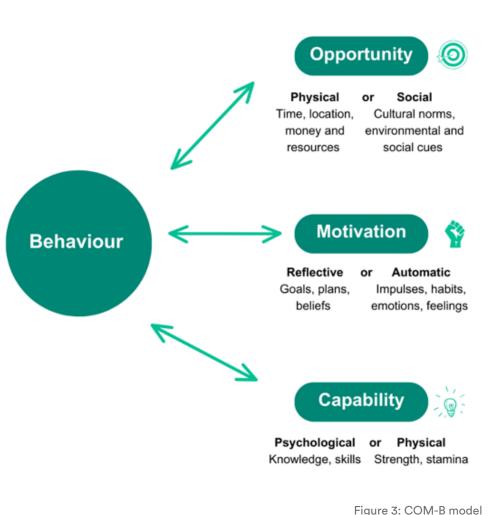
Designing behaviour change initiatives and the role of communications

Behaviour Change

Behaviour change models can be used to support the delivery of initiatives. Two models that have been used by WMCA include COM-B and EAST.

- 1. The COM-B model is widely used to identify what needs to change in order for a behaviour change intervention to be effective. It identifies three factors that need to be present for any behaviour to occur: capability, opportunity and motivation. These factors interact over time so that behaviour can be seen as part of a dynamic system with positive and negative feedback loops
- 2. EAST this framework is built around simple, but pragmatic approach to designing easy, attractive, social and timely initiatives or policies.





Communications

Effective communications are a foundation for interventions to shift behaviours but are not enough alone. The WMCA's previous work with the Behavioural Insights Team (mostly on net zero), made the following principal recommendations, to sit alongside wider behaviour frameworks:

- Offer simple explanations of net zero using graphics illustrations
 that explain the concept of balance between emission put into the
 atmosphere and those taken out. Emphasise the actions people can
 do to reduce the emissions they put into the atmosphere
 (e.g. use public transport over single occupancy cars) and action
 to take emissions out of the atmosphere (e.g. tree planting).
- 2. Develop 'multi-pronged' communications and interventions to address multiple common barriers recognising that there are unique behavioural barriers for different environmental behaviours.
- 3. Capitalise on people's motivation to support net zero targets and be explicit in our communications about how we are helping the public to overcome barriers to enable their support.
- 4. Ensure the public is aware of progress and achievements by the WMCA and partners.
- 5. Outline how the public can contribute to the success of these policies.
- 6. Communicate what WMCA is doing in relation to the high impact priorities

The overall recommendation was to keep the message simple. Within this research, the simple messaging saw the highest levels of intent to do pro-environmental behaviours and the highest support for the WMCA's net zero policies over public health and economic message framing.

Segmentation

To deliver this plan requires not only in-depth behaviour change engagement, but also broader communications to reach wider audiences. To engage with audiences effectively, the type of communication and methods of delivery need to be tailored.

Segmentation involves identifying, within an audience or target population, subgroups that share similar profiles. After segmenting an audience, messages can be targeted based on their unique characteristics. Transport for West Midlands have developed 8 segments of the region's population, which have been used to understand the travel behaviours of all travellers for all journeys, and used to gain a deeper understanding of individuals needs for a specific journey to help develop innovative travel solutions.

We will look to either use existing segmentation tools or create new environment-focused segmentation for the WMCA's population.

Limitations to behaviour change

We should not see behaviour change in a policy vacuum; many initiatives cannot be undertaken without system and policy changes. Whilst people and businesses make decisions every day, those choices are influenced by a "choice environment". That environment determines which options are most advantageous to individuals, such as what is the most convenient, offers value for money and driven by societal norms. Research by the Behavioural Insights Team found that 88% of the UK public would like to make more sustainable choices in their life if they could, stating that it's too hard to make these choices because of high costs, inconvenience, and limited knowledge as barriers. Other external factors such as market economics, weak environmental regulations, cultural norms, and poor environmental leadership, play into the design of the choice environment.

