



Environment & Energy Board

Date: Thursday 9 September 2021

Time: 10.00 am **Public meeting** Yes

Venue: This meeting will be conducted virtually using Microsoft Teams.
[Click here to view the meeting.](#)

Membership

Councillor Ian Courts (Chair)	Portfolio Lead for Environment, Energy & HS2
Councillor Oliver Butler	Walsall Metropolitan Borough Council
Councillor Maria Crompton	Sandwell Metropolitan Borough Council
Councillor Steve Evans	City of Wolverhampton Council
Councillor Andy Mackiewicz	Solihull Metropolitan Borough Council
Councillor Jim O'Boyle	Coventry City Council
Councillor Simon Phipps	Dudley Metropolitan Borough Council
Matthew Rhodes	Energy Capital
Suzanne Ward	Environment Agency
Councillor Waseem Zaffar	Birmingham City Council

Quorum for this meeting shall be the Portfolio Lead for the Environment, Energy & HS2 *and* at least three other members.

If you have any queries about this meeting, please contact:

Contact Dan Essex, Governance Services Manager
Telephone (0121) 214 7505
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AGENDA

No.	Item	Presenting	Pages
Items of Public Business			
1.	Declarations of Interest Members are reminded of the need to declare any disclosable prejudicial interests they have in any item being discussed during the course of the meeting. In addition, the receipt of any gift or hospitality should be declared where the value of it was thought to have exceeded £25 (gifts) or £40 (hospitality).	Chair	None
2.	Chair's Remarks (if any)	Chair	None
3.	Minutes - 1 July 2021	Chair	1 - 4
4.	West Midlands Local Transport Plan Green Paper Update	David Harris	5 - 12
5.	Air Quality Options	Jackie Homan / Prof. Bill Bloss	Verbal Report
6.	Infrastructure for Zero Emission Vehicle Strategy Consultation	Cheryl Hiles / Kate Ashworth	13 - 72
7.	COP26 Update	Steve Bowyer	Verbal Report
8.	West Midlands Circular Economy Routemap	Richard Rees	73 - 94
9.	Natural Environment Plan	Jackie Homan	95 - 146
10.	Environment & Energy Programme Update	Chair	147 - 164
Date of Next Meeting			
11.	TBC in November 2021 at 10.00am	Chair	None



West Midlands
Combined Authority

Environment & Energy Board

Thursday 1 July 2021 at 10.00am

Minutes

Present

Councillor Ian Courts	Portfolio Lead for Environment, Energy & HS2
Councillor Oliver Butler	Walsall Metropolitan Borough Council
Councillor Andy Mackiewicz	Solihull Metropolitan Borough Council
Matthew Rhodes	Energy Capital
Suzanne Ward	Environment Agency

In attendance

Councillor Peter Fowler	Overview & Scrutiny Committee
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1. Apologies for Absence

Apologies for absence were received from Councillor Maria Crompton (Sandwell), Councillor Jim O'Boyle (Coventry), Councillor Simon Phipps (Dudley) and Councillor Waseem Zaffar (Birmingham).

2. Net Zero Neighbourhood

The board considered an update from the Head of Environment on the allocation of £2m to help to explore opportunities for achieving net zero living through technology shift. In addition, financial models and community appetite for net zero living would also be explored.

The Chair emphasised that the selection of neighbourhoods would be key to the success of any project, and stressed the importance of ensuring a broad range of difference localities were selected. He suggested that this work be undertaken with local authorities. In terms of the selection of neighbourhoods, the chair asked that the WMCA worked with local authorities to help to identify potential areas. It was noted that additional work needed to be undertaken on the financial model and timescales.

The Chair undertook to meet with Cheryl Hiles from Energy Capital to discuss these ideas further.

Resolved that the update be noted.

3. WM2041 Behaviour Change

The board considered a report from the Director of Public Service Reform and the Head of Environment that provided an update on the behaviour change work that would support the WM2041 programme. The WMCA was currently working with the Behavioural Insights Team on initial priorities for action and campaigns.

The board received a presentation from Lourdes Valencia from the Cabinet Office's Behavioural Insights Team that considered the role of behaviour change in achieving a reduction in carbon emissions.

Councillor Andy Mackiewicz welcomed the presentation, noting how the COVID-19 pandemic had resulted in a shift in public behaviour motivated by a desire to achieve a positive outcome, and wondered what lessons could be learnt from this to help achieve carbon reduction targets. The Chair stressed the importance of clear and specific messaging that the public could understand and buy in to. He particularly thought that messaging that had a local resonance was more likely to capture people's attention and prompt behaviour change.

Resolved:

- (1) The work being undertaken on behaviour change by the Behavioural Insights Team be noted.
- (2) The comments made by the board on the progress and focus of the work be fed back to the Behavioural Insights Team.
- (3) It be noted that the WMCA was in the process of recruiting an Environment Behaviour Change Project Officer.

4. Update on WM Circular Economy Routemap

The board considered a report from the Director of Public Service Reform and the Head of Environment that provided an update on the progress of the West Midlands' Circular Economy Routemap.

In June 2020, the WMCA Board approved 'WM2041: A Programme for Implementing an Environmental Recovery' that included a recommendation to establish a Circular Economy Taskforce to support the production of a Routemap for the region. Following a stakeholder workshop and public survey to develop understanding of the regional circular economy activity and stakeholders, a Circular Economy Taskforce was formed in November 2020, made up of public, private, academic and third sector partners in the region. The taskforce provided input to a specification which was used to publish a WMCA tender for consultancy support to produce the Routemap. Useful Projects were appointed in January 2021.

Dan Epstein and Laetitia Pancrazi from Useful Projects provided further information on how a circular economy model could scale up across the region. The next steps in this process were to finalise and launch routemap and then prioritise projects to take forward. The Chair noted that much of this work linked in the behaviour change workstream and similarly needed to emphasise the 'local' benefits that could be achieved. He also considered that the financial benefits of transitioning to a circular economy needed to be emphasised in order to bring local businesses onboard.

Resolved:

- (1) The progress on the West Midlands' Circular Economy Routemap be noted.

- (2) The comments made by board to help inform the competition of the Routemap and next steps be noted.

5. Briefing on WMCA-UK100 Summit & Conference and COP26

The board considered a report from the Director of Public Service Reform and the Head of Environment that outlined the work that the WMCA had been leading on, in conjunction with other local, regional and national stakeholders, to favourably position the West Midlands in the run-up to COP26, as well as at the event itself in November. It also provided an update on the UK100 local leaders' summit and conference that was being delivered in partnership with the WMCA.

There are three objectives for the WMCA's engagement with COP26 and the associated local leaders' summit and conference planned by UK100: to shine a spotlight on the West Midlands' economy for trade and investment opportunities; to create a 'buzz' around net zero among local residents and businesses; and to work with central government in a new partnership to deliver net zero.

Resolved:

- (1) The activities planned for the UK100 summit and conference and COP26 be noted.
- (2) The details on how to register for the UK100 Conference be noted.

6. Environment & Energy Programme Update

The board considered a report from the Director of Public Services Reform and the Head of Environment that provided an overview of the Environment and Energy programme, including work on the net zero natural capital and circular economy. It also updated members on the enabling activity being put in place to ensure successful delivery, including behaviour change, business and community engagement, data and financing.

Resolved:

The Environment and Energy programme update be noted.

The meeting ended at 12.00pm

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Environment & Energy Board

Date	9 September 2021
Report title	West Midlands Local Transport Plan Green Paper Update
Portfolio Lead	Environment, Energy & HS2 - Councillor Ian Courts
Accountable Chief Executive	Laura Shoaf, West Midlands Combined Authority email: laura.shoaf@wmca.org.uk
Accountable Employee	<p>Anne Shaw, Interim Managing Director, Transport for West Midlands email: anne.shaw@tfwm.org.uk</p> <p>David Harris, Transport Strategy & Place Manager, Transport for West Midlands email: david.harris@tfwm.org.uk</p> <p>Alex Greatholder, Principal Policy & Strategy Officer, Transport for West Midlands email: alex.greatholder@tfwm.org.uk</p>

Recommendation(s) for action or decision:

The Environment & Energy Board is recommended to:

- (1) Note the progress on development of the West Midlands Local Transport Plan (LTP) and the publication of the West Midlands Transport Green Paper and members views are sought on the key issues raised in the document.
- (2) Note the planned approach for engaging with Leaders on key transport challenges through a transport 'summit' proposed to be held in September.
- (3) Note the high-level programme timescales for developing the core LTP strategy through to Summer 2022.

- (4) Note the plan to publish a West Midlands Transport Plan Prospectus to tie into wider West Midlands representation at COP 26 in Glasgow in November.

1. Purpose

- 1.1 The purpose of this note is to provide an update to Environment & Energy Board on the development of a new West Midlands Local Transport Plan including the publication of the transport Green Paper, proposed West Midlands Leaders summit and COP26 prospectus, and the wider programme for developing and adopting a new Local Transport Plan.

2. Background

- 2.1 Developing and managing a Local Transport Plan (LTP) is one of WMCA's key statutory functions. The current LTP, Movement for Growth, was adopted in 2016 but significant developments and changes have taken place in the last 5 years including increasing concerns regarding the Climate Emergency and the current Covid-19 global pandemic.
- 2.2 Well evidenced and robust transport strategy will be an essential part of our economic recovery, delivering inclusive growth and taking action to address carbon emissions in line with WMCA's commitments. The new LTP will set out the longer-term vision for transport in the region and set out a policy framework within which the programmes brought forward in the Implementation Plan funded through the City Region Sustainable Transport Settlement (CRSTS) and other capital and revenue funding streams will need to align.
- 2.3 Whilst WMCA is formally the Local Transport Authority, the combined authority is a partnership and the LTP is developed collaboratively with the constituent authorities. WMCA and the constituent authorities have duties to deliver the policies and implementation proposals in the LTP. The WMCA's Strategic Transport Board provides the elected member direction for this work, however, changes to the LTP must be approved by WMCA Board and (as a minimum) meet specific statutory requirements on consultation on LTPs.

3 West Midlands Local Transport Plan Green Paper

- 3.1 To support the development of a new West Midlands LTP, Transport for West Midlands has recently published a Green Paper. The purpose of the Green Paper is to start a conversation about how and why we could think differently about how we plan, deliver, manage and ultimately use our transport system. The need to decarbonise transport rapidly will be a critical objective in the new LTP. However, there are other systemic challenges with the transport system, which also stand in the way of the region's ambitions for inclusive growth. The Green Paper sets out 5 Motives for Change for transport:
- **Sustaining economic success:** Support the building of an inclusive and green West Midlands economy, through better use of existing infrastructure, land, technology and sustainable transport options.
 - **Tackling the climate emergency:** Changes to where people travel to / from, reducing the frequency of travel and changing the vehicles we use to travel.

- **Creating a fairer society:** How land is used, the availability and affordability of transport and the experience and usability of transport.
 - **Supporting local places and communities:** Re-imagining local neighbourhoods, reducing dominance of transport and providing quick and easy access to key local services.
 - **Becoming more active:** Enable safe, convenient and accessible walking and cycling opportunities and increase active travel for journeys.
- 3.2 None of the motives are necessarily a greater priority, and all could justify significant change to the transport system. However, tackling the climate emergency is unique in the explicit and significant pace and scale of desired carbon reductions that have been set out at the local and national level, and the global consequences that are faced.
- 3.3 The Green Paper does not set out what policy responses are required but provides an overview of the sorts of changes and measures which could be made to the transport system to tackle climate change and meeting the ambitious target set by WMCA to be carbon neutral by 2041, whilst making positive progress against the other motives for change. It also highlights where other policy areas, including land use and digital connectivity could play a stronger role in helping to reduce the overall demand for travel.
- 3.4 The Green Paper was published on 6th July and engagement has now begun with the full document and summary document together with links to the consultation now available on the TfWM website (<https://www.tfwm.org.uk/who-we-are/our-strategy/green-paper-2021/>). The engagement period will run until the end of September.
- 3.5 A broad range of stakeholders as well as the general public are being encouraged to engage and respond through a range of channels. Significant effort will be made throughout the process to pro-actively seek input from a demographically and geographically representative range of West Midlands citizens. This includes more traditional approaches such as online surveys but once again we are using the TfWM market research community to enable deliberative engagement on the key issues to provide a valuable deeper understanding of people's feelings and views. In addition, local engagement will take place with local authorities separately (e.g. cabinet, scrutiny) and arrangements are being made with officers.
- Deliberative engagement with general public via the MROC platform,
 - Focussed events with representative bodies of private and third sector organisations,
 - Online questionnaire style consultation with general public and wider stakeholders,
 - Press activity fronted by the Mayor and Cllr Ian Ward
 - Engagement with local authorities,
 - Ongoing conversation with LA partners as LTP options are developed and assessed.

4 Developing the new West Midlands Local Transport Plan

- 4.1 Although the Green Paper starts to explore a broad scope of options for the region (both in terms of the vision for the future and state intervention), further work is required to develop these with more detail to inform the approach for a new West Midlands LTP.
- 4.2 Commitments to rapidly decarbonise transport have specific implications for local transport strategy as this cannot rely on a shift to Ultra Low Emission Vehicles alone and so requires a reduction in energy demands of the transport system, largely through behaviour change but also potentially through wider changes to vehicles (e.g. reducing vehicle weight and power). Wider transport objectives also require behaviour change but the decarbonisation agenda introduces a definitive pace of change. The Government has now published its Transport Decarbonisation Plan which places responsibility for much of the behaviour change (which it acknowledges is needed) on local authorities, with reaffirmation of capital funds, signposting to existing design and best-practice guidance, promises for further guidance, and a requirement for Local Transport Plans to “set out how local areas will deliver ambitious quantifiable carbon reductions in transport”. Emphasis is also placed on the greater scope for behaviour change in urban areas compared to rural areas.
- 4.3 The WM2041 five year plan set out a view on how travel behaviours and lifestyles could change to deliver substantial progress towards WMCA’s carbon budget. However, it did not provide the detail on the sorts of measures and interventions that would be required to generate the sorts of behaviour change that is required. In order to do this and support members with their understanding of the issues and options, TfWM is developing thinking around three hypothetical policy futures which will help to illustrate the sorts of policy choices at the national and local level that could deliver transport decarbonisation and their wider implications. These are options which could be considered as part of the development of the new LTP to help address the key challenges as described in the motives for change.
- 4.4 This stage of work requires a structured approach to developing policy options and officers have developed a framework of three policy scenarios within which to explore choices. In essence, these policy scenarios explore the potential opportunities and threats to deliver against all motives for change where appetite for action is constrained by different levels of commitment to decarbonise transport. TfWM has been working closely with local authority officers to develop thinking around the scenarios.
- **Conventional:** what the world might look like with continuation of ‘Business as Usual’ strategy
 - **National Policy Aligned:** change consistent with Climate Change Committee’s UK “Balanced Net-Zero Pathway” recommendations.
 - **Transformational:** providing a transformational change for the region, delivering against WM2041 carbon budget.
- 4.5 The outputs of this work will be used, together with the responses to the Green Paper engagement, to inform and shape discussion with members on how we could successfully start to successfully affect change in travel and wider behaviours to achieve strategic outcomes.

- 4.6 None of these scenarios are intended to represent an optimal scenario, each has strengths and weaknesses. The approach to be set-out in the LTP itself will likely require a blend of elements from the three scenarios. Ultimately it is less likely to be tensions between particular motives that influence the blend; compromise is likely to be driven primarily by public acceptability and wider national policy context.
- 4.7 It is proposed that a ‘summit’ with West Midlands Leaders is held in late September to work through some of the key messages and confirm the scope of ambition and approach for the new West Midlands LTP.
- 4.8 Following the steer provided by the summit, TfWM will continue to develop the LTP strategy during the second half of 2021 working closely with local authorities. The work on the new LTP will also seek to consider the transport challenges presented in wider areas of planning (including Local Development Plans and WMCA’s plans for energy infrastructure).
- 4.9 It is anticipated that a draft West Midlands LTP will be presented to WMCA Board in January 2022 where approval to undertake the statutory consultation on the document will be sought. Further to the consultation and subsequent review in light of responses it is anticipated that the LTP will be sent to WMCA Board for formal approval in Summer 2022.

5 26th UN Climate Change Conference of the Parties (COP 26) November 2021

- 5.1 The scenarios work and outcomes of the Leaders ‘summit’ in September will also be used to develop a short LTP ‘prospectus’ to be published in late October. This will tie in with the UK hosting COP26 in Glasgow in November this year. The prospectus is proposed to be a short high-level document which will affirm the West Midlands’ commitments to working towards achieving a net zero transport system in the shortest possible time. The document will provide high level messages around the emerging ambition for the new Local Transport Plan.

6 LTP Framework and Development Programme

- 6.1 It is proposed that the new LTP will comprise of a framework of documents which will provide a comprehensive set of policy and strategy for transport in the region. It is proposed that this framework will consist of the following:
- **Core LTP strategy** – providing the overarching vision and approach, considering transport issues at a number of spatial tiers (local, regional, national, and international) and accounting for the different kinds of places we have within the West Midlands
 - **Area strategies** – to be led by local authorities, albeit within a common framework, and to identify implementation proposals for delivering the core strategy based on understanding local context at the neighbourhood, centre and corridor level.
 - **Supplementary regional policies (and guidance)** – these documents will include more nuanced policymaking (and guidance) to address and account for specific issues in particular parts of the transport system and identify appropriate implementation proposals at the region level; for example, park and ride, fares and ticketing etc.

- **Implementation plan** – this document will provide a consolidated view of how implementation proposals will be prioritised, resourced and delivered over the plan period. This will include proposals to develop policy to address any outstanding gaps between the effect of committed proposals and SMART LTP objectives.
- 6.2 Whilst it is intended that the Core LTP strategy will remain relatively static over a longer review period, the wider documentation is likely to remain more “live”, to enable additional identification and commitment to implementation proposals and reprioritisation of resource where required.
- 6.3 The high-level programme for developing the new LTP is as follows:
- March-September 2021 – Technical work underway developing and assessing LTP policy scenarios in co-development with local authorities.
 - June 2021 – Green Paper published and engagement runs until end of September 2021.
 - September 2021 (date to be confirmed) - Leaders ‘summit’.
 - November 2021 - COP 26.
 - Autumn - Winter 2021 - LTP Strategy development.
 - January 2022 - WMCA Board – approval to undertake statutory consultation.
 - January to April 2022 - LTP Statutory consultation
 - Summer 2022 – WMCA Board – formal adoption of new LTP.

7 Financial Implications

- 7.1 There are no immediate financial implications as a result of the proposals within this paper.
- 7.2 However, the West Midlands Local Transport Plan will consist of several investable opportunities requiring capital and revenue funding. This will range from national capital funds (eg. including City Regional Sustainable Transport Settlements, Levelling Up Fund, National Bus Strategy/BSIP, etc), to local revenue funding (eg. public transport fare subsidies).

8 Legal Implications

- 8.1 Under the Transport Act 2000, local transport authorities (LTAs) have a statutory duty to produce and review a local transport plan (LTP). As a consequence of the Local Transport Act 2008 and the West Midlands Combined Authority Order 2016, WMCA is the sole LTA. WMCA and the seven metropolitan district/borough councils of the West Midlands must carry out their functions so as to implement these policies.

9 Equalities Implications

- 9.1 In preparing and implementing the LTP, the WMCA and seven metropolitan district/borough councils must take into account the requirements of the Equality Act 2010. In order to ensure that potential impacts of the LTP on equalities have been considered and to fulfil the requirements of equalities legislation, an Equalities Impact Assessment (EqIA) will be undertaken in a fully integrated fashion with the wider Strategic Environmental Assessment process required for LTPs as part of an Integrated Sustainability Appraisal.

- 9.2 EqlA objectives will be identified and reviewed in the light of the Equality Act 2010. The approach to the EqlA review will ensure that all relevant topics are considered throughout the assessment process from establishing the baseline and building up a picture of the area in terms of equalities, identifying the key issues, developing the SA/SEA Framework, assessing the LTP options.