People have agency to make their own choices based on their beliefs, values, and capabilities, making sustainable choices harder when confronted with all these external factors. Therefore, whilst individuals may have limited ability to shape the choice environment, for instance where and how developers build their homes, they can have influence through shaping public policy, which is why creating an inclusive economy is a key fundamental of the Inclusive Growth programme. This plan also has a strong focus on enabling deliberative democracy through citizen engagement for citizens to have the power to fully participate in our work.

Behaviour change across the WMCA

Delivering behaviour change outcomes cuts across other areas of the WMCA's work. Two other thematic areas leading work that links well into the environment behaviour change work programme are transport (led by Transport for West Midlands – TfWM) and energy and net zero (led by Energy Capital). The delivery of this Environment Behaviour Change Plan will work with these other areas where appropriate. A summary of their work is provided below.

Transport

Achieving behaviour change and delivering against the Local Transport Plan objectives will require a range of policies and actions. To help do this TfWM is undertaking a number of key actions including:

- Using a Traveller Segmentation Tool to help gain a deep understanding of travel behaviour for all travellers for all journeys. The segmentation tool is helping us to understanding the travel behaviours and lifestyles of our customers. The tool can support with creating more targeted policies and measures and supporting comms.
- 2. Establishing the Influencing Transport Lab (ITL) sponsored by the Department for Transport. This will be an expert research unit that will work with industry and academia to facilitate and action collaboration in the behaviour change field, allowing the sector to make faster progress towards a transport ecosystem that is fair and sustainable and meets the needs of travellers. Its purpose is to make behaviour change in transport possible by: developing intelligence and research programmes; bringing together insights from stakeholders; and, disseminating findings. More information can be found here: https://www.tfwm.org.uk/who-we-are/what-we-do/influencing-transport-lab/

3. Developing **pilots and trials** for a range of future transport innovations – including Mobility Credits, Local Transport Hubs, new mobility solutions such as e-scooters, Demand Responsive Transport and Mobility as a Service.

Energy and Net Zero

Our Net Zero strategy, #WM2041, aims to achieve net zero emissions by the year 2041. Alongside this is the Regional Energy Strategy, which sets a vision for energy across the region by 2030 (more information can be found here: https://www.wmca.org.uk/documents/environment-energy/wmca-regional-energy-strategy/)

A key part of the work on net zero is retrofit of domestic homes. The SMART Hub (Sustainable Market for Affordable Retrofit Technologies) has been established to build capacity and expertise across our local authorities and housing association partners in the West Midlands, to attract funding to deliver retrofit and fuel poverty alleviation programmes. The Hub seeks to undertake market development activities to lay the foundations for long term growth in the market for home retrofit.

Work on retrofit is a key area where we will need to take people on a journey of understanding and action, especially where homeowners will need to fund initiatives themselves. In response to this challenge, the SMART Hub is pioneering neighbourhood-based approaches to achieving net zero; the Net Zero Neighbourhood programme (https://energy-capital-tfwm.hub.arcgis.com/pages/net-zero-neighbourhoods).

Delivery plan

The remainder of this Plan indicates the actions that we will deliver against environment programme priorities. The actions are not exhaustive, and this Plan will be reviewed and updated annually in order that it responds to changing policy, funding and environmental priorities. It is structured into the following sections:

- 1. Cross-cutting activity that supports all regional stakeholders in taking and delivering effective climate and environmental action.
- 2. Air quality, including how business and residents can take action to improve air quality and reduce exposure.
- 3. Climate adaption and improving resilience of people and businesses to the impacts of climate change.
- 4. Natural environment and how everyone can support work on the improvement to biodiversity in the West Midlands.
- 5. Circular economy and supporting communities and businesses to reduce waste and adopt reuse, repurpose and refuse principles

For each of these priority areas, we have identified:

- Significant communication opportunities; these are moments in time
 where we can initiate more significant campaigns to a wide audience
 in the region. This remains important as a means of sustaining
 interest and momentum in environmental issues and impacts of
 climate change.
- Specific behaviour change solutions to tackle some of the most pressing challenges in the thematic areas identified above, with:

- o The potential role of the WMCA and whether we lead, enable or convene stakeholders for delivering a particular action.
- o The key stakeholder involved in delivery (this is not an exhaustive list)
- o How we will measure successful delivery of the outcome
- o Who the outcome is targeting
- o How the initiative will be funded or if funding has already been secured
- o An indicative timescale for delivery
- o And the contribution to delivery of the region's inclusive growth framework (see below).

Inclusive growth is embedded into all that we do at the WMCA and the actions within the Environment Behaviour Change Plan are striving to achieve inclusive growth for the region. This is defined, by the WMCA, in the following way:

"A more deliberate and socially purposeful model of economic growth, measured not only by how fast or aggressive it is; but also, by how well it is created and shared across the whole population and place, and by the social and environmental outcomes it realises for our people."

There are eight key fundamentals to our Inclusive Growth Framework which ensure that people, places, and businesses are at the heart of how we grow and develop in the region in a sustainable way.

Equality

Reduced employment inequalities so that people have the opportunity to thrive and flourish regardless of their protected characteristics and backgrounds.

Behaviour Change Actions

- Create and maintain accessible greenspace within areas of multiple deprivation
- Ensure all communities are represented in citizen engagement projects
- Reducing climate and air quality impacts on vulnerable groups

Inclusive Growth **Framework**

Climate Resilience

Carbon emissions decoupled from economic growth and reduced to net zero by 2041.

Behaviour Change Actions

- Improve citizen and business understanding of climate adaptation
- Interventions to improve energy efficiency of businesses and homes
- Reduce consumption of virgin materials
- Improve understanding of protecting the natural environment
- Create and improve greenspaces to attract more users

Health and Wellbeing

Avoidable differences in health outcomes are reduced so that everyone can live longer, healthier, and happier lives.

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Behaviour Change Actions

- Interventions to improve the regions air quality
- Provide opportunities for citizens to to engage with greenspaces
- · Provide and encourage active travel
- Increase tree planting

Inclusive Economy

People experience an increase in their household incomes and a better standard of living.

Behaviour Change Actions

- Multiple transport options available that are affordable and connect to places of work
- · Community share hubs and repair cafes

Education and Learning

Improved levels of skills for all to flourish and realise their potential.

Behaviour Change Actions

- Provide retrofit skills formal learning opportunities
- Provide education opportunities on climate change and net zero for businesses and citizens

Power and Participation

People have the power and can fully participate in influencing and exercising agency in the things that matter to them.

Behaviour Change Actions

• Citizens' are meaningfully and consistently engaged with decision making within the environment, energy and transport work

Connected Communities

People live in connected communities which enable everyone to interact with the world around them, both physically and digitally.

Behaviour Change Actions

- Encouraging individual action to travel sustainably through active travel and public transport
- Providing travel incentives such as concessionary fares

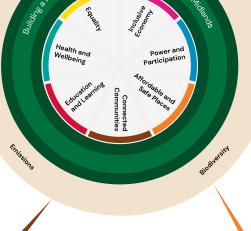
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Affordable and Safe Spaces

Designing out homelessness in the West Midlands through prevention by design:ensuring a supply of affordable homes, tackling welfare related poverty, goodemployment, information, integrated prevention, advice and guidance.

Behaviour Change Actions

- Through retrofit programmes fuel poverty is reduced and people live in warm, comfortable homes
- Greenspaces are accessible for the community





Cross cutting actions

Environment Programme outcome: For residents, communities, and businesses to take action to create a greener, healthier, more resilient region.

Behaviour change outcome: For businesses, communities, and residents to improve their knowledge and understanding of the environment and take practical steps to reduce their impact as well as steps to improve it.

Significant comms opportunities:

- Carbon Literacy Action Day
- World Environment Day

To incorporate all areas of the behaviour change plan into a single project, the main cross cutting project will be to develop a network of community organisations, to empower environment champions that can work with communities and people in the areas of the most pressing environmental issues. The network will foster productive relationships between the private, public, academic and community sectors.