10 Inclusive Growth Implications

- 10.1 Covid-19 has exacerbated many already underlying inequalities – be it socioeconomic or health. As more evidence comes to light, it demonstrates how vulnerable groups are suffering more – the impacts of which are then further exacerbated as we move into recovery and as we then seek to tackle climate change. This will present a significant challenge for delivering Inclusive Growth. The Green Paper presents Creating a Fairer Society as one of the five motives for change and describes the need to address inequity of access and of transports impacts. The Green Paper takes account of the principles of WMCA’s inclusive growth framework and these will need to be considered through the development of the new Local Transport Plan, to ensure all WMCA activity drives more inclusive and sustainable growth. The aforementioned Integrated Sustainability Assessment will provide a framework to ensure that strategy development is challenged.

11 Geographical Area of Report’s Implications

- 11.1 The WMCA exercises transport powers overwhelmingly in respect of the area covered by its constituent authority members, however, there is significant interaction with the wider area. The health and performance of the transport system in metropolitan area has a profound impact on the wider area and vice-versa. Deep engagement with surrounding Local Transport Authorities and with Midlands Connect will essential. Additionally, opportunities to align policies and timescales with surrounding Local Transport Authorities will be explored, especially noting that transport does not stop or start at administrative boundaries.

12 Other Implications

None.

13 Schedule of Background Papers

- 13.1 ‘A Transport System Fit to Tackle Climate Change? - Reviewing the West Midlands Local Transport Plan to support a Greener, Fairer, Healthier Recovery’, WMCA Board Report, 24 July 2020.
<https://governance.wmca.org.uk/documents/s4451/WMLTP%20Review.pdf>

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Environment & Energy Board

Date	9 September 2021
Report title	Infrastructure for Zero Emission Vehicle Strategy Consultation
Portfolio Lead	Environment, Energy & HS2 - Councillor Ian Courts
Accountable Chief Executive	Laura Shoaf, West Midlands Combined Authority email: laura.shoaf@wmca.org.uk
Accountable Employee	Ed Cox, Director of Public Service Reform email: ed.cox@wmca.org.uk Jackie Homan, Head of Environment email: jacqueline.Homan@wmca.org.uk

Recommendation(s) for action or decision:

The Environment & Energy Board is recommended to:

- (1) Review and provide feedback on the draft Infrastructure for Zero Emission Vehicle (IZEV) strategy (given in background papers)

1. Purpose

- 1.1 The purpose of this report is to provide an update to the board on the progress of the development of the Infrastructure for Zero Emission Vehicle (IZEV) Strategy, provide some initial insights from the consultation process and layout a timescale by when the final strategy document will be available for publication.

2. Background

- 2.1 The Infrastructure for Zero Emission Vehicles (IZEV) Strategy is being developed in recognition that the regional, and indeed national, ambition of transitioning to zero emission vehicles will need to be underpinned by co-ordination between not only transport-led initiatives but also the underlying energy infrastructure needed to service the new types of vehicles.

Key tenants of the IZEV strategy

- 2.2 In order to achieve the West Midlands' commitment to net zero by 2041 (#WM2041) system changes need to be made. Transport within the region currently contributes to (approximately) 30% of carbon emissions, and is the UK's greatest sectoral contributor to carbon emissions.
- 2.3 Although there have been a significant number of improvements in spatial planning reducing the need to travel, as well as behaviour change incentives aimed at improving air quality, there is still an under-provision of infrastructure needed to provide zero carbon travel when necessary. By implementing key infrastructure to support the transition to zero emission vehicles away from in-situ combustion engines, carbon savings can be made, helping to achieve net zero by 2041. There are also significant co-benefits for air quality improvements.
- 2.4 Energy Capital, working alongside TfWM and other organisations, have identified several barriers within the region reducing the take up of zero emission vehicles by the general public and private industry:
- A gap between transport, electricity and gas sectors who undertake planning and investment of projects needed to provide this necessary infrastructure (e.g., charge points, charging hubs, hydrogen refuelling etc.)
 - Hesitancy from the private sector to switch from fossil fuel consuming transport to zero emission transport due to the lack of infrastructure available to support their day-to-day activities (e.g., freight, company fleets, delivery vans, etc)
 - Current low consumer demand for zero emission vehicles disincentivises the private sector from providing the infrastructure in the near term, resulting in consumer demand remaining low, and infrastructure not implemented
- 2.5 The public sector is uniquely positioned to support the transport sector in implementing key infrastructure. The IZEV strategy is being developed to:
- Bridge the gap between parties planning infrastructure, helping to support each system to communicate requirements ahead of need
 - Utilise planned public sector investment in transport to provide the infrastructure needed to begin the transition to zero emission vehicles and de-risk future private sector investment
 - Exploit our geographic position by delivering transport infrastructure to support the national market

Consultation process

- 2.6 The IZEV strategy was released in draft form to industry stakeholders who were invited to provide their feedback. This was done over a series of in-depth workshops focusing on the provision of electrical infrastructure, alternative fuel infrastructure and the specific role of the public sector in catalysing the changes required. Feedback was also sought through email and questionnaire for those not able to make the sessions.

2.7 The feedback will now be considered in the final version of the IZEV strategy which will be written up as companion document informing the upcoming Long Term Transport Plan (LTP). This process is due to be completed by the end of September 2021.

2.8 Early insights from the consultation process:

- Respondents strongly support the Strategy's position that the public sector needed to take a leadership role in bringing forward the necessary infrastructure to support the transition to zero emission vehicles.
- Respondents recognised the risks around the challenge of sufficient grid capacity for the projected energy system requirements to support zero emission vehicles. A further risk was recognised around the possibility of developers 'land banking' potentially key locations for charging infrastructure without immediate plans for bringing these sites forward until demand builds.
- Respondents wanted to see further support for local initiatives already undertaken such as Ansty CLEAN hub and Tyseley Energy Park which supports multi-model transport shifts as well as supports the transition of larger vehicles to zero emission modes.
- Respondents felt that more could be done to support both public and private fleets to switch to zero emission modes and that the public sector should be demonstrating and normalising the technology adoption.
- Respondents felt that hydrogen and alternative fuels had a role to play, particularly in the transition of larger vehicles but that the provision of infrastructure was a clear barrier. It was recommended that the West Midlands, as the geographic heart of the distribution network, should have a series of refuelling stations capable of servicing large vehicles with range of fuel options (hydrogen/high powered charging/other alternative fuels) until the technology pathway is clearly set. This would give confidence to commercial operators to make strategic decisions on their fleet earlier and give greater carbon and air quality benefits.

Next steps:

2.9 The next steps are to consider the feedback from the consultation process in the drafting of the final strategy.

2.10 The strategy contains an outline action plan for delivery. If agreed, then these actions will require further resources to progress. The funding for these resources may be sought internally or could be sought from the Office for Zero Emission Vehicles (OZEV) or similar central agencies depending on their nature.

3. Financial Implications

3.1 There are no immediate financial implications as a result of the proposals within this paper.

4. Legal Implications

4.1 None from this report.

5. Equalities Implications

- 5.1 The IZEV Strategy has been written with Fairness and Equality as its first driving principle. The strategy is designed to address inequalities that may arise if the market were left to decide the provision of infrastructure to support the transition of zero emission vehicles.

6. Inclusive Growth Implications

- 6.1 The transition to zero emission vehicles has the potential to support the West Midlands automotive industries and supply chain.

7. Geographical Area of Report's Implications

- 7.1 West Midlands Combined Authority Area

8. Other Implications

- 8.1 None.

9. Schedule of Background Papers

- 9.1 IZEV Consultation slide pack

A strategy to provide Infrastructure for Zero Emission Vehicles (IZEV): Stakeholder Consultation Slides

July 2021,
Energy Capital, WMCA

Contents:

Policy and strategy development
Infrastructure requirements
Our strategy and approach
Actions identified through the strategy

An IZEV strategy is needed because:

The West Midlands has committed to achieving net zero by 2041

Approximately 30% of today's carbon emissions in the region come from transport. Most transport carbon emissions are now from surface transport, primarily from cars. Surface transport carbon emissions have not significantly reduced over the last 30 years meaning they are now the UK's greatest source of carbon emissions, making them a key area of focus for decarbonisation.

Lots of work is already being done on transport planning and spatial planning, including reducing the need to travel and promoting forms of active travel

However, where journeys are necessary, either by public or private transport modes, these need to be fuelled by low or zero carbon fuels to enable us to meet our targets

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Decisions by operators as to whether to make the switch away from fossil fuels have been proven to be heavily dependent upon whether there is the necessary infrastructure in place to support the transition.

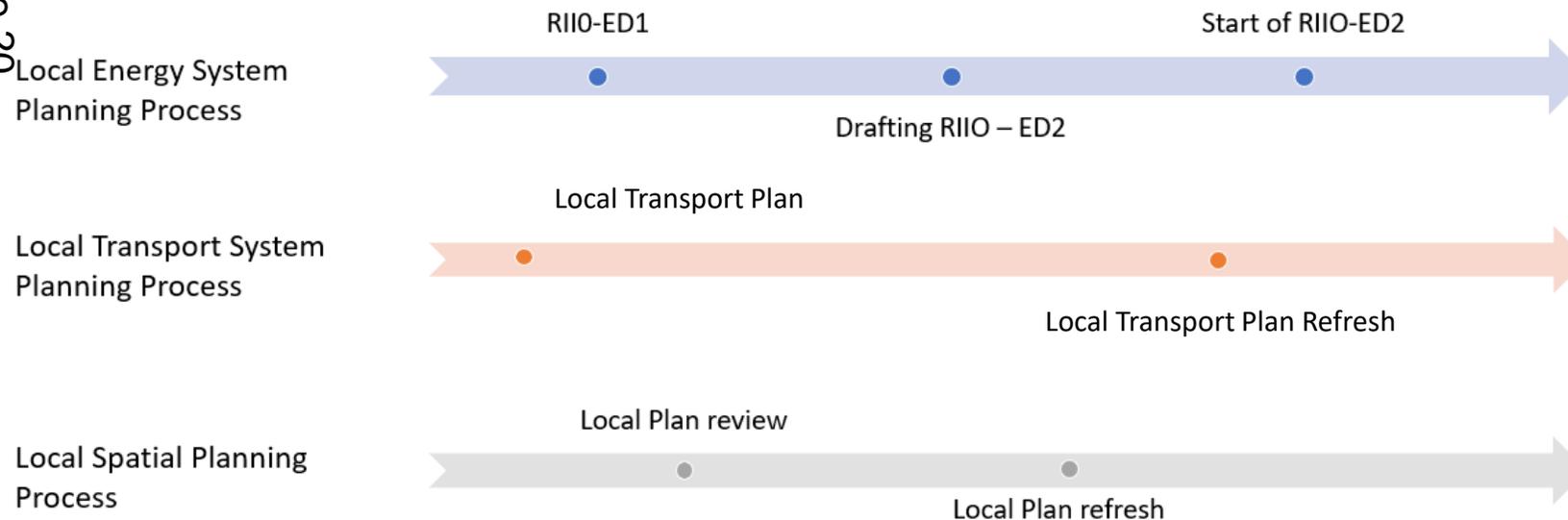
- This infrastructure could be in the form of:
 - Access to suitable electric charging facilities
 - Upgraded electrical capacity to feed new electrical charging stations
 - Suitable hydrogen generation and distribution infrastructure

(The use of biofuels is likely to also form an important part of the transition nationally, but is considered to have less infrastructure barriers to deployment, so is not a feature of this strategy)
- **The provision of this infrastructure requires planning and investment to support and enable the transition.**
- **The planning and investment decisions for electricity and hydrogen are currently undertaken by different organisations to those who plan for and operate transport systems.**

A key role of this strategy is to influence the energy infrastructure planning process to take better account of transport decarbonisation plans

- This IZEV strategy is being developed to bridge the gap between the relevant parties, by bringing them together to explore the options for the West Midlands and ensure they are using the same information to inform each of their planning and investment processes
- This is important because investment decisions for infrastructure are taken well in advance of delivery, so some timely decisions need to be taken regarding the direction of travel of this transition.

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Below is the schedule for the development of the IZEV strategy

Proposed Timetable	Action
19 th July 2021	Publish presentation, questionnaire and invite partners to consultation events
5 th August 2021 10 th August 2021 12 th August 2021	Host 3 workshops with partners, focusing on: 1 - Use Cases and Infrastructure for Hydrogen and Alternative Fuels in West Midlands Transport 2 - Infrastructure for Electric Vehicle Charging in the West Midlands 3 - The Role of the Public Sector in Driving Infrastructure for Zero Emission Vehicles
30 th August 2021	Consultation closes
31 st August 2021	Update strategy based on consultation responses
9 th September 2021	Produce draft strategy prospectus document
14 th September 2021	Send to Energy Capital Board for final inputs
21 st September 2021	Energy Capital Board sign off
22 nd – 29 th September 2021	Design prospectus for publication with TfWM

Looking through an energy lens at transport decarbonisation enables the identification of low regrets infrastructure investment options

- This strategy is looking through an energy lens.
- It aims to bring transport together with the electrical and gas elements of the energy sector, rather than the petroleum sector that the transport system is used to working with.
- These parts of the energy sector are planned, invested in and regulated in a very different way, bringing new challenges.
- To determine what energy infrastructure is required to support the transport sector to decarbonise, a range of decisions about future transport plans have to be made. With both sectors innovating and changing rapidly, this in itself is a challenge.
- **This strategy therefore needs to be a living entity that is updated to reflect changes in transport policy and innovation over time.**
- However, we recognise that **action is also needed now** to ensure that the decarbonisation process is able to take place and so **this strategy seeks to identify least regrets investment options** to enable this.

The Local Transport Plan is the place that transport policy & strategy options are explored, which this strategy then seeks to respond to

The West Midlands Combined Authority (WMCA) has a statutory duty to produce and review the local transport plan (LTP) and policies for the area. The WMCA and the 7 Local Authorities then have duties to use their functions to deliver that plan.

5 motives for change have been identified:

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- Sustaining economic success
- Creating a fairer society
- Supporting local communities and places
- Becoming more active
- Tackling the climate emergency



There are some trade offs that are required in developing a new strategy when considering the role of zero emission vehicles, for example, whilst the shift will likely bring significant benefits in air quality and carbon emissions, simply shifting all existing ICE travel to ZEVs does not help address issues such as road safety, congestion and the need to get people to be more active. There are also risks that rapid electrification and the ban on ICEs could worsen some transport inequalities. The LTP will need to try to set how the elements of the transport system can effectively play their part in both decarbonisation and in addressing the other motives for changes. **You can find out more and input to the development of the LTP [here](#), by ‘Reimagining transport in the West Midlands’.**

‘Reimagining Transport in the West Midlands’ identifies the need to switch to zero emission vehicles

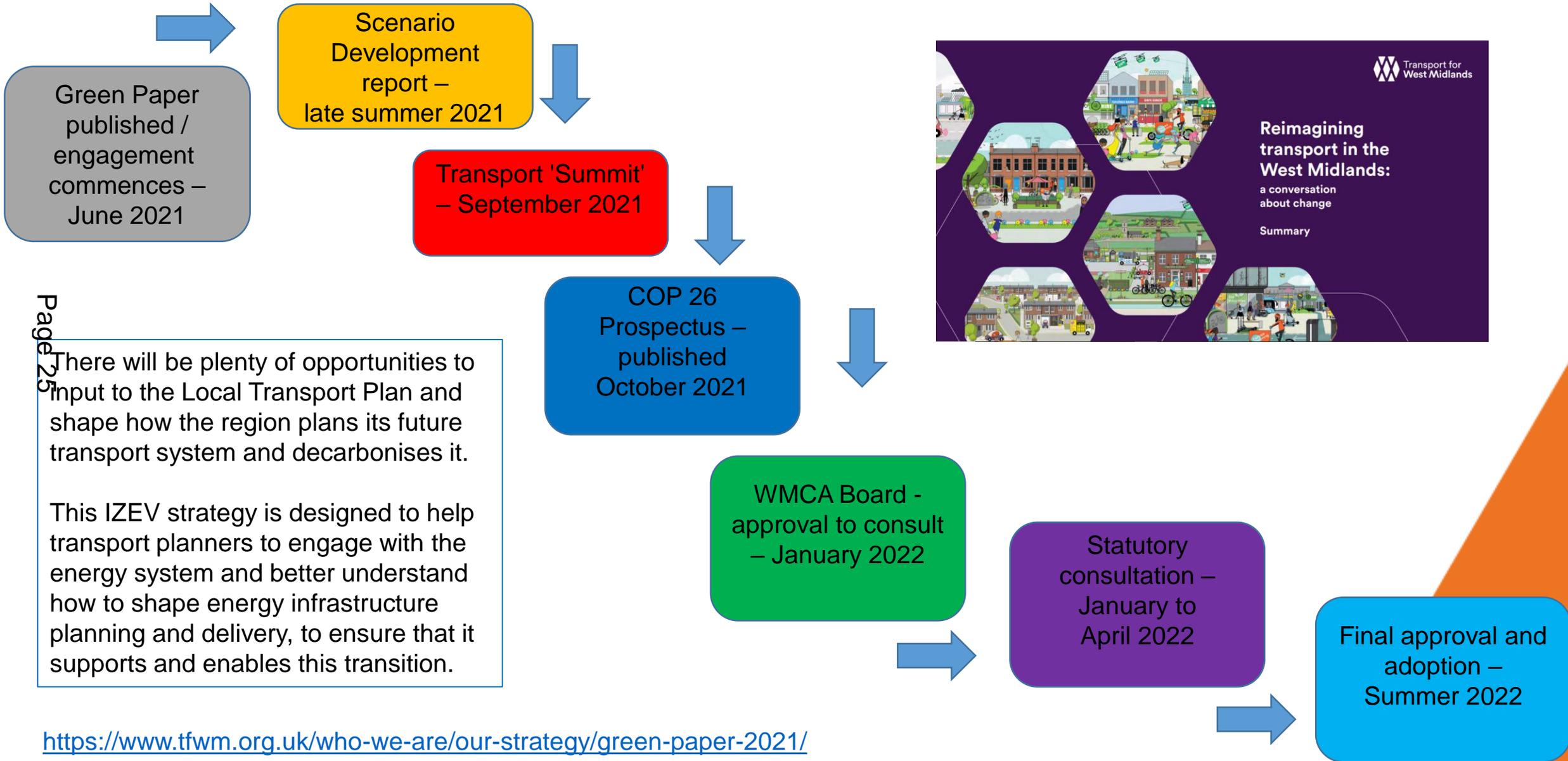
Research commissioned by TfWM suggests that because the switch to zero emission vehicles will take time, in order to achieve our carbon reduction goals, the energy we use for transport in the short term will also need to reduce. There will need to be a significant change in travel behavior and the vehicles used, which will require a mix of actions framed below:

Page 24

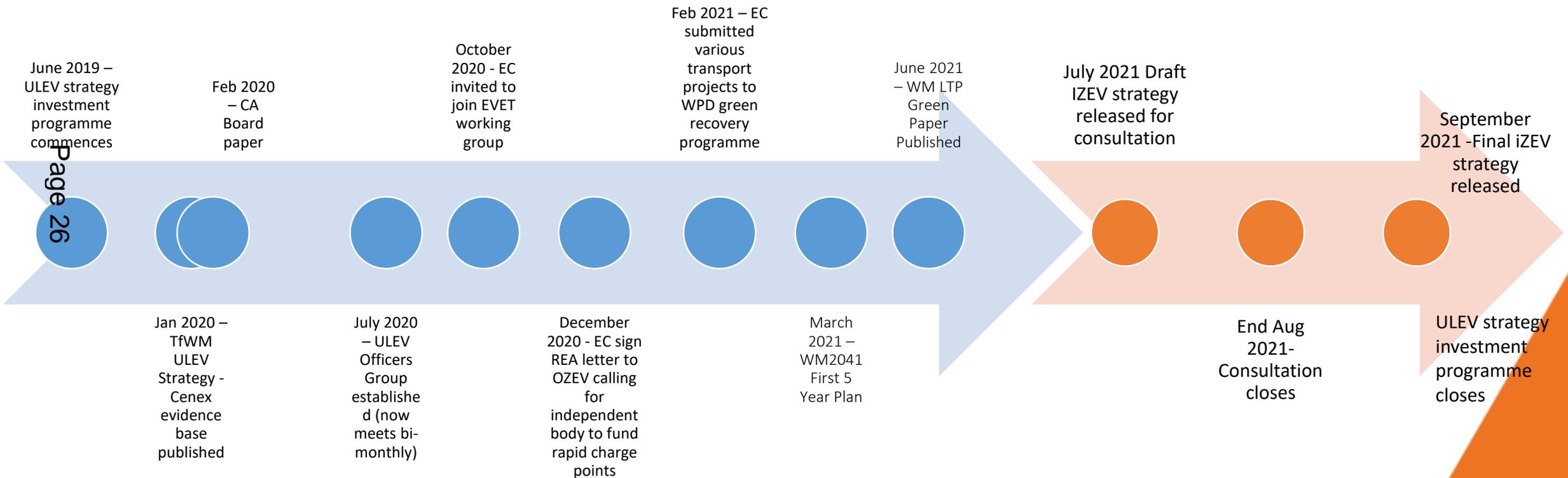
AVOID	SHIFT	IMPROVE
<p>Reductions in the frequency of travel – consolidation of trips or replacement of travel with use of information and communication technologies</p> <p>Changes to where people travel to/from – making shorter journeys and/or to places that are more easily accessed and served by more sustainable modes of travel</p>	<p>Changing the vehicles we use to travel – modal shift to more sustainable modes such as public transport and walking and cycling</p>	<p>Improving the vehicles we use to travel - switching personal and public transport journeys to vehicles that use alternative fuels but use less energy.</p>

Source: <https://www.tfwm.org.uk/media/ekxhr3lk/ltp-summary-final.pdf>

The Local Transport Plan timetable



The following key inputs have been considered in developing the IZEV strategy



This strategy builds on the work of a wide range of experts shaping policy in the West Midlands

Over the past 18 months a range of evidence has been commissioned by various partners across the region which has been used to inform this strategy:

West Midland ULEV strategy report Jan 2020

- Over 10,000 on-street residential chargers needed
- 10-15 ultra-rapid charging hubs for transit/ multiple user case needed

Black Country ULEV strategy report Jul 2020

- Sets 2025 target for public EV chargers
- Commitment to 100% EV for council owned cars and van and installing suitable infrastructure to do so

WMCA Park and Ride EV Strategy March 2021

- 65 TfWM managed Park and Ride Sites
- Could provide charging to commuters and overnight for nearby residents
- Smart charging, battery storage and solar to be considered to mitigate grid connection issues

TfWM

- Atkins work on transport decarbonisation pathways
- WM Local Transport Plan Green Paper
- New WM Local Transport Plan

WMCA Environment team

- WM2041 5 year plan

West Midlands Local Authorities

- Support of the ULEV Officers Working Group

Midlands Energy Hub

- Strategic Outline Case for Ansty Clean Hub
- Identification of 14 more sites in W.Mids for development

Midlands Connect

- Alternative Futures
- Alternative Fuels
- EV Charging infrastructure locational modelling

Please let us know about any other local intelligence that you think could also help to inform this strategy.