Problem	Solutions	WMCA role (lead / enable / convene)	Stakeholders	Measurement	Demographic segmentation	Funding route	Timelines for delivery	Inclusive Growth Fundamentals
Lack of knowledge of climate change	Deliver Carbon Literacy Training to WMCA colleagues to support organisation wide behaviour change to reduce emissions.	Lead	WMCA	Number of people achieving Carbon Literacy certificate	WMCA colleagues	Funding secured	5 years	
causes, impacts and solutions	Deliver Carbon Literacy Training, for free, to 2,500 residents in the West Midlands to reduce emissions on an individual basis.	Lead	Individuals, Community groups	Number of people achieving Carbon Literacy certificate	General Public	Funding secured	3 years	
Lack of available support to address climate change	Deliver the Community Environment Fund £1m fund, to support communities in delivering initiatives that improve the environment and people's lives.	Lead	Community Groups, NGOs	Number of funded projects	Communities	Funding secured for 2-years	2 years	All
	Deliver the Net Zero Business Pledge to provide organisations with support on reducing their carbon footprint and reaching net zero.	Lead	Businesses, SME's	Number of pledgers accessing the toolkit and business support session.	Business sector	Funded secured	5 years	

Problem	Solutions	WMCA role (lead / enable / convene)	Stakeholders	Measurement	Demographic segmentation	Funding route	Timelines for delivery	Inclusive Growth Fundamentals
Lack of available opportunities for communities to shape their response to addressing climate impacts	Deliver the Greener Together Citizens' Panel for 30 people, representative of the region, to shape the WMCA's environment programme.	Lead	Citizens' Panel, WMCA, Local Authorities	No. Panel sessions held and outcome reports generated	General Public	General Public	2 years	
	Develop a community network to empower community groups to tackle the most pressing environmental challenges.	Lead	Community Groups, Local Authorities Individuals,	No. sustainable living neighbourhoods created	Communities	Communities	5 years	All
	Deliver the West Midlands Greener Together Forum for the public learn, share and take action on climate change	Lead	Community Groups, Businesses and NGOs	Number of Forum attendees	General Public	General Public	5 years	

Air quality

Programme outcome: The West Midlands will have cleaner air that is safe for all people, no matter where you live in the region, resulting in significantly improved public health and environmental outcomes

Behaviour change outcome: For businesses and residents to adopt behaviours that not only reduces their contribution to air pollution, but also behaviours which reduce their exposure to harmful pollutants.

Significant comms opportunities:

- Clean Air Night and Clean Air Day.
- Domestic solid fuel burning winter campaigns.

These communication opportunities offer a moment in time to draw attention to air quality issues as part of our wider programme of work. The specific projects outline below, coupled with these opportunities, will inform the creation of longer campaigns to improve air quality in the region, with priorities informed by our Air Quality Framework.

Problem	Solutions	WMCA role (lead / enable / convene)	Stakeholders	Measurement	Demographic segmentation	Funding route	Timelines for delivery	Inclusive Growth Fundamentals
Lack of awareness of poor air quality, impacts and solutions	Air Quality Literacy training to support elected officials and council officers to understand the causes and impacts of air pollution as well as solutions.	Lead	7 Local Authorities WM-Air researchers	No. of people completing the course Monitoring understanding of air quality, and changes made by individuals as a result of the training.	Elected officials Local Authority Officers	DEFRA Air Quality grant	1 year	
	Provide information on how to reduce personal exposure to poor air quality outside of the home and what can be benefits through community awareness raising events.	Lead	7 Local Authorities Community Groups	No. of people spoken to / taking resources at events	General public	DEFRA Air Quality Grant	1 year	