Infrastructure requirements

TfWM's ULEV strategy shows the projection of electrical charging infrastructure required to 2040

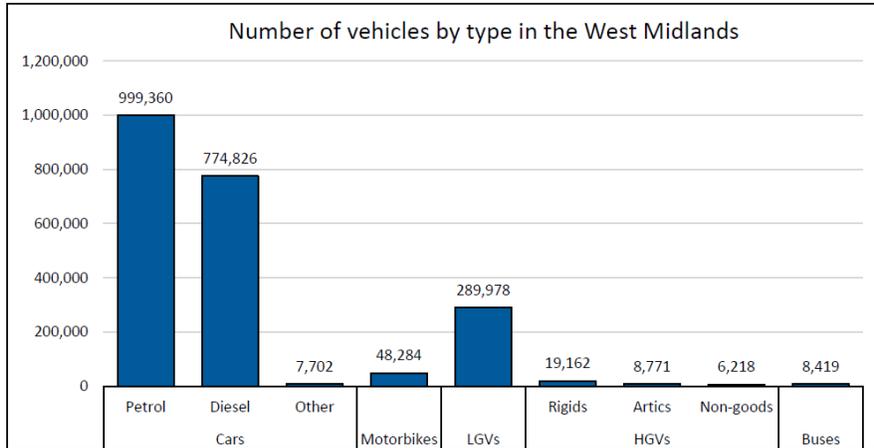
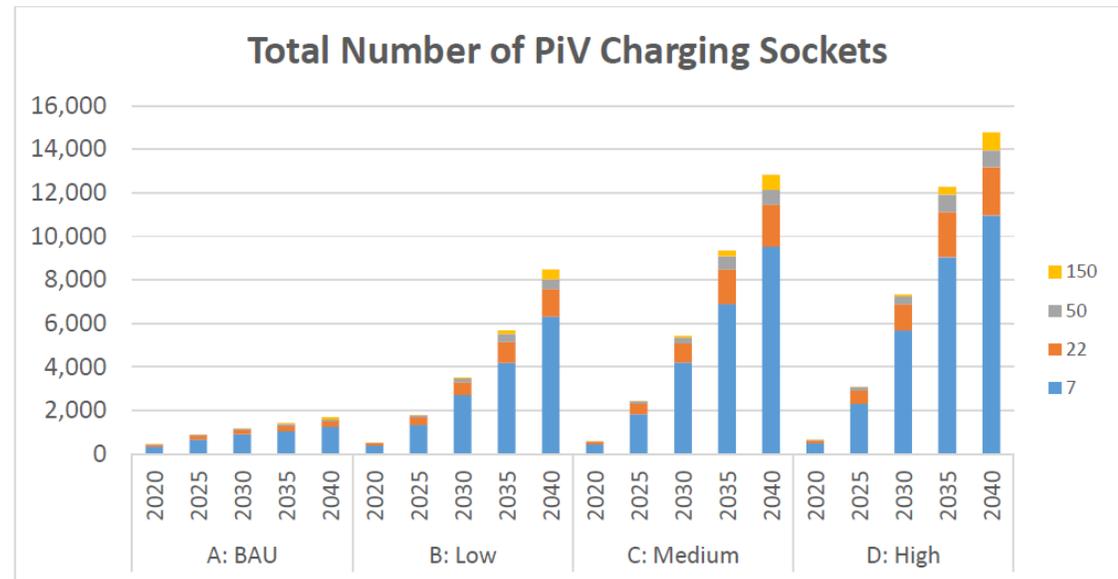


Figure 6: Vehicle parc by vehicle type and fuel



Future requirements** – in terms of types of EV chargers

	Total Vehicles	EVs	% EV
Warwickshire			
North Warwickshire	56,221	135	0.24%
Nuneaton and Bedworth	79,980	138	0.17%
Rugby	69,236	261	0.38%
Stratford-on-Avon	102,232	713	0.70%
Warwick	96,289	408	0.42%
West Midlands (Met County)			
Birmingham	796,070	2,652	0.33%
Coventry	160,143	376	0.23%
Dudley	181,552	417	0.23%
Sandwell	157,601	314	0.20%
Solihull	214,567	1,795	0.84%
Walsall	142,451	275	0.19%
Wolverhampton	127,078	218	0.17%
Total West Midlands	2,183,420	7,702	0.35%
UK	39,364,569	186,386	0.47%

Current position* – in terms of vehicle park and infrastructure

**Based on ICE ban at 2040, trajectory will need to be steeper to meet 2030 target

*Based on 2019 data

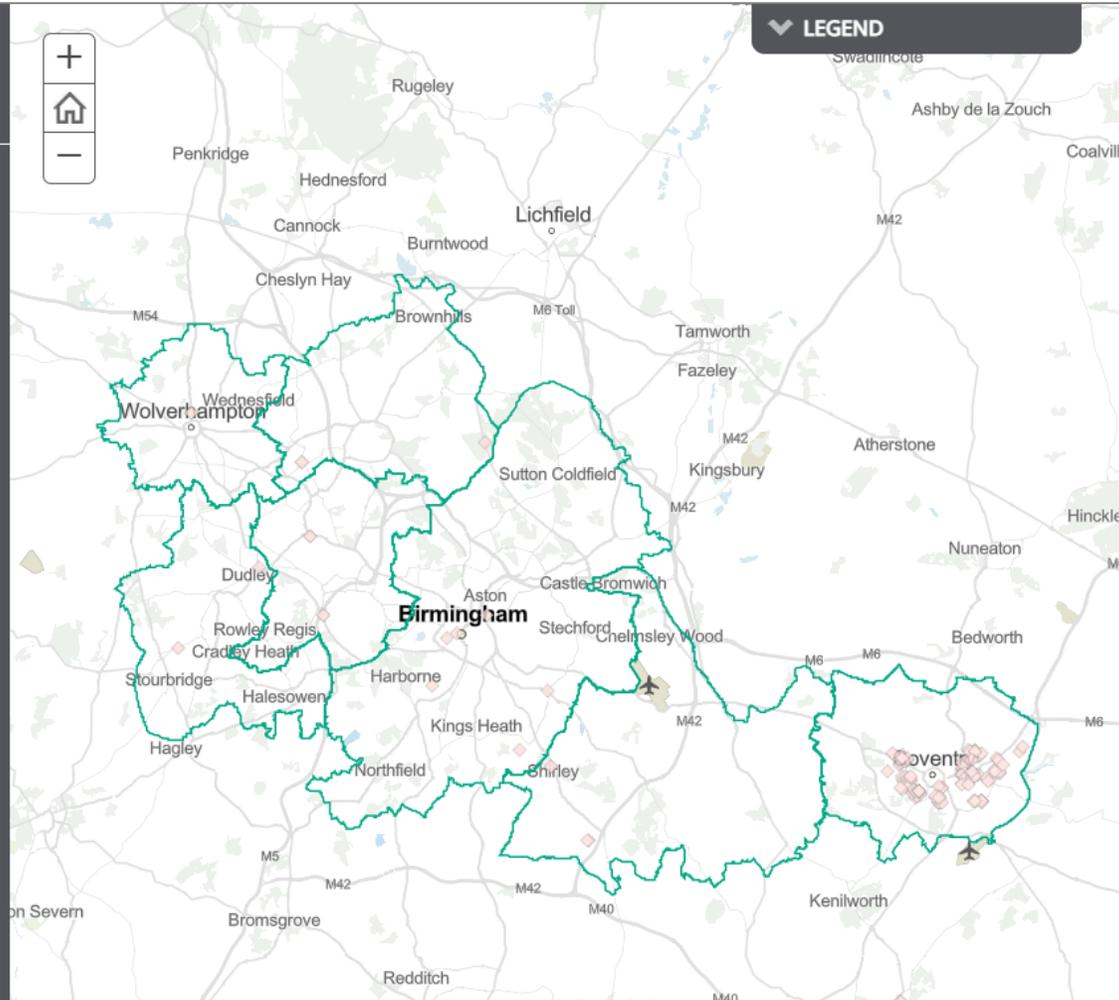
Energy in Transport

7kW Charging Points

In order to allow an equitable transition to Ultra Low Emission Vehicles (ULEVs), charging infrastructure is being rolled out on the public road network with an initial drive for low powered (i.e. slow speed) on-street residential charging.

22kW Charging Points

Destination charging is also being rolled out where facilities such as leisure complexes, super markets and other retail facilities are offering mid-speed charging facilities to entice customers as well as in work places to encourage take up of EVs



Local authorities have already been investing in electric charging facilities across the region



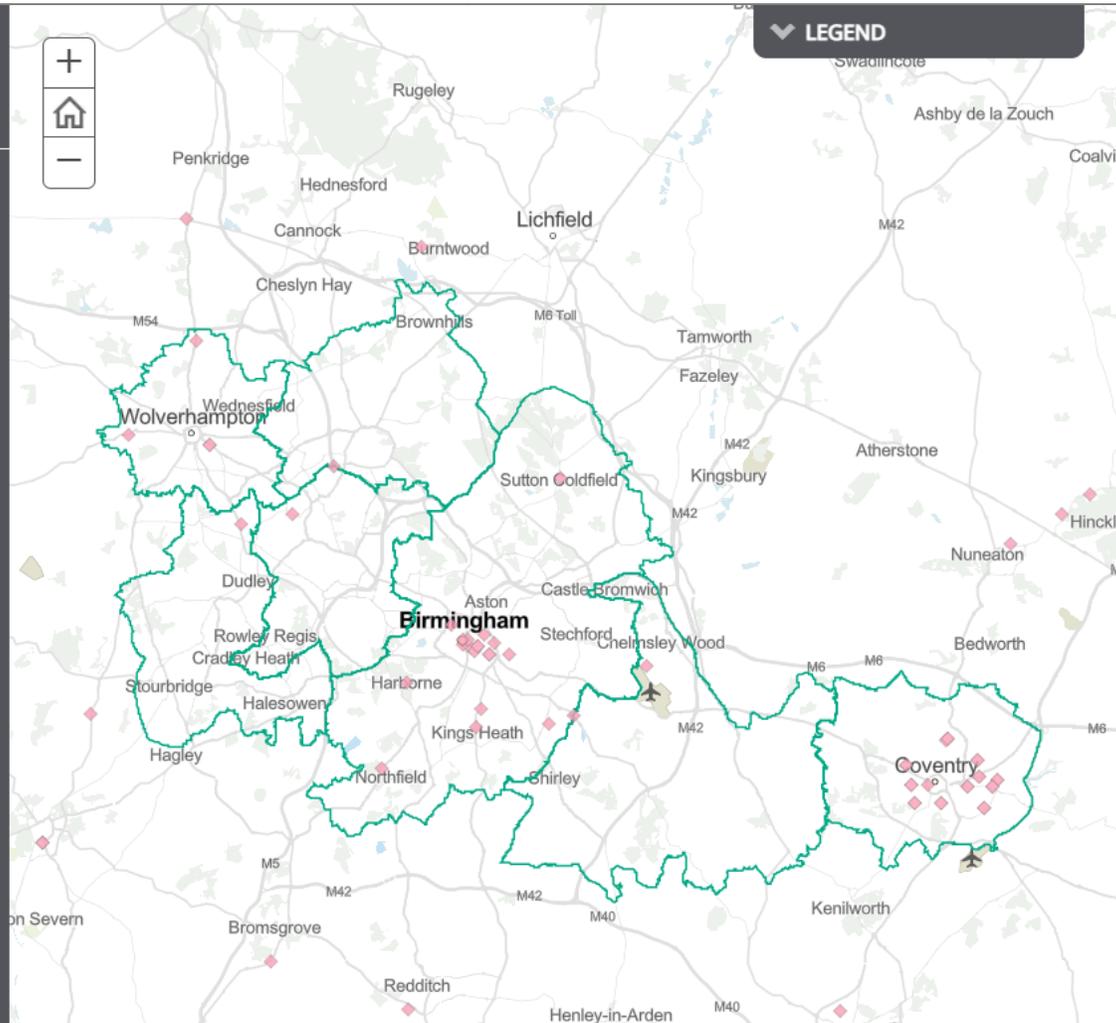
Energy in Transport

22kW Charging Points

Destination charging is also being rolled out where facilities such as leisure complexes, super markets and other retail facilities are offering mid-speed charging facilities to entice customers as well as in work places to encourage take up of EVs

50kW Charging Points

The fastest chargers available in the West Midlands currently are 50kW chargers and these have been installed in some petrol stations or other transit locations but still require a lengthy wait for enough capacity to continue



The private sector have also been investing in electric charging facilities across the region and are continuing to do so where it makes economic sense

ENERGYCAPITAL



Energy in Transport

Key Route Network

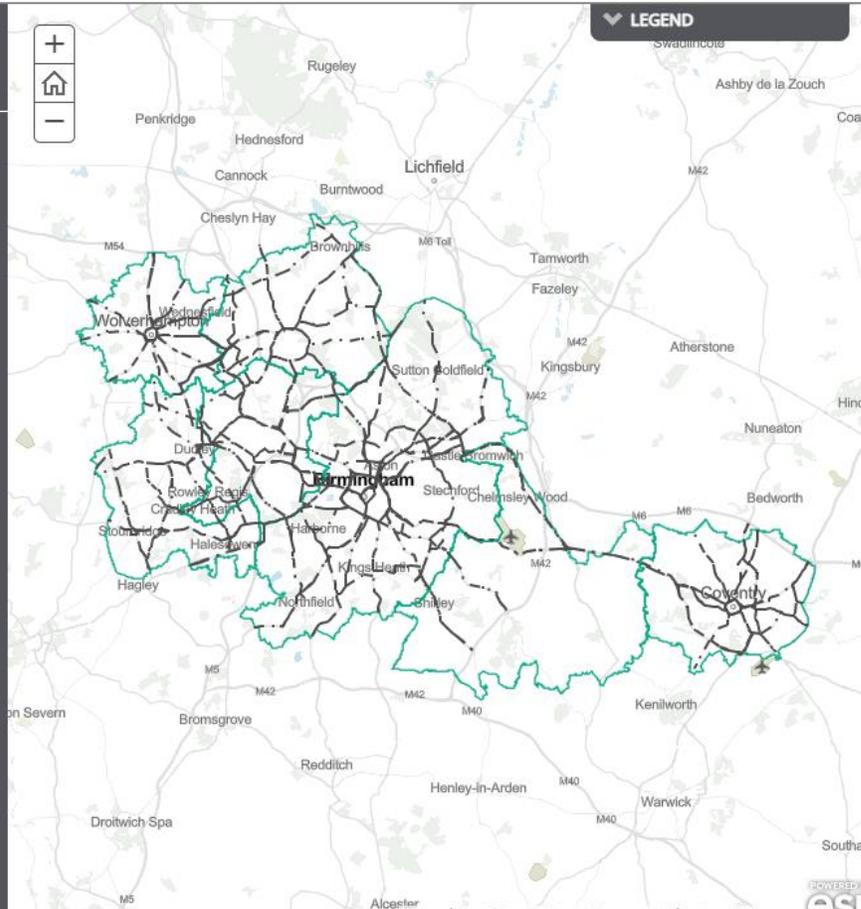
The West Midlands has an extensive key route network allowing private vehicles, distribution and logistics fleets, emergency services and others to traverse the region

7kW Charging Points

In order to allow an equitable transition to Ultra Low Emission Vehicles (ULEVs), charging infrastructure is being rolled out on the public road network with an initial drive for low powered (i.e. slow speed) on-street residential charging.

22kW Charging Points

Destination charging is also being rolled out where facilities such as leisure complexes, super markets and other retail facilities are



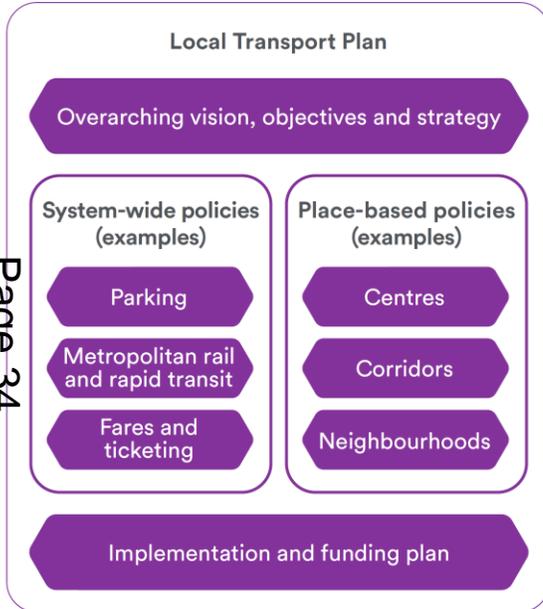
West Midlands Combined Authority	
WMCA Board	
Date	14 February 2020
Report title	Electric Vehicle Charging and Enabling Energy Infrastructure: A West Midlands Approach
Portfolio Lead	Environment, Energy & HS2 - Councillor Ian Courts
Accountable Chief Executive	Deborah Cadman, West Midlands Combined Authority email: deborah.cadman@wmca.org.uk tel: (0121) 214 7552
Accountable Employee	Ian Martin, Director of Investment & Commercial Activities email: ian.martin@wmca.org.uk tel: 07921 105435 Cheryl Hiles, Director, Energy Capital email: cheryl.hiles@wmca.org.uk tel: 07814 972921 Kate Ashworth, Energy Infrastructure Lead, Energy Capital email: kate.ashworth@wmca.org.uk tel: 07469 916673
Report has been considered by	Programme Board - 31 January 2020

<https://governance.wmca.org.uk/documents/s3953/Report.pdf>

A gap was identified by the WMCA Board in the provision of ultra rapid charging services, which can have a significant impact on the electrical network. With current demand for these services currently fairly low, private sector investment is not yet widespread, but without the provision of adequate infrastructure, the take up of zero emission vehicles will not be as rapid as needed to meet our carbon targets.

A range of local plans and projects are being developed, which this strategy is built upon

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Consultation Question:
What insight could you provide from local initiatives and plans that should be reflected in this strategy?

Some current projects include:

- Coventry all electric bus town
- Sprint development including pantograph charging
- Metro extension(s)
- Zero Emission Mobility hubs
- Zero Emission Bus Regional Area (ZEBRA)



Credit: Tyseley Energy Park



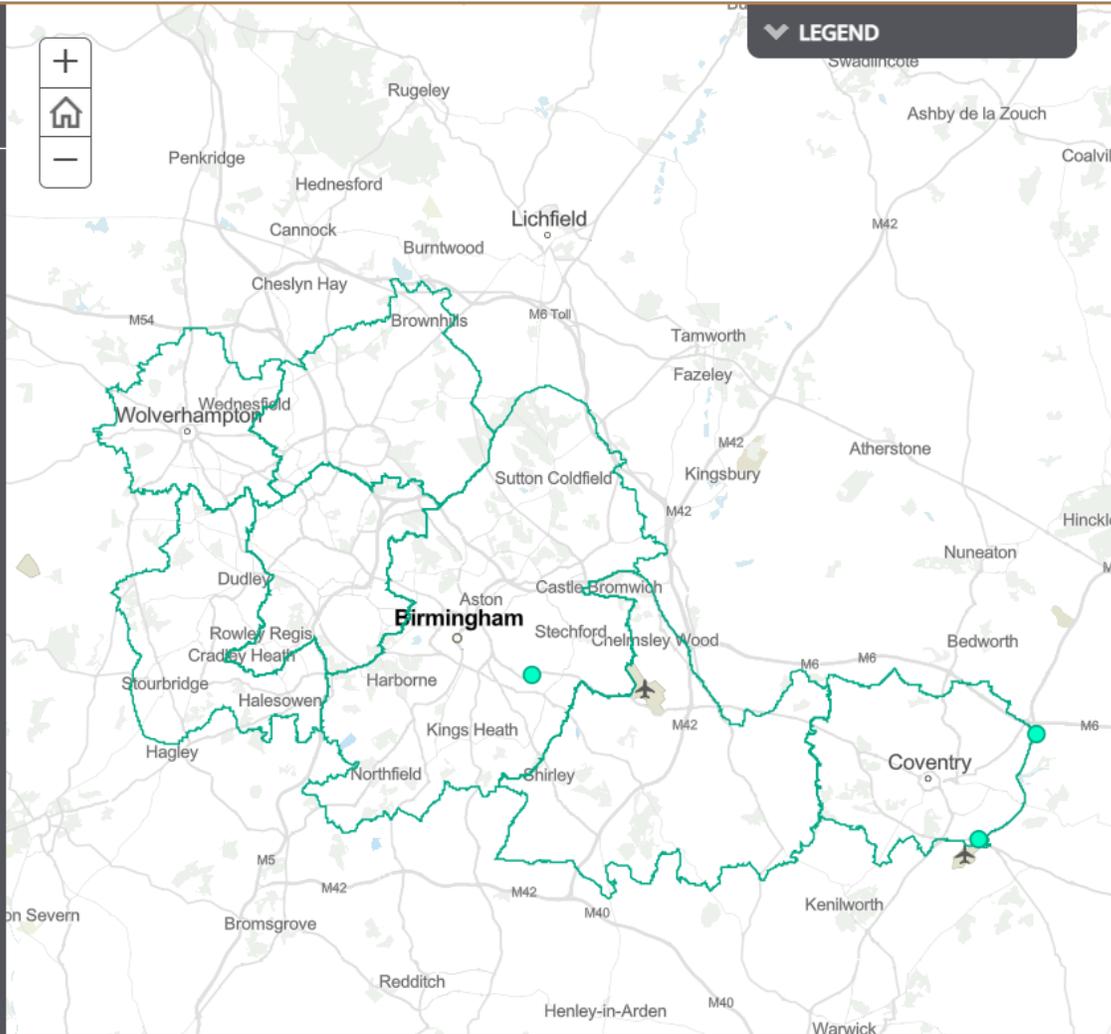
Energy in Transport

Potential New Hydrogen
Stations

Some of the ultra-rapid charging sites may also offer alternative fuels such as hydrogen which may offer significant benefits to certain sectors such as haulage. These sites will still need to utilise significant connections to the underlying energy infrastructure

Bus Opportunity Chargers

High energy draws are not just limited to strategic hubs. Recent research commissioned by TfWM and delivered by Ricardo shows that the bus networks may need a series of on route high power connections in order to fully electrify their routes



There are also far fewer hydrogen refuelling facilities currently being developed due to uncertainty around the availability of 'Green' hydrogen and a variety of other factors

Infrastructure for hydrogen and alternative fuels

Research undertaken by Midlands Connect highlighted several challenges relating to the adoption of alternative fuel vehicles.

Amongst fleet operators, the three most frequently cited barriers were:

- a lack of recharging and refuelling infrastructure
- the upfront cost of vehicle acquisition
- lack of vehicle availability.

Amongst vehicle and infrastructure suppliers, the top three barriers to alternative fuel uptake were:

- upfront vehicle cost
- uncertainty over residual values
- lack of recharging and refuelling infrastructure, with infrastructure availability being constrained by access to sites of the appropriate size and location, at reasonable costs. It is challenging for suppliers to find suitable sites, which are near motorways and the strategic road network, which have enough space for large vehicles, including turning circles

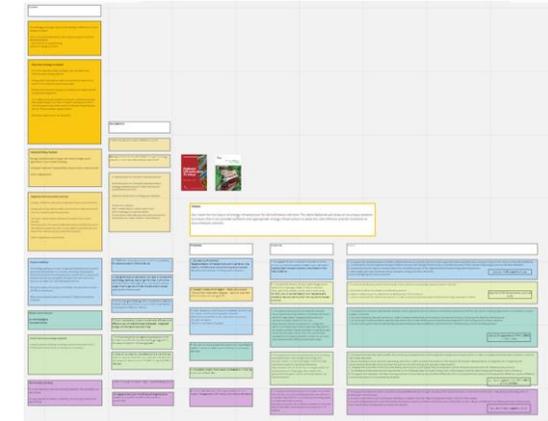
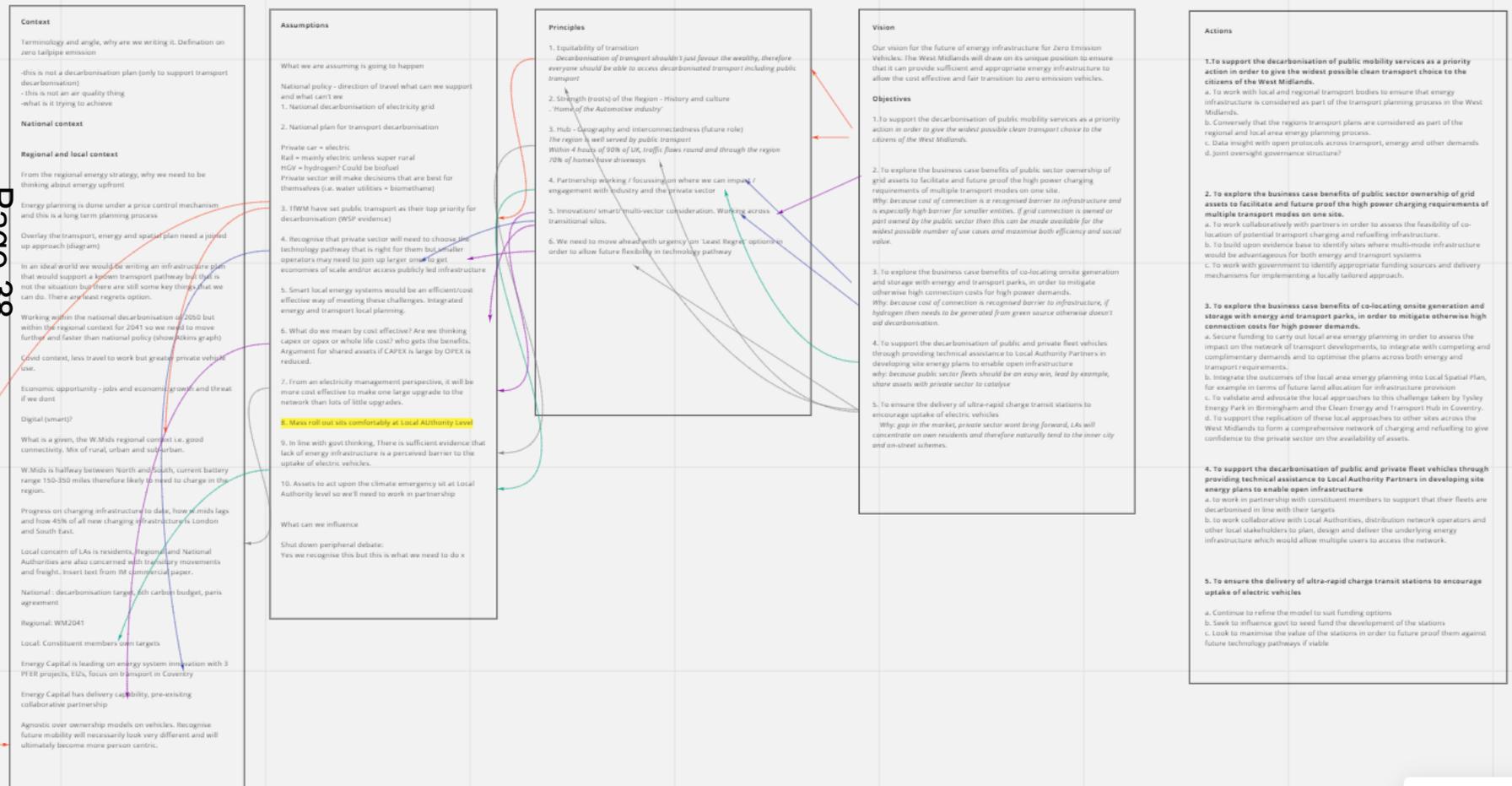
The need for public sector intervention to kickstart demand by investing in infrastructure and interventions that better enable and encourage operators to change or convert their fleet, was very clear. Overall, their findings suggest that a regional public sector organisation working in partnership with Local Authorities is well placed to define and implement a consistent approach regarding alternative fuels across the region.

<https://committees.parliament.uk/writtenevidence/22800/pdf/>

Our strategy and approach

We have considered the energy infrastructure implications of many of the issues raised over the last 12 months and identified some key threads

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We have set out the IZEV strategy
under the following headings

Why this strategy is needed

The national context

Local and regional
opportunities

The impact of
innovation in
Future Mobility

The impact of
innovation in
Smart local
energy systems

Market
interventions
that are needed

Partnership
working
solutions

Our IZEV strategy vision

The West Midlands will draw on its **special circumstances** to ensure that it can provide **sufficient and appropriate energy infrastructure** to allow the **cost effective** and **fair transition** to zero emission transport options by 2041.

Consultation Question:

Do you agree with this vision?

How do we ensure cost effectiveness and equity?

There are a number of opportunities presented by the National Context

- The transition to zero emission vehicles is being driven nationally
- Market regulation and Government incentivisation is taking place to which the industry is responding
- However, barriers are also being identified, including the provision of infrastructure to enable the transition, with a lack of charging points, network capacity and alternative fuelling stations, which Government is looking to local areas to address
- Funding is being made available to address some of these barriers and the West Midlands needs to position to **secure this funding**
- The development of a new industry and the digitalisation of mobility as a whole, offers significant opportunities for **economic growth**

Relevant policy documents for reference:

Clean Growth Strategy:

<https://www.gov.uk/government/publications/clean-growth-strategy>

Build Back Better: Our Plan for Growth

<https://www.gov.uk/government/publications/build-back-better-our-plan-for-growth>

The Ten Point Plan for a Green Industrial Revolution (Point 4: Accelerating the shift to zero emission vehicles and Point 6: Driving the growth of low carbon hydrogen)

<https://www.gov.uk/government/publications/the-ten-point-plan-for-a-green-industrial-revolution/title>

Decarbonising Transport: A Better, Greener Britain

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1002285/decarbonising-transport-a-better-greener-britain.pdf

Energy White Paper

<https://www.gov.uk/government/publications/energy-white-paper-powering-our-net-zero-future>

National Infrastructure Strategy

<https://www.gov.uk/government/publications/national-infrastructure-strategy>

Reducing emissions from road transport: Road to Zero Strategy

<https://www.gov.uk/government/publications/reducing-emissions-from-road-transport-road-to-zero-strategy>

Government vision for the rapid chargepoint network in England

<https://www.gov.uk/government/publications/government-vision-for-the-rapid-chargepoint-network-in-england>

Digital, data and technology strategy: 2021-2024

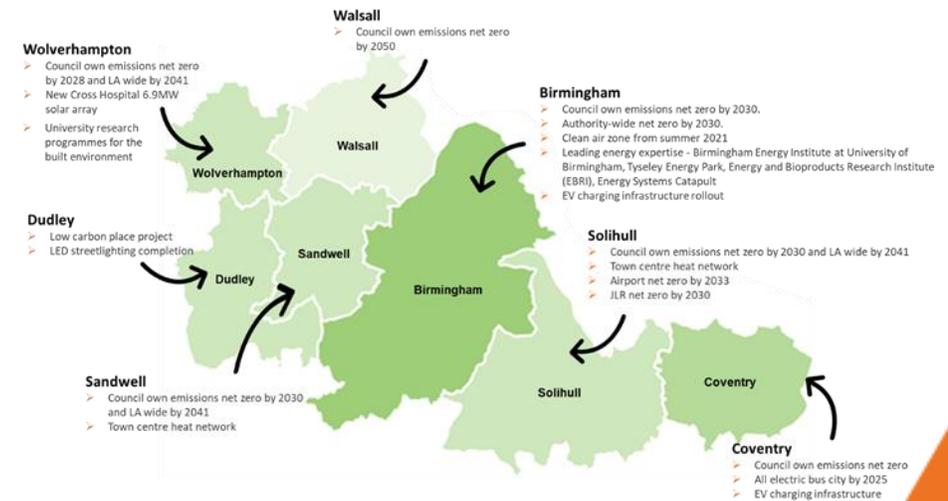
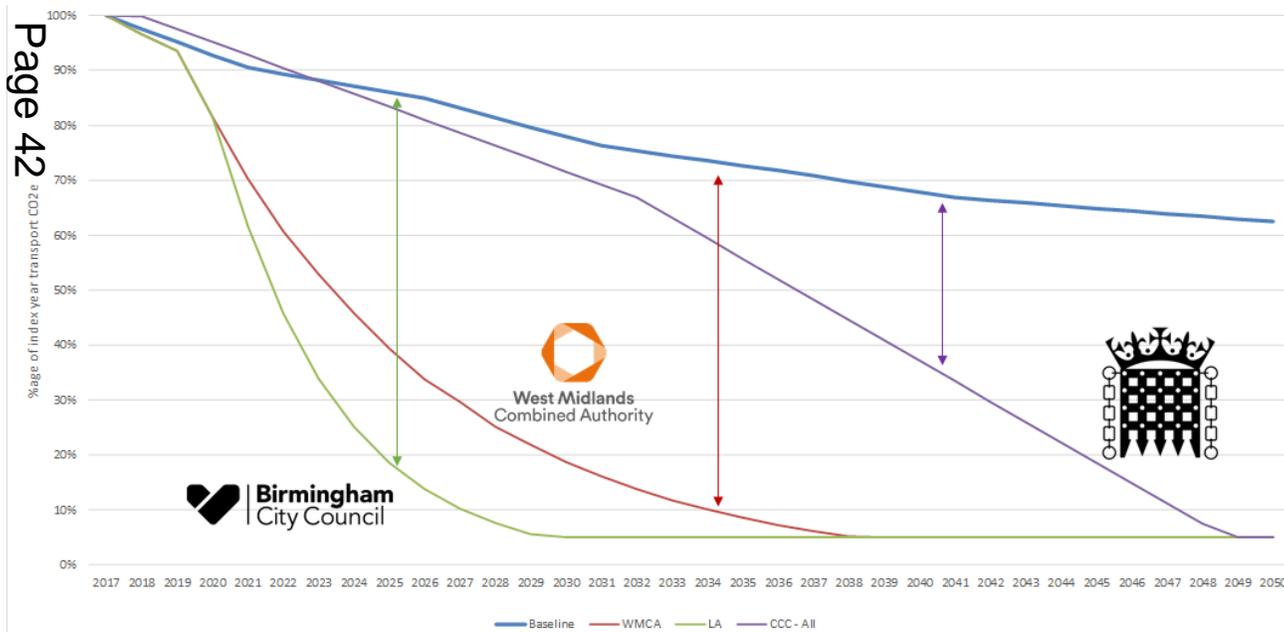
<https://www.gov.uk/government/publications/digital-data-and-technology-strategy-2021-to-2024>

We also recognise that we must be proactive to achieve local targets

Timing

The region has set a target of achieving net zero by 2041 and some local authorities within the region, including Birmingham, have aspirations to move even faster. We must therefore take action locally, as if not, the national trajectory shows that we will fail to achieve these goals.

Comparison of emission trajectories against targets (transport)



Source: #WM2041

Source: Atkins analysis of transport decarbonisation commissioned by TfWM 2020

Key opportunities presented by local and regional circumstances

Consultation Question:

Are there any other circumstances that are special to the West Midlands that should shape this strategy?

People and Place:

- The West Midlands' position at the heart of the UK puts it in a competitive location in terms of connectivity; at the centre of the UK's road and rail networks including the new HS2 line. 90% of the UK population is within 4 hours travel time of the region and traffic flows both round and through the region, which acts as a transport interchange due to its location.
- The region has a tradition of car use, being home to the automotive sector, with 70% of homes having driveways which is above the national average, an important component in enabling the switch to private electric vehicles. However, there is a need to look at significant behaviour change away from traditional travel behaviours, particularly with regards to private car use.
- The way we think about and therefore plan and provide for accessibility and mobility could change. The West Midlands already has a good public transport network and in particular the bus will continue to be a key focus of transport strategy in the region. Traditional bus services could also be supplemented with the provision of shared transport such as Demand Responsive Transport. Other emerging future mobility options such as micro mobility could start to play a critical role in meeting personal mobility needs. This growth can be stimulated by the public sector investment if the right market conditions are created.
- What is right for some areas will not be right for others, a range of factors including socio-economic, demographic and spatial factors influence the viability of transport and energy solutions. The way that the transport system is planned and managed also affects our ability to deliver inclusive growth. It is very important for the West Midlands that no one is left behind in the transition to net zero. TfWM are currently reviewing the future transport needs of the region through the development of the Local Transport Plan. This includes thinking beyond just mobility and considering all aspects of accessibility.
- The region has already been successful in recent years in securing public and private sector investment to support the decarbonisation of bus fleets and the wider transport system which provides a strong foundation.
- The West Midlands, as a landlocked region and will remain a net importer of energy, meaning that opportunities to manage when we need to draw down energy from the grid through energy storage and demand management will be hugely important to the region and could offer significant economic growth potential.

Key opportunities presented by local and regional circumstances

Conclusions:

- The region should consider its role within the national, as well as the local context, which presents opportunities to plan for infrastructure to support the national market that could then help stimulate the local market
- The energy needed to shift public transport to net zero is significant, so the investment that will be necessary by the public sector could also act as an enabler for the private sector and stimulate new business opportunities for shared net zero transport services in the region
- The opportunity presented by the potential for vehicle to grid services, energy storage and demand management could be of significant value to the West Midlands as a net importer of energy

Innovation context: Future Mobility

Transport is constantly changing and new services are continually emerging. There is a huge amount of innovation taking place in the transport sector to enable cleaner, more sustainable, more accessible transport options, which will impact upon the energy infrastructure needs of the region.