Problem	Solutions	WMCA role (lead / enable / convene)	Stakeholders	Measurement	Demographic segmentation	Funding route	Timelines for delivery	Inclusive Growth Fundamentals
Lack of awareness of poor air quality, impacts and solutions	Develop and deliver a consistent regional schools engagement programme across the West Midlands, with flexibility to account for variations across the area (such as city vs suburban locations)	Lead	7 Local Authorities Primary and secondary schools Sustainable school networks	No. children and their parents engaged No. actions taken to reduce exposure	School aged children Parents	Air Quality Framework	2 years	
	Engage with council and private housing organisations to increase awareness of indoor air quality issues and the actions that need to be taken to reduce the impacts.	Convene	Housing associations 7 Local Authorities	No. action taken to reduce emissions No. stakeholders engaged	Social housing providers	Funding Funding to be sourced	5 years	
Domestic combustion largest source of PM2.5 emissions	7 behaviour change campaigns focusing on interventions to reduce exposure, awareness raising and reducing PM2.5 emissions. Each campaign will be co-designed with each local authority.	Lead	7 Local Authorities WSP consultancy The Behaviouralist	No. people engaged with interventions	General public	DEFRA Air Quality Grant	1 year	
	Use low-cost sensors to capture high level domestic combustion data to be used in effective behavioural change advertisement and create real life stories/ case studies.	Enable	7 Local Authorities	Reduced pollutant (PM) concentrations (compare baseline to after intervention)	General public	Funding to be sourced	3 years	₩
	Where solid fuel combustion is required, raise awareness to ensure the correct fuels are used (i.e. dry seasoned wood).	Enable	Faith leaders, GPs, nurses, fire service, influencers, community voices.	Reduced pollutant (PM) concentrations (compare baseline to after intervention) Number of people / groups engaged if the aim of the action is to raise awareness.	Individuals with log burners and/ or open fires	Funding to be sourced	3 years	
Poor air quality caused through transport emissions	Leverage campaigns for public transport, walking and cycling to promote the various co-benefits (including emissions and health) along with exposure mitigation.	Lead	TfWM	Increase use of public transport and active travel	Car travellers Public transport users	Funding to be sourced	5 years	€ 💝
	Provide free public transport and active travel initiatives such as 100-minute cycle hire bundles to organisations	Lead	TfWM	Increase in users of West Midlands Cycle Hire scheme	Staff and students from education sites	Ongoing TfWM project	1 year	€ 💝

Problem	Solutions	WMCA role (lead / enable / convene)	Stakeholders	Measurement	Demographic segmentation	Funding route	Timelines for delivery	Inclusive Growth Fundamentals
Poor air quality caused through transport emissions	Personalised travel planning with businesses and schools to encourage use of public transport and active travel modes	Lead	TfWM	Increase in public transport patronage Increase in active travel	Commuters Students	Ongoing TfWM project	1 year	
	Research conducted through the Influencing Transport Lab to trial behaviour change interventions for public and active travel	Lead	TfWM	Increase in modal shift	General public	Ongoing TfWM project	2 years	
Lack of coordinated message causes	Air Quality Communications Toolkit with key messaging and assets for all 7 Local Authorities.	Lead	7 Local Authorities	Consistent use of messaging across the WMCA	Local Authorities	DEFRA Air Quality Grant	1 year	
confusion	Work with existing public health channels to deliver consistent health messaging across the West Midlands	Enable	GP networks Integrated Care Services NHS England	How many times the toolkit is downloaded	Healthcare professionals Vulnerable communities	Funding to be sourced	3 years	
	Use trusted advisors to disseminate air quality messaging	Enable	Faith leaders, GPs, nurses, fire service etc).	Consistent health messaging used No. healthcare professional engaged	General public	Funding to be sourced	2 year	
	Use a regional air quality website to deliver key air quality information and effective information to facilitate behavioural change through a single point for the West Midlands.	Lead	7 Local Authorities WM-Air researchers	Consistent health messaging used No. trusted advisors engaged No. website hits	General public	DEFRA Air Quality Grant	1 year	

Climate adaptation

Programme outcome: To ensure that organisations and people in the West Midlands understand their vulnerability to climate-related risks and are taking steps to become more resilient.

Behaviour change outcome: For businesses and residents to implement adaptation measures to improve their resilience to climate related risks.

Significant comms opportunities:

• Major climate related events in the region.

Climate adaptation is becoming an increasing area of focus for the public and private sector. In addition to the specific projects outlined below, we will develop a region wide climate adaptation campaign to increase awareness of our climate related risks in the region and how residents, community groups and businesses can become more resilient to our changing climate.