This includes:

- Mobility as a Service products and services to reduce demand for private car journeys
- On demand, door to door transport services
- Strategic and local public charging/green fuel infrastructure to enable transition to cleaner private vehicles and public transport fleets
- Development of a Mobility Hub network to provide more sustainable transport options for local communities
- A West Midlands wide approach to the development of parcel lockers in communities, to offset rapid growth of home delivery mileage

The inherent challenge is:

“A lack of understanding of anticipated energy demand; how that will manifest spatially, and the ability and preparedness of energy infrastructure providers to ensure that the energy system can respond effectively.”

Innovation context: Future Mobility

Conclusions:

- This strategy must exist as a live document, continually updated as transport plans evolve
- New mobility services should be supported by the significant investment by the public sector into new infrastructure
- The development of mobility hubs offers an opportunity to provide multiple services from a single energy infrastructure investment

Innovation context: Smart Local Energy Systems

Siloes in energy infrastructure are beginning to be broken, as the benefits of digitalisation and integration mean the systems can be managed in a new, more efficient way.

- In a local context, decarbonisation requires planning and delivery across vectors including energy systems, transport systems and wider spatial planning, including housing provision
- These systems are currently managed in isolation, with limited consultation across vectors, leading to sub-optimal infrastructure planning. For example, because there are clear plans in place nationally to decarbonise electricity, electrification is currently perceived as the lowest regrets option, which will remain the case until a clear process for the decarbonisation of gas and the associated costs of this are set out. The result is that the widespread electrification of transport and heating systems is placing significant demands on the electrical network and grid
- It is now recognised that the impacts of this could be mitigated by better data and better planning locally
- A Smart Local Energy System, such as those being developed in the West Midlands under the Prospering from the Energy Revolution (PfER) programme sponsored by Innovate UK, would allow these systems to be overlaid and considered together, leading to reduced cost of infrastructure, whilst also minimising disruption, which is why this is something that the region is championing.

Innovation context: Smart Local Energy Systems

Conclusions:

The potential energy systems opportunities afforded by the transition to zero emission vehicles could be significant for the West Midlands. These include:

- Public sector investment in new, large energy network connections could offer opportunities for shared connections that could stimulate and enable new zero emission vehicle services to be established
- The West Midlands, as a net importer of energy, will require myriad of small scale distributed assets in order to increase system efficiency and reduce overall energy costs, which if planned effectively, transport could be a part of
- Vehicle to Grid deployment could play a role in energy system balancing in the future. The scale of this opportunity should be further explored, as the technology develops.

Market interventions

There are some aspects of the current market which are not supporting the decarbonisation transition and it is here that the public sector can take action nationally and / or locally to make a real difference. However, the market is changing so rapidly that it is important to invest any public funds effectively to ensure they are not wasted, so a clear case for investment will be needed.

For example, with regards to electrification:

- OZEV has identified the lack of charging infrastructure as a barrier to people switching to electric vehicles but the market will not invest in the provision of widespread charging infrastructure until they are confident that there will be sufficient demand. [Public sector grants](#) are being made available to address this issue.
- The current charging regime for electricity grid connections which requires the next in the queue to pay for grid infrastructure upgrades is a clear market failure in the context of decarbonisation. This may be addressed by the Charging Review or may require consideration of how the public sector can intervene to spread costs more equitably and invest ahead of need.

Collaboration and partnership working is vital

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- It is recognised that infrastructure to support transport decarbonisation is multi-faceted and that the power and influence to affect change sits with different actors at a range of different levels.
- The key purpose of this strategy is to pull together and support the actors that can collectively bring about the necessary investments required.

Consultation Question:

Which bodies do you think should own the actions identified in this strategy and why?

“Local Authorities are leading on the delivery of on-street charging solutions because:

- Powers to affect change to roadways sit at this level
- Knowledge of local requirements
- National funding to expedite scheme is therefore also targeted at this group
- Electrical demands of this type of charging tend to be much lower and therefore have less requirement for strategic planning in order to accommodate the infrastructure.”

TfWM ULEV Officers Working Group

Assumptions underpinning this strategy



Energy

- Decarbonisation of the electricity grid will be driven nationally and achieved between 2040 and 2050
- Hydrogen supply will require on-site renewable energy generation in order to ensure that it is a decarbonised option
- The national pace of change being driven through policy and regulation is insufficient to enable ambitions set locally.



Future Mobility

- TfWM will develop a Local Transport Plan with local authorities and partners which will set out how through a mix of AVOID/SHIFT/IMPROVE options the transport system can be decarbonised in the fastest possible time.
- The private sector will choose the technology pathway that is right for them, but smaller operators may need to join up with larger ones to get economies of scale and/or access public infrastructure
- The lack of energy infrastructure is a perceived barrier to the uptake of electric vehicles.



Smart Local Area Planning

- Smart local energy systems would provide value and enable more integrated energy and transport planning and delivery.
- It would be more cost effective to make one large upgrade to an electricity substation than lots of smaller upgrades.



Partnership

- Most levers to act upon the climate emergency sit at Local Authority level, but these remain fairly limited. Some actions may be usefully undertaken at Combined Authority level and others at a pan regional or national level.
- Mass roll out of new charging capacity sits comfortably at Local Authority Level, although its currently really hard for LAs to find cost effective sites due to lack of transparency on hyper-localised grid capacity
- LEPS could be in a good position to provide engagement with the private sector with a focus on economic growth (subject to the LEP review)

Principles underpinning this strategy

1. That the transition to zero emission vehicles in the West Midlands should be fair and equitable

WMCA core principles & #WM2041 just transition statement

2. Innovation will continue and industry will deliver technological advancements

Strategic Economic Plan (SEP)

3. The West Midlands development plans and resulting transport strategy will shape/ inform our approach to delivery

Local Transport Plan (LTP)

4. We need to move with urgency on 'least regrets' decarbonisation options

#WM2041

5. Local area requirements can stimulate innovative multi-vector solutions

Regional Energy Strategy

6. Effective partnership working is key to delivery

WMCA core principles

Our Strategy

The key components of our strategy are to:

- Bridge the gap between the parties **planning infrastructure** in the region to ensure they are using the same information to inform each of their planning and investment processes
- Utilise the **public sector's planned investment in transport services** to provide infrastructure that will act as an enabler for the private sector and stimulate new business opportunities in the region through the provision of charging facilities for mobility hubs and transport interchanges
- Use our geographic **position** to plan and deliver infrastructure to support the national market which will help to stimulate the local market, including providing refuelling options for freight vehicles

Our approach

To understand the factors that will drive and shape the demand for zero emission vehicle infrastructure across the region



Through collaboration with partners, to identify the key issues and opportunities where collaborative action can add value



To develop an action plan



To show how integrated planning and targeted investment by the public sector can stimulate and enable change, and support the achievement of better outcomes

Opportunities for action

Planning infrastructure

Public sector investment

Positioning



1. Planning infrastructure

These actions are centred around continual improvement of communication between those who make energy infrastructure investments and those who plan the region's transport infrastructure, to support the achievement of net zero objectives.

1: Planning Infrastructure

Aim: To bridge the gap between the parties **planning infrastructure** in the region to ensure they are using the same information to inform each of their planning and investment processes

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A1. Establish joint oversight of net zero infrastructure planning across the region to facilitate collaboration and effective planning between spatial planning, transport planning and energy system planning by:

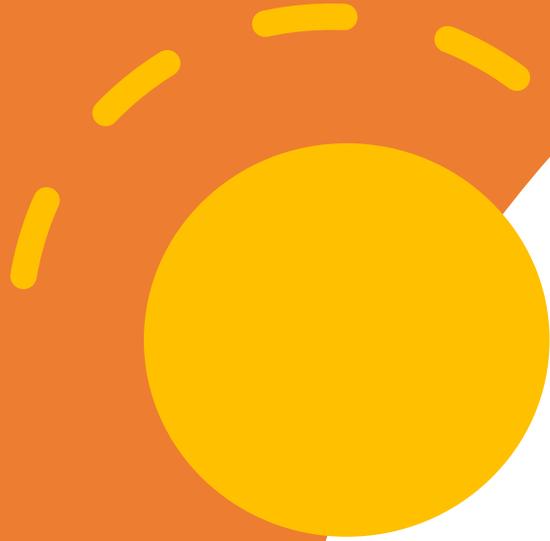
- Including zero emission vehicle infrastructure planning and delivery reporting into the new Net Zero Infrastructure Delivery Board's remit
- Supporting our regional Distribution Network Operators and Local Authorities to achieve deeper and more effective engagement to inform business planning, spatial planning and investment planning processes
- Supporting transport planners to engage with energy infrastructure planning process to ensure their needs are considered

A2. Enable data and modelling sharing through open data protocols across transport, energy and other demands

A3. Advising on the energy impacts of spatial planning policy



Consultation Question:
What other actions should be included here and who should lead on them?



2. Public sector investment

These actions use the public sector investment being made into transport decarbonisation, as a driver to explore opportunities to stimulate wider investment to support the net zero transition, through targeted business case development.

2: Public sector investment

B. To explore the business case benefits of public sector sponsorship of grid connections to facilitate and future proof the high power charging requirements of multiple transport modes on one site.

B1. Assess the feasibility of co-location of transport charging and refuelling infrastructure

B2. Build upon existing evidence to identify sites where multi-modal infrastructure, such a mobility hub or local transport interchanges, would be advantageous for both the energy and transport systems

B3. Work with Local Authorities to understand and develop a range of power provision options such as private wires were applicable

B4. Analyse opportunities where transport assets can become energy assets by providing storage and flexibility services through V2G

B5. Support West Midlands Local Authorities to innovate and access the forthcoming Local Electric Vehicle Infrastructure Fund to deliver local solutions.



Consultation Question:
What other actions should be included here and who should lead on them?

2: Public sector investment

C. To explore the business case benefits of co-locating onsite generation and storage with energy and transport parks, in order to mitigate otherwise high connection costs for high power demands.

C1. Secure funding to carry out local area energy planning in order to assess the impact on the network of transport developments, to integrate with competing and complimentary demands and to optimise the plans across both energy and transport requirements.

C2. Work with Local Planning Authorities to integrate the outcomes of the local area energy planning into Local Spatial Plans, for example in terms of future land allocation for infrastructure provision

C3. Continue to validate and advocate the local approaches to this challenge taken by innovators, including Tyseley Energy Park in Birmingham and the Clean Energy and Transport Hub in Coventry.

C4. Support the replication of these local approaches to other sites across the West Midlands, to form a comprehensive network of charging and refuelling, to give confidence to the private sector on the availability of assets.



Consultation Question:
What other actions should be included here and who should lead on them?

2: Public sector investment

D. To support Local Authorities to demonstrate a leadership position in decarbonising their own fleet to trigger or help unlock investment in corresponding private sector fleets

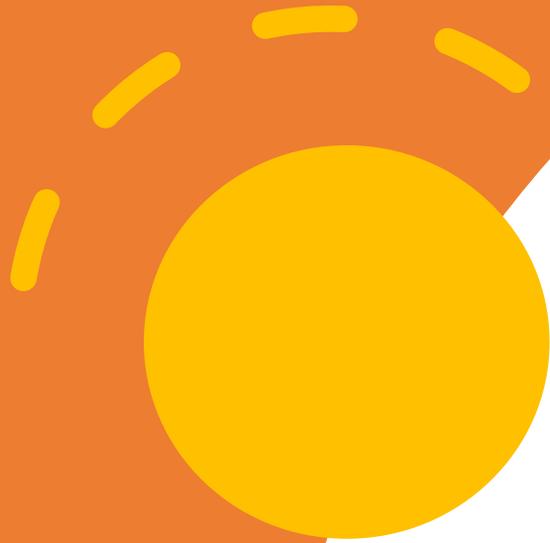
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D1. Work in partnership with Local Authorities and the Midlands Energy Hub to ensure local authorities are able to shift their fleets to zero emission fleets, for example including by exploring the business case for smart charging and sharing the costs of network connections or infrastructure development

D2. Support Local Authorities to work with Distribution Network Operators and other local stakeholders to optimise the value of necessary network upgrades by considering the potential for adjacent schemes and their energy needs. Site Energy Feasibility Studies should consider demand and generation opportunities outside of the immediate site boundaries such as the opportunity to take low carbon electricity via a private wire from a local PV system or Energy from Waste plant. The feasibility study should consider demand and generation profiles in order to design a fully optimised local energy system.



Consultation Question:
What other actions should be included here and who should lead on them?



3. Positioning

These actions harness the value of the geographic position of the West Midlands, which presents opportunities to plan for infrastructure to support the national market that could then help to stimulate the local market.

3: Capitalising on our position

E. To ensure the delivery of ultra-rapid charge transit stations to encourage uptake of electric vehicles, harnessing funding for charging provision on the strategic road network which also provides ultra-rapid services for local citizens and fleets

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E1. To continue to refine the commercial model for the above to align with funding and finance options

E2. To seek to government seed funding for the development of these transit stations

E3. To look to maximise the value of transit stations in order to future proof them against future technology pathways



Consultation Question:
What other actions should be included here and who should lead on them?

3: Capitalising on our position

F. To harness opportunities to enhance the provision of charging infrastructure presented by key events in the region such as the Commonwealth Games.

F1. Work with host local authorities and event organisers to minimise the carbon impact of the Commonwealth Games transportation and ensure a valuable infrastructure legacy for the region.



Consultation Question:

What other actions should be included here and who should lead on them?

3: Capitalising on our position

G. To ensure that the West Midlands does not preclude alternative fuel solutions for transport by considering technology pathway agnostic infrastructure investments

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G1. Take the outcomes of the Governments upcoming hydrogen strategy and look for opportunities to bring forward investments to support this sector appropriate to the West Midlands

G2. Support demonstrator projects which explore the feasibility of pan-regional charging and refuelling options for a range of vehicles

G3. Recognise the wider national challenges of decarbonising heavy goods and other large vehicles and consider what infrastructure might be necessary in the region to support the use of alternative fuels to meet this challenge

G4. Continue to work with partners on understanding the enablers and barriers of a new hydrogen and other alternative fuel economy and how the available resource could be best utilised



Consultation Question:
What other actions should be included here and who should lead on them?

Summary of actions

Partnership working will be key to the delivery of the IZEV strategy. There are important roles for those in the transport and energy sectors and at all geographic levels. The main aim of this strategy is to facilitate this collaboration.

Summary of actions

THEME	REF	Summary	Owner and key partners	By When
1. Planning infrastructure	A1	Develop and test approach to integrated planning across energy and transport through Net Zero Infrastructure Delivery Board collaboration	Energy Capital, with TfWM	Establish NZIDB summer 2021
	A2	Establish open data protocols and shared data platforms across energy and transport planning	OfGEM, Western Power Distribution, Cadent and TfWM with Energy Capital, WMCA	Through the NZIDB during 2021
	A3	Advise on energy impact of spatial planning policy	Midlands Energy Hub, MHCLG, BEIS and Energy Capital, WMCA	Ongoing as spatial plans are updated
2. Public Sector Investment	B1	Feasibility of co-location of charging and refuelling facilities	Local Authority Partners with Energy Capital, WMCA	March 2022
	B2	Site identification with co-location opportunities	Local Authority Partners with Energy Capital, WMCA	March 2022
	B3	Power Provision Options Appraisal	Energy Capital, WMCA	Dependant of co-location opportunities identified
	B4	Identify V2G and other energy system support opportunities	Innovation project with Energy Capital, WMCA	Dependant of co-location opportunities identified
	B5	Lead or support LA partners to bid for funding through OZEV LEVI fund	Energy Capital, WMCA with Investment Team	Dependant of co-location opportunities identified

Summary of actions

THEME	REF	Summary	Owner and key partners	By When
2. Public Sector Investment	C1	Secure funding to carry out Local Area Energy Plans (LAEP)	Energy Capital, WMCA with Local Authorities	December 2021
	C2	Align LAEP with Spatial Plan	LA partners with Energy Capital, WMCA, Housing and Regeneration team & Midlands Energy Hub	As spatial plans are refreshed
	C3	Validate and advocate demonstrator approaches taken at Tyseley Energy Park (TEP) and Ansty Clean Energy Hub	Energy Capital, WMCA with TEP and Coventry CC	March 2022
	C4	Look to replicate these approaches at other sites in the West Midlands	LA partners with Energy Capital, WMCA	March 2023
	D1	Support LA partners to decarbonise their fleets by helping to reduce the cost of energy infrastructure	LA partners with Energy Capital, WMCA & Midlands Energy Hub support	Various due to different climate commitments
	D2	Support LA partners to make best value of their energy assets by assessing nearby energy demands and generation opportunities	LA partners with Energy Capital, WMCA & Midlands Energy Hub	Various due to different climate commitments

Summary of actions

THEME	REF	Summary	Owner and key partners	By When
3. Positioning	E1	Continue to refine the commercial model to demonstrate the viability of the spine network of transit stations	Investment team, WMCA, supported by Energy Capital	September 2021
	E2	Seek to influence government to attract funding	Investment team, WMCA supported by Energy Capital	September 2021
	E3	Future proof transit station development	Investment team, WMCA, supported by Energy Capital	March 2022
	F1	Work with Commonwealth Games and host LAs to consider low carbon transport and legacy	TfWM, Energy Capital, WMCA with CWG committee, DCMS and OZEV	July 2022
	G1	Consider the outcomes of the BEIS Hydrogen Strategy when released this year	TfWM supported by Energy Capital, WMCA	September 2021
	G2	Support demonstrator projects which look to show the feasibility of alternative fuel systems	TfWM supported by Energy Capital, WMCA	As opportunities arise
	G3	Recognise the specific challenge of decarbonisation of Heavy Good Vehicles (HGV) and explore infrastructure to support	TfWM supported by Energy Capital, WMCA	March 2022
	G4	Continue to work with partners to consider enablers and barriers of alternative fuel systems to assess future viability	TfWM supported by Energy Capital, WMCA	Ongoing

Appendix: Consultation Questions

Consultation Questions

1. How strongly do you agree with this vision (1-10) where 10 is strongly agree and 1 is strongly disagree?
2. How do you see this strategy dovetailing or linking with other strategies and plans in the region?
3. What are the key factors in ensuring cost effectiveness and equity through this transition?
4. How far do you think the West Midlands should be planning for and investing in infrastructure to enable transport decarbonisation, or how much should we wait and follow the national roll out? (1-10) where 1 is self-determine and 10 is fully follow the national roll out
5. What powers or levers should the West Midlands public sector be drawing on to set its own decarbonisation pathway? What additional powers or abilities would enhance our ability to meet our transport decarbonisation aims?
6. What insight could you provide from local initiatives and plans that should be reflected in this strategy?
7. How much do you believe that accessing cost effective electrical grid capacity is, or will be, a barrier to delivering electric charging infrastructure? (1-10)
8. Can you give any examples of projects where grid capacity was an issue? What was done to mitigate this?
9. Do you see a strong role for hydrogen and alternative fuels in the West Midlands transport system (1-10) where 10 is strong role and 1 is no role at all
10. Please could you outline where you see the strongest use case for hydrogen and alternative fuels
11. Are there any other circumstances that are special to the West Midlands that should shape this strategy? Please give details.
12. Do you agree with the principles underpinning this strategy?
13. Which bodies do you think should own the actions identified in this strategy and why?
14. What other actions should be included here and who should lead on them?

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Environment & Energy Board

Date	9 September 2021
Report title	West Midlands Circular Economy Routemap
Portfolio Lead	Environment, Energy & HS2 - Councillor Ian Courts
Accountable Chief Executive	Laura Shoaf, West Midlands Combined Authority email: laura.shoaf@wmca.org.uk
Accountable Employee	Ed Cox, Director of Public Service Reform email: ed.cox@wmca.org.uk Jackie Homan, Head of Environment email: jacqueline.homan@wmca.org.uk

The text of this report is the draft text of the proposed report to WMCA Board on 17 September 2021.

Recommendation(s) for action or decision:

The WMCA Board is recommended to:

- (1) Notes the production of the West Midlands Circular Economy Routemap, the excellent engagement of key partners, and the opportunities for the WMCA to play a key role with its partners in turning the Routemap into action to maximise circular economy opportunities for the region.
- (2) Discuss and agree two areas for priority action and business case development:
 - Circular Manufacturing with a focus on a West Midlands Industrial Symbiosis Delivery Programme to unlock investment, innovation and circularity in strategic regional locations including East Birmingham and building on the hub models of Repowering the Black Country by supporting the project's emerging investment opportunities.

- Circular Construction with a focus on developing Zero Waste Construction Hubs to support materials exchange and recovery using strategic hubs based across the region.
- (3) Notes the wide-ranging opportunities for wider collaborative action and good practice sharing and the suggested delivery plan in the Routemap.
 - (4) Notes the recommendation to local authorities to build on their existing leadership, and to use their enabling functions to create the conditions for a more circular economy.

1. Purpose

- 1.1 This paper provides an overview of the West Midlands Circular Economy Routemap as well as the next steps and recommendations for delivery. The Routemap is attached for information, but this Board paper highlights the salient points. Supporting appendices are available on request.

2. Background

- 2.1 The definition of a circular economy is a system that designs out waste and pollution, keeping products and materials in use for as long as possible and regenerating our natural systems through economic activity. It is much more than a sophisticated term for recycling. Rather than depend on linear and extractive, wasteful processes, a circular economy encourages repair, reuse and regeneration of resources and materials as well as a transition to renewable energy. A 2020 report by the Waste and Resources Action Programme (WRAP) found that a circular economy could bolster the UK economy by £75 billion and create over half a million jobs.
- 2.2 In June 2020, WMCA approved the formation of a Circular Economy Taskforce and the production of a Routemap for the region to guide future activity. A regional approach to this work ensures alignment with economic and environmental strategies, as well focusing on opportunities at scale through the co-ordination of infrastructure and systems wide transitions, like WM2041 net zero efforts. A regional approach also ensures we align the local expertise recognised in the Routemap with large scale regional and national opportunities.
- 2.3 An initial workshop and public survey, to develop an understanding of the regional circular economy activity and key stakeholders, informed the membership of a Circular Economy Taskforce in November 2020, made up of public, private, academic and third sector partners in the region. The Taskforce provided input to a specification which was used to publish a WMCA tender for consultancy support to produce the Routemap. Consultancy and global leaders in this field, Useful Projects, were appointed in January 2021.
- 2.4 The production of the Routemap involved extensive engagement and consultation with regional stakeholders, including WMCA internal; Circular Economy Taskforce; Local Authorities and Low Carbon Officers Group (LCOG) workshop; LEP and academic institutions workshop; sector workshops for three priority sectors; SME engagement organised with Groundwork WM; West Midlands Circular Economy Club workshop, plus 1-2-1s and a public survey.

2.5 This engagement enabled Useful Projects to build a detailed picture of where the region currently is – and whilst the next steps are ambitious, they build on existing leadership, practice and innovation in all areas. For example:

- In Wolverhampton, the first English city to sign the European Circular Cities Declaration, the National Brownfield Institute and the University of Wolverhampton's Springfield Campus form a centre of excellence for circular and sustainable construction. MHCLG's relocated second HQ in the city, along with its new national Modern Methods of Construction (MMC) taskforce, also based in the city, means Wolverhampton is well placed to lead this part of the Circular Economy routemap.
- Coventry University's National Transport Design Centre, which considers a broad range of factors that influence vehicle, transport and infrastructure design, is informing ways of designing out obsolescence in mobility.
- Solihull's Koolmill is using globally significant technological innovation to design out waste food from the milling process. This sort of technology will be a critical component of climate resilience, where lower yields could result in food shortages.
- Birmingham is home to International Synergies, which supports industrial symbiosis networks and solutions worldwide, and has expertise in different elements of low carbon heat and fuel across its universities, including EBRI, which focuses on circular practices within the field of bioenergy.
- Walsall is home to several innovative start-ups which are growing circular practice, including Kiondo, an arts, design and regeneration-focused social enterprise currently receiving support from the Cultural & Creative Social Enterprise grant programme.
- In Dudley, the Black Country and Marches Institute of Technology provides a vibrant learning environment to encourage people to take up cutting edge technical education, focused on circular practice in modern methods of manufacturing and other essential industries.
- Sandwell's Kew Technology uses high efficiency Advanced Thermal Conversion to turn end-of-life waste derived fuels into a hydrogen rich 'syngas', which has a broad range of uses in the generation of heat and power.
- Finally, the BEIS and UKRI-funded Repowering The Black Country project takes in all four Black Country authorities, and focuses on decarbonising industry across the area, including through industrial symbiosis and other innovative practice.

Project and Routemap aims

2.6 The Circular Economy Routemap, developed in collaboration with key stakeholders, sets out a:

- Vision for the circular economy in the West Midlands
- Headline opportunities for three priority sectors as well as the enabling conditions for a more circular economy
- A clear plan for delivery, implementation and resourcing

- 2.7 The Routemap aims to kickstart the circular economy in the West Midlands by building on existing projects and expertise across the public, private and third sectors to:
- Generate economic advantage and innovation, safeguard existing jobs and create new ones. Although difficult to quantify, similar approaches in London have been predicted to create 40,000 additional jobs by 2036.
 - Complement broader environmental recovery activity (e.g. WM2041), significantly reduce material and resource consumption
 - Support wider social outcomes and the creation of a social economy (Social Economy Growth Strategy). Analysis conducted by the Ellen MacArthur Foundation shows that the average household income would increase by £2,500 a year in a circular economy¹.
 - Accelerate green and just recovery from COVID-19 and maximise post Brexit opportunities.
 - Build on existing circular economy activity, expertise and best practice in the region.
- 2.8 The vision for the region's circular economy is: *“The West Midlands circular economy will support the green industrial revolution. It will support sustainable growth and contribute to the social economy as well as to green recovery. Our circular economy will make better use of our resources, generating more value and creating new jobs.”*
- 2.9 The Routemap includes a detailed policy analysis at the international, national, regional and local level (available in Appendix 1 Baseline Analysis). From the regional and local level, it was found that there is a low level mainstream understanding of what the circular economy is and there are currently no significant policies in the region enabling circularity at scale.
- 2.10 International and national policy best practice has been used to inform what can be done to support policy development at the regional and local level and these are covered under the Enablers section within the Routemap (page 5) and will form part of the delivery activity. The enablers set the systems wide conditions to create more circularity in the region.

Priority areas and opportunities

- 2.11 The West Midlands already has a number of unique strengths in moving to a more circular economy, with leading activity across academia, research and businesses. Publicly available data was also used to analyse the inputs of materials and resources into the West Midlands economy to help identify specific resource and materials issues across sectors. Together this analysis informed the priority sectors, strategic projects and opportunities in this Routemap, that would most effectively support delivery of outcomes under 2.5. The Routemap includes a delivery plan for activities for the WMCA and its partners under each of the following strategic opportunities.

¹ [Growth Within: a circular economy vision for a competitive Europe](#)

Priority sector	Strategic issues and assets	Strategic Opportunities	Key Partners	What is the opportunity?
Circular manufacturing	<ul style="list-style-type: none"> Industry and manufacturing have the highest carbon footprint of all sectors analysed and are a large consumer of renewable and non-renewable resources. Huge existing potential and strengths in the region in advanced manufacturing, supporting our claim as the home of the green industrial revolution, including in Coventry and the Black Country. Legacy of National Industrial Symbiosis Programme (NISP) can be reinvigorated, building in recent programmes in Tyseley, Birmingham and Solihull. 	Circular battery manufacturing	UKBIC, universities, WMCA Electrification Taskforce	Build on the region's battery expertise to design the first truly circular battery factory, distinguishing the West Midlands Gigafactory from other similar projects worldwide.
		Industrial symbiosis delivery	BEIS, Tyseley Energy Park, local authorities, LEPs & Growth Hubs	Develop a West Midlands Industrial Symbiosis delivery programme to unlock innovation and investment in strategic locations, building on the hub models of Repowering the Black Country and supporting the project's emerging investment opportunities.
		High-value fuels from waste	Waste companies, STW, local authorities, LEPs	Use advanced processing technologies to turn residual, municipal and industrial waste into high-value fuels for aviation, logistics, heavy plant and other manufacturing sectors.
		Circular manufacturing Centre of Excellence	WMG, LEPs, local authorities, Warwick University,	Establish a Circular Manufacturing Centre of Excellence to support circular design best practice and to develop advanced technologies (robotics, AI etc.).
Circular construction	<ul style="list-style-type: none"> Construction, demolition & excavation is the largest consumer of non-renewable materials & largest producer of waste. Circular construction and design can have a huge impact on embodied carbon. Large growth planned in the region (200,000 homes and major infrastructure project like HS2) can be a catalyst for circularity. WMCA is already working on Advanced Manufacture in Construction (AMC) and Modern 	Brownfield land reclamation	University of Wolverhampton, developers	Set up a facility and associated advisory services to unlock the development potential of brownfield sites of all sizes.
		Circular strategies for infrastructure	HS2, STW, waste companies, TfWM	Develop circular strategies and action plans for major infrastructure projects and utility providers.
		Circular building product initiative	Construction industry, Zero Carbon Homes Taskforce.	Support the development of leading, regional circular buildings' systems, products and service offers
		Zero Construction Hub	Zero Carbon Homes Taskforce,	Launch a physical and virtual hub to recover and exchange materials, as well as share

	<p>Methods of Construction (MMC) as well as Zero Carbon Homes Routemap. Circular design is synergistic.</p> <ul style="list-style-type: none"> The National Brownfield Institute (NBI) in Wolverhampton, City of Wolverhampton's recent Circular Cities Declaration and existing projects like Port Loop present huge opportunities to be a leader in circular construction. 		MMC Hub, LEPs, developers.	and incentivise circular design and processes.
Circular Food	<ul style="list-style-type: none"> The supply chain for food system will require rethinking if we want to meet carbon targets. There is an agro-processing hub in the West Midlands, home to major companies like Mondelez, Cadbury etc. Urban agriculture, farms and community growing are all also present in the region. There is pre-existing research and development expertise around improving food processing, packaging and logistics. There are already well established communities working on food issues, and there is an ability to catalyse the social and sharing economy, tapping into the region's diversity and entrepreneurial spirit. 	Circular repurposing programme	Local authorities, LEPs, Chambers, community groups,	Develop and implement circular approaches for refurbishing and repurposing commercial and residential properties, as well as public buildings and spaces.
		Regenerative agriculture	WM Circular Economy Club, Food Trails, District Eating	Support regenerative agricultural and farming practices as well as local food growing initiatives.
		Circular agro-businesses	Mondelez, breweries, WRAP, WMG, Coventry	Develop circular strategies and action plans for major agro-businesses and food processors in the region.
		Circular food hubs	Commonwealth Games, The Active Wellbeing Society, local authorities	Create circular food hubs with optimised logistics to collect and redistribute food that would otherwise be wasted.
		Healthy consumption	Food Trails, local authorities, LEPs, community groups	Raise awareness and encourage sustainable, local food consumption, working closely with existing communities and volunteer groups.
		Circular nutrient loop	Waste companies, NFU, local authorities, EBRI	Close the nutrient loop by developing biotechnologies to recover and enhance value of food waste and other waste products (sewage etc.).

3. Next Steps

- 3.1 We plan to publish the Routemap in September 2021.
- 3.2 WMCA will work with local authorities and key stakeholders to deliver the circular economy enablers (page 5) and proposes the following priority opportunities resulting from the Routemap, which will have significant regional impact:
- 3.2.1 Two areas for priority action and business case development:
1. **Circular Manufacturing** with a focus on a West Midlands Industrial Symbiosis Delivery Programme to unlock investment, innovation and circularity in strategic regional locations including East Birmingham and building on the hub models of Repowering the Black Country by supporting the project's emerging investment opportunities.
 2. **Circular Construction** with a focus on developing Zero Waste Construction Hubs to support materials exchange and recovery using strategic hubs based across the region.
- 3.2.2 There are numerous opportunities for collaborative action to drive forward the circular economy in the region. We propose three initial priorities for collaborative action and good practice sharing including:
- a. **Convening a Circular Battery Partnership** (working closely with UKBIC, University of Birmingham and Coventry City Council) to create a world leading ecosystem of circular battery manufacturing in the West Midlands and identify any funding proposals e.g. circular battery accelerator.
 - b. Exploring a **Circular Construction Repurposing Programme** (subject to a clear mandate from Housing and Land Board) to develop and implement circular approaches for refurbishing and repurposing commercial and residential properties, as well as public buildings and spaces, building on the Zero Carbon Homes Taskforce expertise and Energy Capital retrofit work.
 - c. A **Circular Hubs Network** – developing hubs in communities based around sharing of food, products and skills as part of the wider Social Economy Growth Strategy and building on local initiatives such as Birmingham City Council's Food Trails programme and The Active Wellbeing Society and opportunities associated with Commonwealth Games 2022.
- 3.2.3 WMCA officers would be keen to work with local authorities to identify opportunities to use their enabling functions such as waste, planning, procurement and other key strategies, plans and policies, to support investment in critical waste, energy and transport infrastructure that will create the conditions for a more circular economy.
- 3.3 Following business case development and partnership working, proposals will be brought back to WMCA Board for consideration. We will pursue external funding opportunities with partners and Government as part of our work.

4. Financial Implications

- 4.1 The costs associated with developing the business case proposals will be covered by Environment portfolio's existing budget.
- 4.2 The next steps will include developing our understanding of the costs associated with delivering the prioritised parts of the Routemap, with particular focus on that which may fall under WMCA delivery.

5. Legal Implications

- 5.1 None from the Routemap. We will work closely with colleagues in the Legal Team during business case development as these progress for each of the priority interventions.

6. Equalities Implications

- 6.1 The equalities implications of this paper – and the activities it proposes – should create net positive effects in terms of the impacts on citizens and communities. Underpinning all of the WMCA Environment and Energy programme is the need for a 'just transition' and it seeks to embed environmental goals as part of an overall approach to economic growth that is more inclusive.

7. Inclusive Growth Implications

- 7.1 The Routemap has inclusive and green growth as one of its key principles to ensure activity delivers co-benefits of job creation, social value, decarbonisation as well as health and well-being. It also aligns with the UN Sustainable Development Goals, which underpin the WMCA's Environment and Energy programme.

8. Geographical Area of Report's Implications

- 8.1 The report concentrates on the seven constituent authorities. Different parts of the Circular Economy Routemap may involve non-constituent authorities as part of delivery. These relationships will be developed on a case-by-case basis.

9. Other Implications

None.

9. Appendix

West Midlands Circular Economy Routemap



West Midlands' Circular Economy Routemap

Kickstarting the region's journey to a green industrial revolution



Executive summary

A vision for the West Midlands' circular economy

The West Midlands' circular economy will support the green industrial revolution. It will contribute to sustainable, inclusive growth, to the social economy and to a green recovery. The region's circular economy will make better use of resources, generating more value and creating new jobs.

This vision is underpinned by four principles: inclusive green growth, enabling foundations, innovation and collaboration, and resource optimization.

Why a circular economy?

The circular economy is much more than a sophisticated term for recycling. A circular economy is a different approach to the economy based on regenerative principles and business models that seeks to deliver environment and social value whilst promoting a strong economy.

For the West Midlands, transitioning to a circular economy supports the region in becoming the home of the green and circular industrial revolution. The West Midlands Circular Economy Routemap aims to kickstart the circular economy by building on existing best practice, projects, and expertise. Doing so will:

- Contribute inclusive, green growth and innovation, and create new jobs whilst safeguarding existing ones. A 2020 [report](#) by the Waste and Resources Action Programme (WRAP) found that a circular economy will help the UK build back better, bolstering the economy by £75 billion and creating over half a million jobs.
- Support the creation of a social economy and generate social value for local communities. Analysis conducted by the Ellen MacArthur Foundation shows that the average household income would increase by [£2,500](#) a year in a circular economy.
- Reduce environmental degradation by reducing material extraction and resource consumption as well as waste generation. For example, transitioning to a circular economy could reduce global greenhouse gas emissions (GHG) by [10 billion tonnes](#).
- Accelerate a green, inclusive, and just recovery from COVID-19, and maximise post-Brexit opportunities that build on the region's unique characteristics and strengths.

How did we develop the routemap?

To develop this routemap, we:

- Produced a baseline analysis. This included:
 - High-level mapping of material and waste flows for five sectors. The selection of sectors was guided by the West Midlands Local Industrial Strategy.
 - Policy analysis and desk research on best practice and project case studies. It revealed a lack of robust framework and incentives to enable a circular economy at scale in the region. This analysis also demonstrated the need to put in place enabling levers that support an economy-wide transition.
 - Interviews and workshops with public, private, and academic stakeholders.
- Identified five economy-wide enabling levers and developed an implementation plan.
- Recommended that, in addition to the enabling levers, the West Midlands Combined Authority (WMCA) and its partners focus their efforts and resources on strategic interventions within three priority areas.
- Selected three priority areas and developed strategic interventions for each area. These interventions build on the region's economic and industrial strengths, capitalise on existing projects and expertise, and have a unique selling point that will drive the region's national and international competitiveness.

Enabling levers for a circular economy

Transitioning to a circular economy will be a challenging process that can generate multiple opportunities for the region. To do so, it will require a coordinated set of interventions across a wide range of sectors.

To support this economy-wide shift, five enablers are explored in this routemap:

- **Policy and regulation:** Embedding circularity in planning and design, improving regulatory and fiscal instruments to support a circular economy, and using procurement to grow new circular markets and supply chains.
- **Governance:** Implementing robust internal processes, convening experts and partners, encouraging partnerships and collaboration, developing new supply chains, and supporting a wider adoption of new, innovative circular business models.
- **Capacity-Building:** Launching a comprehensive behavioural change programme to encourage a shift in societal thinking, supporting upskilling and training, and strengthening existing business support programmes.
- **Soft infrastructure:** Supporting system-wide innovation, improving linkages between research and commercial application, using data platforms and digital infrastructure to accelerate the transition, and ensuring logistics support the movement of goods and materials.
- **Hard infrastructure:** Investing in critical energy, waste, and transport infrastructure, and in shared spaces, resource recovery hubs and storage facilities.

This routemap explores each enabler in further detail, proposing next steps and an implementation plan, identifying delivery partners and best practice.

Priority areas and strategic interventions

To accelerate the transition to a circular economy, the West Midlands must target its strongest sectors, leveraging its expertise and scaling up existing projects. To that effect, three priority areas were informed by a high-level material flow analysis and stakeholder engagement. They were selected based on the following criteria:

- Economic sectors where there are significant material and/or waste flows.
- Alignment with other corporate policies such as job creation, health improvements or environmental protection.
- Opportunity to leverage regional strengths such as existing skills, expertise and/or areas with considerable opportunity for growth.

Executive summary

The three priority areas are:

Circular Manufacturing: Industry and manufacturing consumes 3.3 million tonnes of minerals every year. With 16% of resource inputs feeding into transport manufacturing activities, the routemap focused specifically on transport manufacturing. This capitalises on the region's position as a major automotive hub and aerospace cluster. The West Midlands has a unique opportunity to drive the growth of a competitive clean tech sector, support the decarbonisation of the transport sector, and optimise the use and re-use of precious materials and metals through manufacturing.

Circular Construction: The construction sector is the largest consumer of minerals and the biggest producer of waste in the region. The waste generated by this sector represents a lost opportunity as value can be created from construction outputs. With 220,000 homes and major infrastructure projects planned, the West Midlands must reduce the impact of this sector on the natural environment. Distinctive opportunities exist in unlocking brownfield sites, embedding circular design, capitalising on new material innovations, and leveraging new delivery models, whilst building on the region's existing initiatives (such as the Zero Carbon Homes Routemap and the Advanced Methods in Construction Roadmap).

Circular Food: As the largest consumer of natural resources in the region, the food and agriculture sector was chosen because the West Midlands is a major food and drink manufacturing hub, home to giants such as Mondelez as well as a plethora of diverse community groups working on food issues. This unique landscape means the West Midlands can engage the entire food supply chain to re-design its food system. A system-wide shift in this sector would deliver socio-economic benefits, reduce environmental degradation, and contribute to the social economy.

This routemap explores 4 to 5 strategic interventions for each of the three priority areas described above. It provides detailed next steps, delivery partners and metrics for each intervention identified. The table on the right summarises each strategic intervention proposed in the routemap. To accelerate the transition to a circular economy, a mixture of large scale and smaller scale interventions were selected.