Problem	Solutions	WMCA role (lead / enable / convene)	Stakeholders	Measurement	Demographic segmentation	Funding route	Timelines for delivery	Inclusive Growth Fundamentals
Lack of public and business awareness of climate impacts, who is	Economic Impacts Assessment: Publish quantitative, evidence-based reports on costs of climate change facing different sectors and groups.	Lead	Businesses, Health care organisations, Community groups, NGOs	No. reports produced	Businesses General public Local Authorities	Identify funding	1 year	
vulnerable and what help they might need	Understand potential future impacts on business operations, climate related risks, supply chain risks, infrastructure risks. Understand where investment in adaptation and nature-based solutions at a local and regional scale should be concentrated. Include climate adaptation within the WMCA's Carbon Literacy training for staff.	Lead	Environment NGOs, Local Environment Record Centres University of Birmingham	Produce climate risk vulnerability mapping	Businesses General public Local Authorities	Funding secured	1 year	All

Problem	Solutions	WMCA role (lead / enable / convene)	Stakeholders	Measurement	Demographic segmentation	Funding route	Timelines for delivery	Inclusive Growth Fundamentals
Lack of awareness and knowledge held by individuals	Include climate adaptation within the WMCA's Carbon Literacy training for staff.	Lead	WMCA Carbon Literacy Project	No. staff accredited as Carbon Literate	WMCA colleagues	Funding secured	1 year	
on the proactive action they need to take to adapt to changes in our climate	Fund community lead adaptation projects through the WMCA's Community Environment Fund	Lead	Community groups, environmental NGOS, faith groups, Community Interest Companies	No. adaptation projects funded	General public	Funding secured for 2-years	1 year	
	Create guidance and other literacy materials on adaptation measures alongside other standards e.g., shading, ventilation, sustainable drainage	Convene	Local Resilience Forum TfWM Housing Providers West Midlands Fire Service (WMFS) Sustainability West Midlands (SWM) British Red Cross	Follow up surveys to assess impact.	General public	Identify funding	2 years	
	Understand public appetite for adaptation measures and policy by holding Citizen Panel meetings	Lead	Citizen Panel members (general public)	No. sessions on adaptation No. outputs from sessions	General Public involved in the Citizens' Panel	Funding secured for 2-years	2 years	
	Create tailored communication materials for different audiences, in partnership with sector actors to articulate specific risks and vulnerabilities.	Lead	Sustainability West Midlands (SWM) West Midlands Fire Service (WMFS) Housing Associations	No. materials produced and used by partners	General Public	Identify funding	2 years	All
Housing stock and commercial building unsuitable for climate impacts	Incentivise private landlords and homeowners to improve energy efficiency and climate resilience of homes	Enable	7 Local Authorities Social housing providers	EPC C band and above increases Reduced flood risk Reduces risk of overheating	Private landlords Homeowners	Trailblazer Devolution Deal	5 years	

Natural environment

Programme outcome: The West Midlands will protect, restore and enhance the region's natural environment for people and biodiversity.

Behaviour change outcome: For businesses, communities and residents to adopt behaviours which increases biodiversity and protects nature.

Significant comms opportunities:

- World Wildlife Day
- Love Parks Week
- National Tree Week

There are many natural environment action days and weeks to highlight the importance of nature, and we will look to support and amplify these messages.

Problem	Solutions	WMCA role (lead / enable / convene)	Stakeholders	Measurement	Demographic segmentation	Funding route	Timelines for delivery	Inclusive Growth Fundamentals
Lack of understanding or willingness to connect and protect nature	Citizen science projects to support engagement in natural environment activities.	Enable	Environment Record Centres Educational Institutions NGOs VSO's Community Groups	Surveying of volunteers to understand if connection to nature improved through projects.	People living in areas with lack of accessible greenspace	Identify funding	3 year	
	Right Tree Right Place campaign to remove barriers for people improving their greenspaces.	Lead	Community Groups VSO's	Number of trees given to members of the public for planting	People living in areas with lack of accessible greenspace	Project funded through WMCA and Woodland Trust's Emergency Tree Fund	2 year	