Priority Sector	Strategic Interventions	Overall Aim
Circular Manufacturing	Circular battery manufacturing	Design the first truly circular battery factory, distinguishing the West Midlands Gigafactory from other similar projects.
	Industrial symbiosis delivery programme	Implement a place-based industrial symbiosis delivery programme to cross-fertilise opportunities across the three priority areas.
	High-value fuels from waste	Use advanced processing technologies to turn residual, municipal and industrial waste into high-value fuels for aviation, logistics, heavy plant and other manufacturing sectors.
	Circular manufacturing centre of excellence	Establish a Circular Manufacturing Centre of Excellence to support circular design best practice and to develop advanced technologies (robotics, AI etc.).
Circular Construction	Circular strategies for infrastructure	Develop circular strategies and action plans for major infrastructure projects and utility providers.
	Circular building product initiative	Support the development of leading, regional circular buildings' systems, products and service offers.
	Zero waste construction hub	Launch a physical and virtual hub to recover and exchange materials, as well as share and incentivise circular design and processes.
	Circular repurposing programme	Develop and implement circular approaches for refurbishing and repurposing commercial and residential properties, as well as public buildings and spaces.
Circular Food	Brownfield land reclamation	Set up a facility and associated advisory services to unlock the development potential of brownfield sites of all sizes, and to ensure brownfield reclamation adopts a circular approach to site clean-up and clearance.
	Regenerative food production	Support regenerative agriculture and permaculture practices as well as local food growing initiatives.
	Circular food manufacturing	Develop circular strategies for food and drink processors and manufacturers, focusing on opportunity to use food waste as a productive resource.
	Circular food hubs	Create circular food hubs with optimised logistics to collect and redistribute food that would otherwise be wasted.
	Healthy consumption	Raise awareness and encourage sustainable, local food consumption, working closely with existing communities and volunteer groups.
	Circular nutrient loop	Close the nutrient loop by developing bio-technologies to recover and enhance value of food waste and other waste products (sewage etc.).

Executive summary

Next steps

A circular economy is a vital part of WMCA's overall approach to building a greener, healthier, and more inclusive region. Transitioning to a circular economy can build resilience, create new jobs, reduce environmental degradation, and support the growth of the social economy. To deliver the full potential offered by a circular economy, it will be essential for WMCA and its partners to develop shared ambitions and work closely together.

This routemap is only the first step for the region's journey towards a circular economy. Next steps proposed in the routemap include:

- Implement key actions across the enablers identified, including updating WMCA's Single Commissioning Framework and procurement rules, embedding the circular economy in the wider Net Zero Behaviour Change Campaign and the Commonwealth Games 2022 legacy work, as well as commissioning any further research and intelligence that may be required to inform future actions.

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Develop a business case for a West Midlands Industrial Symbiosis delivery programme with a focus on unlocking opportunities within and between the three priority areas identified in the routemap. The Tyseley Energy Park and the East Birmingham Corridor have been identified as hot spots for cross-sector circular activities.

- Develop a business case for a Zero Waste Construction Hub to support material recovery and exchange and to share and incentivise best practice in circular design and construction.
- Work with partners to convene a Circular Battery Partnership to create a world-leading ecosystem of circular battery manufacturing and to develop funding proposals.

- Explore innovation opportunities to transform waste into high-value fuels for hard-to-decarbonise sectors (such as aerospace).
- Accelerate a circular construction repurposing programme to implement circular approaches for refurbishing and repurposing commercial and residential properties as well as public buildings and spaces.
- Develop a network of circular community hubs based around sharing goods, food, and skills, supporting the wider Social Economy Growth Strategy and existing projects looking to re-design our food system.

The route ahead will not be simple but transitioning to a circular economy offers huge potential for the region including becoming the home of the green industrial revolution.



Transitioning to a circular economy requires a fundamental shift in how we operate, how we think about industrial processes and how we design our products and services. This routemap has identified five enablers that support an economy-wide transition to a circular economy. WMCA and its local authority constituent members can take a leading role in implementing these enablers. These enablers can also be applied to wider programmes of work beyond the circular economy.

Policy and Regulation	Governance	Capacity-Building	Soft Infrastructure	Hard Infrastructure
<p>Planning & Design</p> <ul style="list-style-type: none"> – Encourage circular design and processes, particularly in planning. – Ensure consistency and harmonisation of policies across all local authority constituent members. 	<p>Internal Processes</p> <ul style="list-style-type: none"> – Implement internal governance processes within WMCA to assign roles and responsibility, allocate resources and monitor progress. – Plan within WMCA the delivery of circular economy strategic interventions identified in the routemap. 	<p>Behavioural Change</p> <ul style="list-style-type: none"> – Work with local communities, businesses and schools to demystify the circular economy. – Encourage a shift in societal thinking and behaviours amongst local communities. 	<p>R&D & Innovation</p> <ul style="list-style-type: none"> – Support innovation by de-risking the use of circular processes and providing seed funding. – Improve linkages between academic research and commercial applications. 	<p>Physical Infrastructure</p> <ul style="list-style-type: none"> – Invest in critical physical infrastructure (energy, waste and transport) to support wider transition to a circular economy. – Ensure access to financially viable storage facilities.
<p>Legislation & Regulation</p> <ul style="list-style-type: none"> – Introduce regulatory instruments that support the circular economy including better implementation and enforcement of existing and upcoming waste legislations. 	<p>Partnerships</p> <ul style="list-style-type: none"> – Act as a convenor of experts and key stakeholders and encourage knowledge-sharing. – Encourage circular economy partnerships and collaboration across synergistic sectors. 	<p>Upskilling & Training</p> <ul style="list-style-type: none"> – Ensure adequate training and upskilling is provided to public sector employees, regional businesses and supply chains in order to support a transition to a circular economy. 	<p>Data & Digital</p> <ul style="list-style-type: none"> – Use digital platforms and data technologies, such as 5G, to better track movement of resources and facilitate trading of materials. This should build on WMCA's Digital Roadmap. – Use digital platforms and data technologies to grow a regional sharing economy. – Create a repository of information on the circular economy. 	<p>Shared Infrastructure</p> <ul style="list-style-type: none"> – Invest in shared spaces for communities and businesses to encourage the growth of a sharing economy.
<p>Fiscal Incentives</p> <ul style="list-style-type: none"> – Align taxation and fiscal incentives with circular economy outcomes. 	<p>Business Models</p> <ul style="list-style-type: none"> – Encourage the adoption of new business and finance models to encourage circularity and innovation as well as increase regional businesses' competitiveness. – Facilitate the development of circular products and services. – Support region-wide systems-thinking and industrial symbiosis. 	<p>Business Support</p> <ul style="list-style-type: none"> – Streamline existing business support and ensure all businesses, including SMEs, can benefit from circular economy opportunities. 	<p>Logistics</p> <ul style="list-style-type: none"> – Ensure logistics enable easier tracking and transport of goods and materials across various sectors/businesses and to enable a sharing economy. This should include enabling reverse logistics. 	
<p>Procurement</p> <ul style="list-style-type: none"> – Develop collaborative approaches to service provision amongst public sector bodies in the region. – Use public sector procurement to grow new circular markets and supply chains and to accelerate the introduction of circular goods and services. 				

Enabling interventions: 2022 implementation plan

2022 will be an important year for WMCA and its partners to set the enabling foundation and map out strategic first steps required to accelerate a transition to a circular economy in the region. The table below presents the key target outcomes and potential actions WMCA and its partners should aim to achieve in 2022.

Useful Projects and SOENECS have proposed a potential implementation plan in Appendix 1, which is accompanied by a detailed matrix of the actions proposed (See Appendices 2 to 6). This implementation plan is one potential route to deliver enabling actions. Others exist based on the resources made available to deliver the routemap.

Enabler	Target Outcomes for 2022	Potential Next Steps and Actions	Delivery Partners
Policy and Regulation	<ul style="list-style-type: none"> Procurement and commissioning policies and processes pro-actively support a circular economy. Circular design is incentivised in a harmonised manner across all local authorities and key partners in the region. The region is at the forefront of embedding and implementing new waste regulations. 	<ul style="list-style-type: none"> Update WMCA's Single Commissioning Framework. Publish new procurement guidelines to support circularity. Hold workshops with local authorities to pro-actively prepare for new waste regulations. 	
Governance	<ul style="list-style-type: none"> Sufficient internal resources have been allocated by WMCA and its Boards to deliver key actions set in this routemap. A robust governance structure has been set up to support the delivery of key actions in this routemap. The West Midlands becomes a first-mover in adopting innovative, circular business and finance models at a region-wide scale. 	<ul style="list-style-type: none"> Appoint a Circular Economy Lead. Establish a Circular Economy Delivery Board to oversee the delivery of strategic projects. Work with partners such as ASG to express the benefits of new business and finance models. 	
Capacity-Building	<ul style="list-style-type: none"> The skills supporting a transition to a circular economy have been identified. Funding provided by WMCA and key partners supports a circular economy. A comprehensive behavioural change programme is ready to be launched to normalise the circular economy and encourage local communities and businesses to put a higher value on circular products and services. 	<ul style="list-style-type: none"> Add circular economy requirements for WMCA-led grants. Commission a forecast report to look into circular economy skills gap, working with partners like the Great Birmingham and Solihull LEP's Low Carbon Skills Team. Include circular economy actions in the Energy and Environment Behavioural Change Strategy. 	
Soft Infrastructure	<ul style="list-style-type: none"> Logistics are improved to support better recovery, movement and exchange of resources across the region. Building on WMCA's Digital Roadmap, digital tools, platforms and infrastructure enable a better collection of data and sharing of resources. 	<ul style="list-style-type: none"> Publish recommendations to improve logistics, including the use of reverse and consolidated logistics. Launch online repository of existing sharing platforms. Align actions of this routemap with the Digital Roadmap. 	
Hard Infrastructure	<ul style="list-style-type: none"> Energy, transport and waste infrastructure all enable a transition to a more circular economy. Physical locations have been selected to recover and exchange resources, as well as to support a sharing economy. 	<ul style="list-style-type: none"> Select location for regional Resource Recovery Hubs and financially viable storage facilities. Launch an online repository and booking system for unused, vacant or idle spaces, whilst ensuring equal access to digital platforms. 	

The West Midlands is a major [automotive hub](#), with 40% of all cars exported from the UK made in the West Midlands. It is also the largest aerospace cluster in the UK, with 25% of the country's aerospace sector located in the region. Embedding circularity within the manufacturing sector will ensure these sectors continue to thrive, are resilient to future increases in material costs, and jobs are safeguarded.

The majority of employment within the West Midlands' manufacturing sector is in intermediate product supply chains to the end producers, rather than in processing of primary resources or in assembly of end products. This presents opportunities and challenges that will need to be explored further when developing specific interventions.

The manufacturing sector is a priority area for the West Midlands given the national government's support for growing the clean tech sector, particularly to support the decarbonisation of the transport sector.

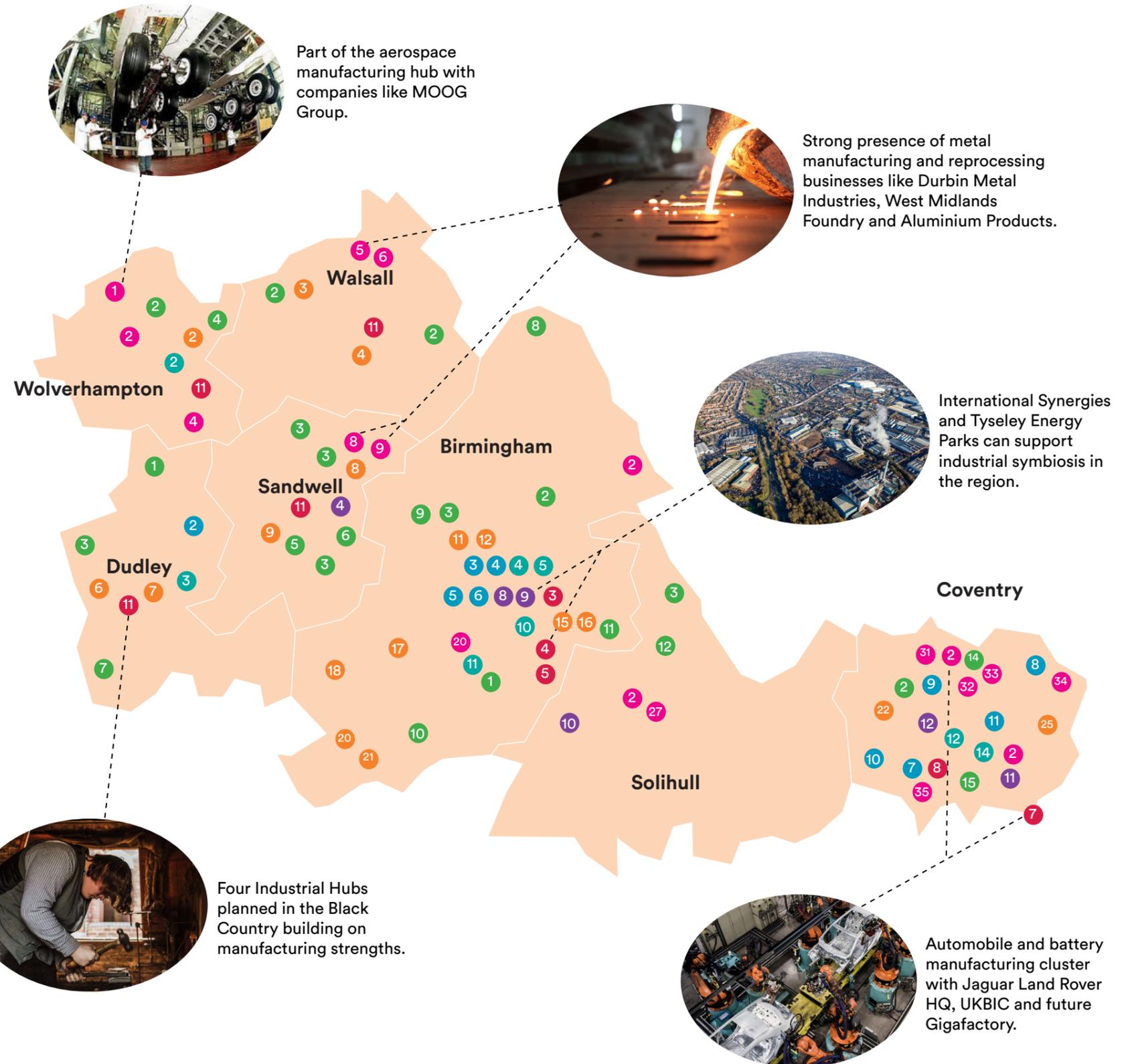
The clean tech sector poses a resource challenge. This sector, which includes electric vehicle, batteries, rapid charging infrastructure, wind turbines and other smart devices, relies heavily on the supply of imported scarce materials (such as rare earth, cobalt, manganese, graphite, scandium, neodymium and lithium) as well as highly refined metals (such as aluminium, composites, silver, nickel and copper).

The demand for these materials is predicted to grow by 2050, as high as 1000% for Lithium according to the [World Bank](#). Given the rapid increase in demand and potential scarcity of these raw materials, there is a need to increase efficiency in the use of these materials and to ensure that they can be recovered and recycled at the end of their life.

To that effect, circular economy interventions that would bring the most value to the region within the manufacturing sector include:

- Adopting a circular economy approach to electric vehicle, battery, and EV charging including high-value material recycling.
- Adopting circular economy approaches to metal recycling and to produce low carbon fuels from waste.
- Providing specialist circular design and development services for the manufacturing sector combined with the development of advanced material recovery technologies and facilities, including investment in robotics, robot/human interfaces and the use of artificial intelligence (AI) in resource recovery.

See Appendix 7 for more detailed information on the strategic interventions chosen for this priority area.



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Circular manufacturing Strategic interventions

Circular Battery Manufacturing

What? Design the first truly circular battery factory, distinguishing the West Midlands Gigafactory from other similar projects worldwide.

Why? To meet the growing demand for electric vehicles and batteries, to ensure that scarce materials are recovered, to secure jobs in the automobile manufacturing sector.

Role of WMCA? Enable.

Partners: See Appendix 7 for complete partners list.



Next Steps:

- Convene all partners to establish formal partnership and develop project and research proposals.
- Build political support and an investment prospectus.
- Develop and submit funding proposals to support a wide range of applied development projects.

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Circular Manufacturing Centre of Excellence

What? Establish a Circular Manufacturing Centre of Excellence to support circular design best practice and to develop advanced technologies (robotics, AI etc.).

Why? To test new technologies and processes for end of life resource recovery and circular manufacturing and to increase knowledge about circular manufacturing.

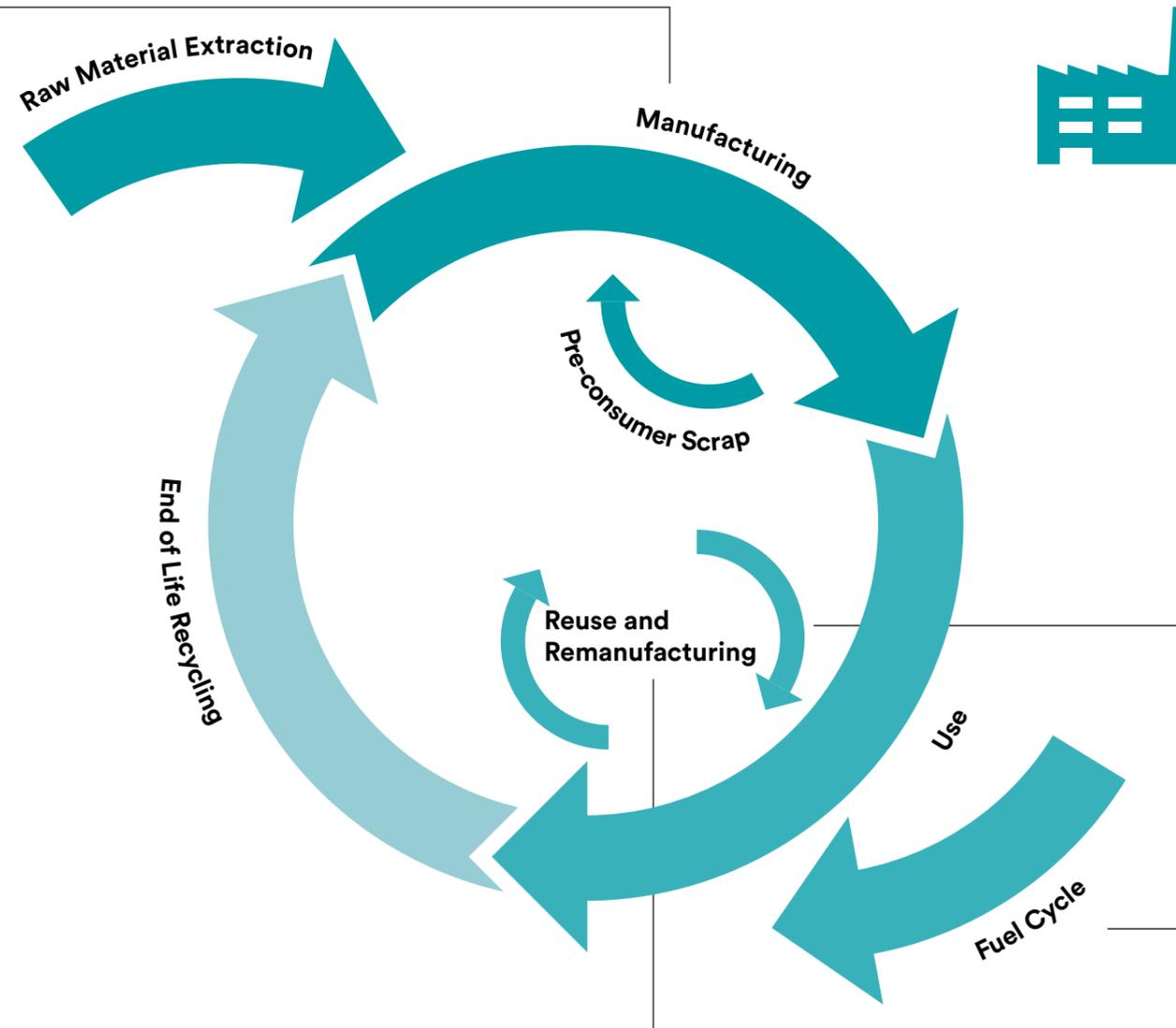
Role of WMCA? Enable.