Problem	Solutions	WMCA role (lead / enable / convene)	Stakeholders	Measurement	Demographic segmentation	Funding route	Timelines for delivery	Inclusive Growth Fundamentals
Lack of understanding or willingness to connect and protect nature	The Local Nature Recovery Strategy is co-created with citizens through engagement with the Citizens' Panel and Forum.	Lead	Citizen Panel members (general public)	No. sessions on LNRS No. outputs from sessions	General Public involved in the Citizens' Panel and Forum	Funding secured for 2-years	1 year	
Greenspaces present but poor quality and inaccessible	Financial and expert support to community groups who engage with diverse communities with greenspace through the Community Environment Fund.	Lead	Forum attendees (general public) LAs, Inclusion and Faith organisations, Voluntary Sector Networks.	Number of grants given to community groups who engage with diverse communities.	Focus on areas of high deprivation	Funding secured for 2-years	2 years	All
	Natural Environment Awards used to encourage/ inspire good practice sharing on creating and restoring greenspaces and waterways.	Lead	Businesses Community Organisations Public Sector Education Institutions	Number of applications for awards.	Businesses, educational institutions, public sector bodies and community organisations / NGOs	Funding secured through sponsorship	1 year	
	Support green prescribing and health benefits realisation to increase access to greenspaces	Enable	Healthcare practitioners Community Organisations Public Health	Number of green prescribing referrals	People with pre- exisiting health conditions	Identify funding	3 years	

Circular economy

Programme outcome: To make better use of materials and resources to reduce waste and create environmental and economic benefits for the WMCA area.

Behaviour change outcome: For businesses, communities, and residents to reduce waste and adopt reuse, repurpose and refuse principles.

Significant comms opportunities:

Zero Waste Week

Our values and social norms play a role in achieving consumption-related behaviour change, as consumer choices can express our identity and aspirations, whilst demographic factors such as age and income play a role, as those who are older and on higher incomes, have higher levels of consumption. Therefore, to create a circular economy within the region, we will build on existing work being done and seek to work with the manufacturing and construction industries, as well as residents and community groups to reduce waste through a regional campaign.

Problem	Solutions	WMCA role (lead / enable / convene)	Stakeholders	Measurement	Demographic segmentation	Funding route	Timelines for delivery	Inclusive Growth Fundamentals
Over consumption and use of virgin materials	Industrial Symbiosis programme for businesses to support waste reduction	Lead	Community groups, private sector	Waste diverted from landfill through delivery of the project	Construction and manufacturing industries	Funding secured for pilot programme	Until March 2025	
	Encourage use of and new repair cafes and borrow schemes through CEF	Lead	Community groups	Number of projects funded through CEF	Communities	Funding secured for 2-years	Until March 2025	$\bigcirc \ \textcircled{$\mathfrak{P}$}$
	Encourage materials recovery in the construction sector through the delivery of Zero Waste Construction Hubs	Convene	Construction industry	New materials saved through delivery of the project	Construction Industry	Identify funding	Pilot hub opening Summer 2024 Ongoing work to fund more pilots	

Monitoring impact

To ensure that we are creating lasting behaviour change, each intervention detailed within the delivery plan, will be monitored and its impact measured.

Monitoring impact will include:

Individual interventions

It is a challenge to identify if a change in behaviour is a direct result of a particular intervention when there are many other factors that influence people's lives. Therefore, clear objectives will be defined and where possible, pre and post evaluations will be completed for each intervention to establish baseline data. Each project within the delivery plans has a measurement to assess impact. Progress will be monitored across the 5-year timeline for the Plan using RAG ratings.

• Programme wide

A whole programme evaluation will be developed to measure the impact of the environment behaviour change programme. Programme evaluation will include metrics assessing engagement levels, number of interventions implemented, progress of developing interventions and a theory of change will be developed to identify key metrics that indicate progress against the plans outcomes.

Environment Attitudes Survey (EATS)

EATS will monitor behaviours and attitudes over 3-years. Each year, 2,000 people will be surveyed to understand if attitudes, perceptions, and knowledge towards each area of the WMCA's environment programme, is changing. The results from the survey will be used to shape our programme of work and 2024 data will be used as a baseline for future comparison.

Plan Governance

The Environment Behaviour Change programme sits within the wider Environment programme which falls within the Strategy, Economy and Net Zero (SENZ) directorate. Key decisions are taken to WMCA Board.

This plan will be led by the Environment Behaviour Change Project Officer with support from the Environment Team and will be reviewed on an annual basis to ensure it remains current and responds to a rapidly evolving programme.