Partners: See Appendix 7 for complete partners list.



Next Steps:

- Engage and convene identified partners to gauge support, to identify existing or potential locations for a centre of excellence and to share best practice.
- Develop and submit a major sectoral funding application for a centre of excellence and associated research/developmental projects.
- Support research into best practice for circular design in manufacturing and into advanced technologies.



Industrial Symbiosis Delivery Programme

What? Implement a place-based industrial symbiosis delivery programme to cross-fertilise opportunities across the three priority areas.

Why? To reduce resource consumption, to support SMEs in adopting circular processes, to create/save jobs, to minimise environmental degradation.

Role of WMCA? Enable and potential delivery partner.

Partners: See Appendix 7 for complete partners list.



Next Steps:

- Select location for a demonstrator project, focusing initially on high-value metal recycling (such as aluminium) and water.
- Develop a funding proposal for the selected industrial symbiosis demonstrator project.
- Convene key partners to develop a region-wide industrial symbiosis programme, aligning it with existing business support.

High-Value Fuels from Waste

What? Use advanced processing technologies to turn residual, municipal and industrial waste into high-value fuels for aviation, logistics, heavy plant and other manufacturing sectors.

Why? To increase the volume and value of resources generated from waste, to develop new technologies that can be exported globally.

Role of WMCA? Enable.

Partners: See Appendix 7 for complete partners list.



Next Steps:

- Engage relevant sectors to test appetite, secure support and establish formal partnerships.
- Identify one initial focus area (sustainable aviation fuel, sewage waste, etc.) and develop detailed plan and proposal for early funding.



With over 220,000 new homes and major infrastructure projects like [HS2](#) planned, embedding circularity within construction can unlock new opportunities, generate cost savings and build resilience across regional supply chains. Circular design and processes can also decrease the amount of virgin materials consumed and reduce environmental degradation associated with construction.

The West Midlands can leverage the funds it has secured to transform the construction, demolition and excavation (CD&E) sector. For example, WMCA and its constituent members have received several investment packages to support investments in infrastructure across the region. It has a £100 million Land Fund and £24 million Competitive Fund. WMCA and its constituent members have also received a £84 million investment to unlock and accelerate the region's pipeline of brownfield sites.

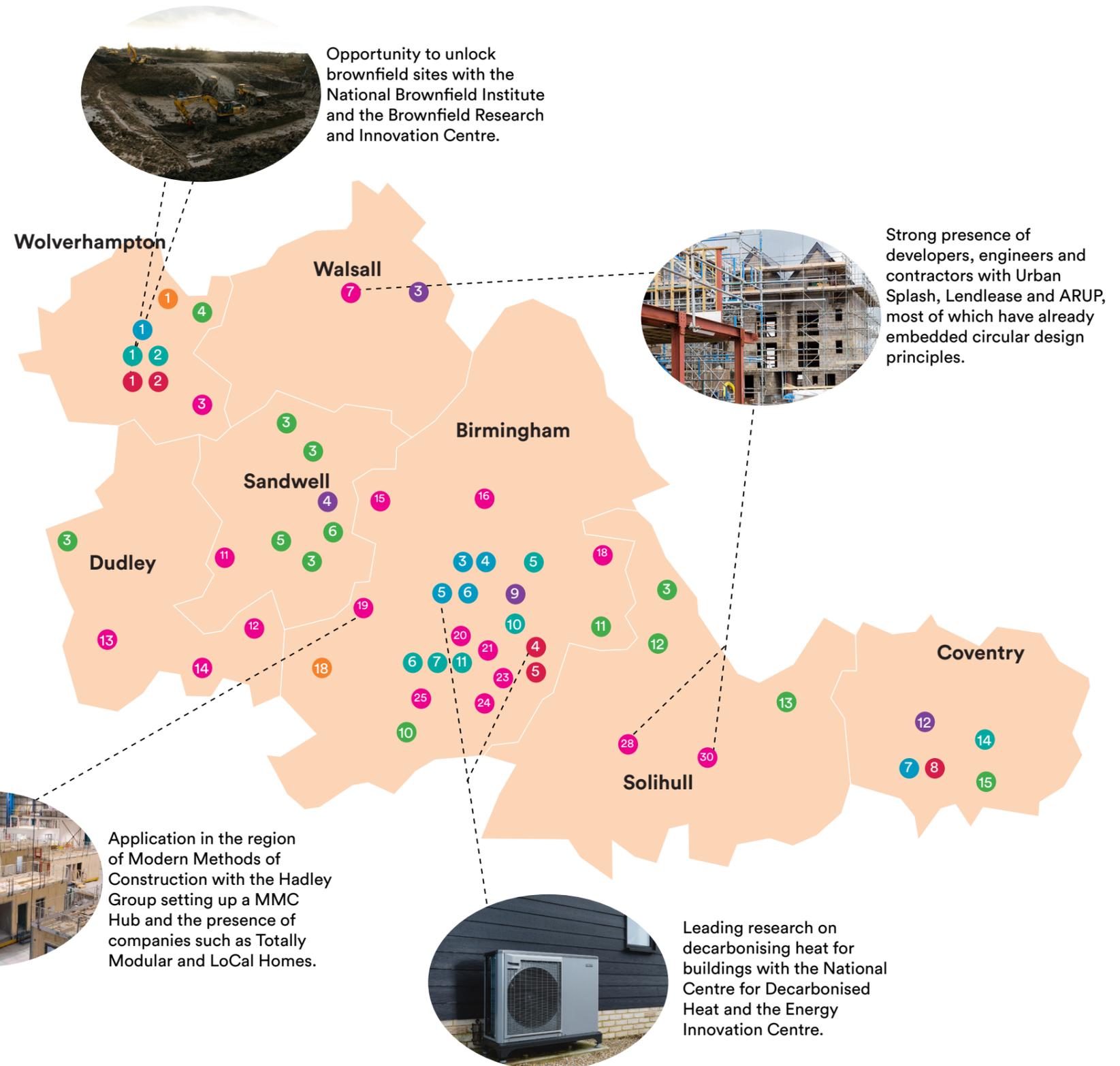
To that effect, circular economy interventions that would bring the most value to the region within the CD&E sector include:

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Adopting circular design principles and construction processes for residential, commercial and major infrastructure projects. A particular opportunity is to create a physical and virtual resource recovery and material exchange hub to make better use of material wasted in construction.

- Unlocking the value of brownfield sites with the creation of a leading facility to provide a register of sites, and incentives for developing these sites. This can be spearheaded by Wolverhampton and their National Brownfield Institute.
- Supporting the growth of regional specialist circular products and services relating to the construction industry, creating a one-stop shop to deliver all required services. Working and mobilising supply chains.

See Appendix 8 for more detailed information on the strategic interventions chosen for this priority area.



Circular construction Strategic interventions

Brownfield Land Reclamation

What? Set up a facility and associated advisory services to unlock the development potential of brownfield sites of all sizes.

Why? To reduce resource consumption, wasted materials on brownfield sites, and the amount of soils and virgin materials imported.

Role of WMCA? Enable and Influence. Lead on own sites.

Partners: See Appendix 8 for complete partners list.



Next Steps:

- Explore option for the National Brownfield Institute to become leading facility.
- Convene partners to develop incentives including for smaller sites.
- Create a register of brownfield sites and develop a data-sharing platform.

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Circular Repurposing Programme

What? Develop and implement circular approaches for refurbishing and repurposing commercial and residential properties, as well as public buildings and spaces.

Why? To minimise construction waste, to reduce virgin material extraction and to revitalise unused space.

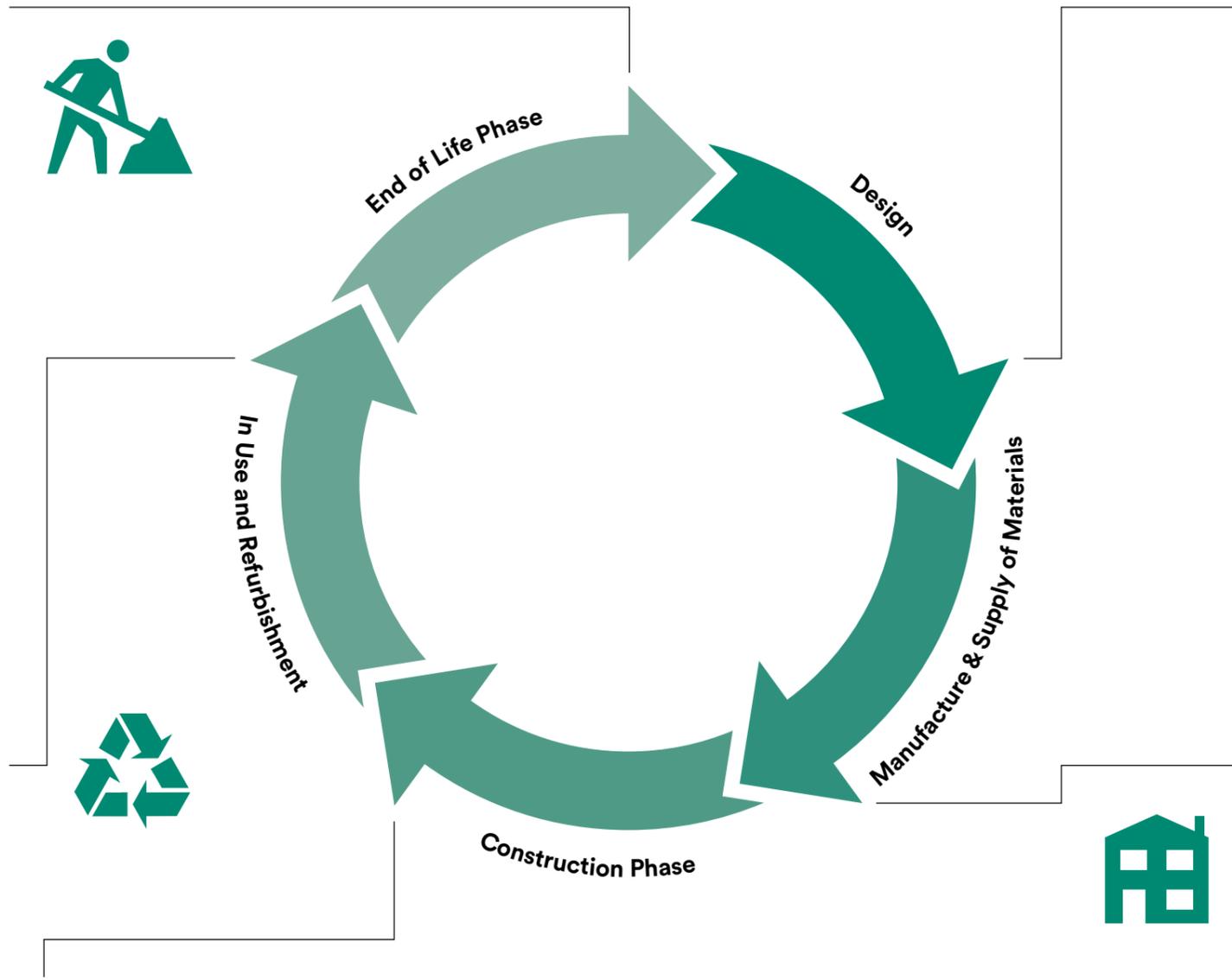
Role of WMCA? Enable and Influence. Lead on own sites.

Partners: See Appendix 8 for complete partners list.



Next Steps:

- Audit public spaces, high streets and unused/vacant commercial spaces to create a region-wide revitalisation investment prospectus.
- Support R&D in circular products, services and approaches that support repurposing and refurbishing.
- Publish guidance on alternative financing and delivery models.



Circular Strategies for Infrastructure

What? Develop circular strategies and action plans for major infrastructure projects and utility providers.

Why? To mobilise and scale up circular supply chains, to encourage innovation, and to support circular, sustainable utility provision.

Role of WMCA? Enable and Influence. Lead on own sites.

Partners: See Appendix 8 for complete partners list.



Next Steps:

- Identify and convene major infrastructure and utility companies and their supply chains to develop projects and incentives.
- Create a forum for infrastructure and utility companies to share best practice.
- Publish best practice guidance for circular strategies for infrastructure and utility companies.

Circular Building Product Initiative

What? Support the development of leading, regional circular buildings' systems, products and service offers.

Why? To create a suite of regional circular building products, to increase the number of circular products and services, to support regional job creation.

Role of WMCA? Enable and Influence. Lead on own sites.

Partners: See Appendix 8 for complete partners list.



Next Steps:

- Work with the Zero Carbon Homes Task Force and other key partners to select ten regional building product manufacturers/suppliers.
- Convene partners and experts to explore creation of a consortium of regional organisations to act as a one-stop shop for circular buildings' products, services and systems.

Zero Waste Construction Hub

What? Launch a physical and virtual hub to recover and exchange materials, as well as share and incentivise circular design and processes.

Why? To use fewer materials and reduce waste on construction sites, to encourage material exchange within the built environment.

Role of WMCA? Enable and Influence. Potential delivery partner.

Partners: See Appendix 8 for complete partners list.



Next Steps:

- Determine best location for material recovery and exchange hub(s), developing feasibility and funding proposal.
- Mobilise and convene regional supply chains around circular construction methods (including MMC and AMC).
- Launch virtual hub and share best practice guidance and incentives for circular construction processes.

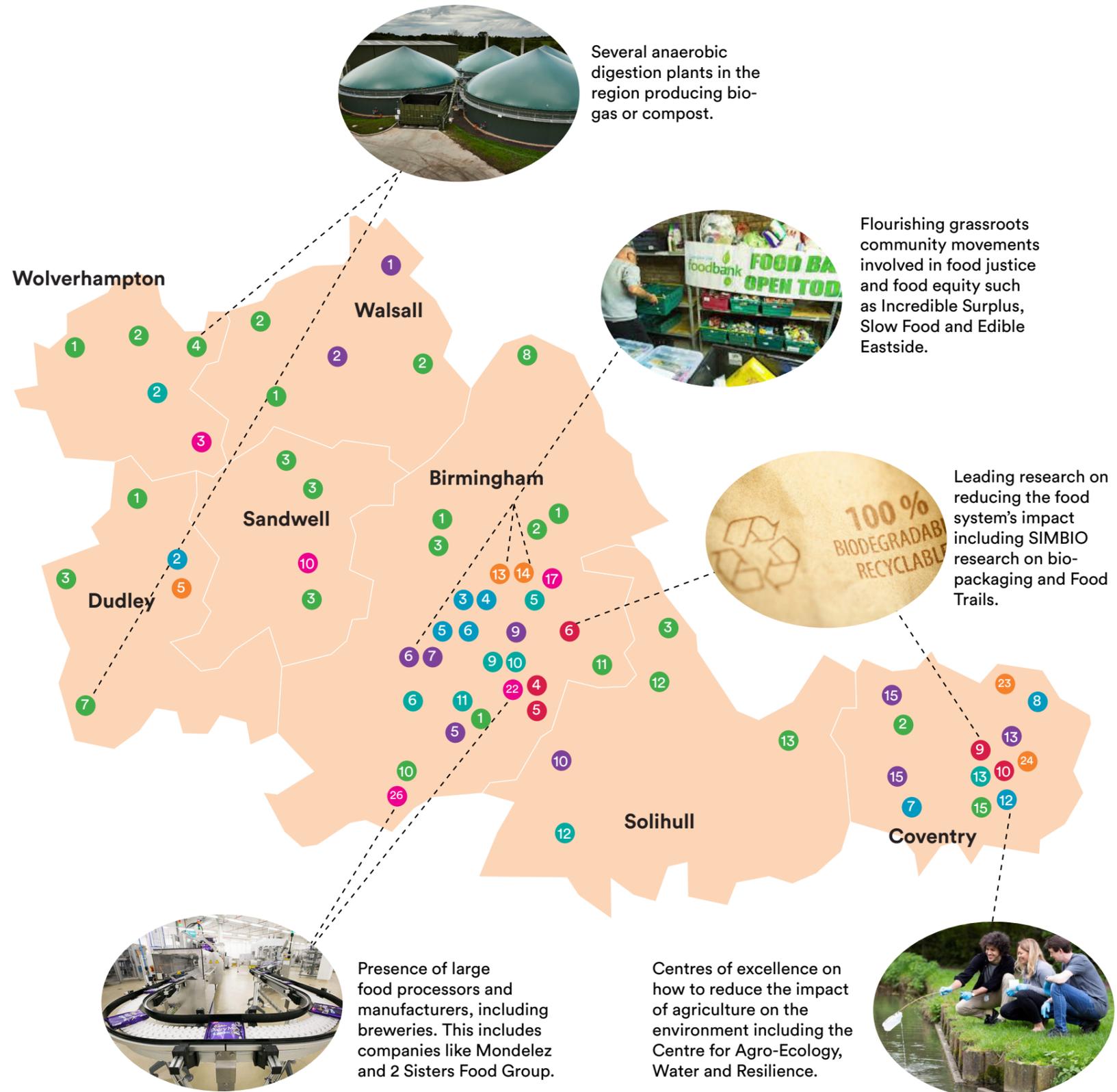
Thanks to its surrounding [rural areas](#), the West Midlands region as a whole remains one of the UK's main agricultural hubs, making the food and agricultural sector a key priority for this routemap. According to [DEFRA](#), the biggest agricultural contributors to the region's £2.4 billion outputs are milk, poultry meat, wheat and fruit. The West Midlands is also home to several farms, with income from farming increasing by 34% between 2015 and 2019. Grazing livestock accounted for 28% of farmed area, whereas cereal farms accounted for an additional 26%.

The food and agricultural sector was chosen as a priority area given the presence of large food processors and manufacturers, local agro-ecological farms and movements, as well as numerous community-based groups focusing on food. Numerous research projects, including Food Trails, are looking to make the region's food system more circular and to eliminate food waste across the supply chain. This routemap will support such research projects.

To that effect, circular economy interventions that would bring the most value to the region within the food and agriculture sector include:

- Adopting a systems-thinking approach to redesign the food system working with leading research institutions, regional agro-businesses and farms to deliver tangible social benefits and economic growth.
- Encourage more sustainable food consumption in the region, including improving distribution and access to food and supporting existing grassroots movements to continue their work as part of a recovery. Additionally, urban agriculture and urban horticulture opportunities should be further explored, building on existing initiatives and community groups such as District Eating.
- Unlocking the value of food and drink manufacturing waste and the potential of wastewater sludge for agricultural purposes. This will help close the nutrient loops, deliver new jobs and reduce environmental degradation.

See Appendix 9 for more detailed information on the strategic interventions chosen for this priority area.



Several anaerobic digestion plants in the region producing biogas or compost.

Flourishing grassroots community movements involved in food justice and food equity such as Incredible Surplus, Slow Food and Edible Eastside.

Leading research on reducing the food system's impact including SIMBIO research on bio-packaging and Food Trails.

Presence of large food processors and manufacturers, including breweries. This includes companies like Mondelez and 2 Sisters Food Group.

Centres of excellence on how to reduce the impact of agriculture on the environment including the Centre for Agro-Ecology, Water and Resilience.

Circular food Strategic interventions

Circular Nutrient Loop

What? Close the nutrient loop by developing bio-technologies to recover and enhance value of food waste and other waste products (sewage etc.).

Why? To reduce use of finite resources, to retain important nutrients in the soil, to reduce negative environmental impacts.

Role of WMCA? Enable.

Partners: See Appendix 9 for complete partners list.



Next Steps:

- Engage with wastewater and sewage companies to identify technologies to recover nutrients from sludge for agricultural use and create an online platform to facilitate exchange with farmers.
- Support local authorities in streamlining food waste collection, including producing best practice guidance for food separation.
- Determine logistics required to transport food waste to anaerobic digestion and composting plants and then distribute compost to farms and inject biogas in local gas network.

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Healthy Consumption

What? Raise awareness and encourage sustainable, local food consumption, working closely with existing communities and volunteer groups.

Why? To improve health of local communities, to reduce costs associated with unhealthy diets, and to reduce environmental impact of modern diets.

Role of WMCA? Enable and Influence.

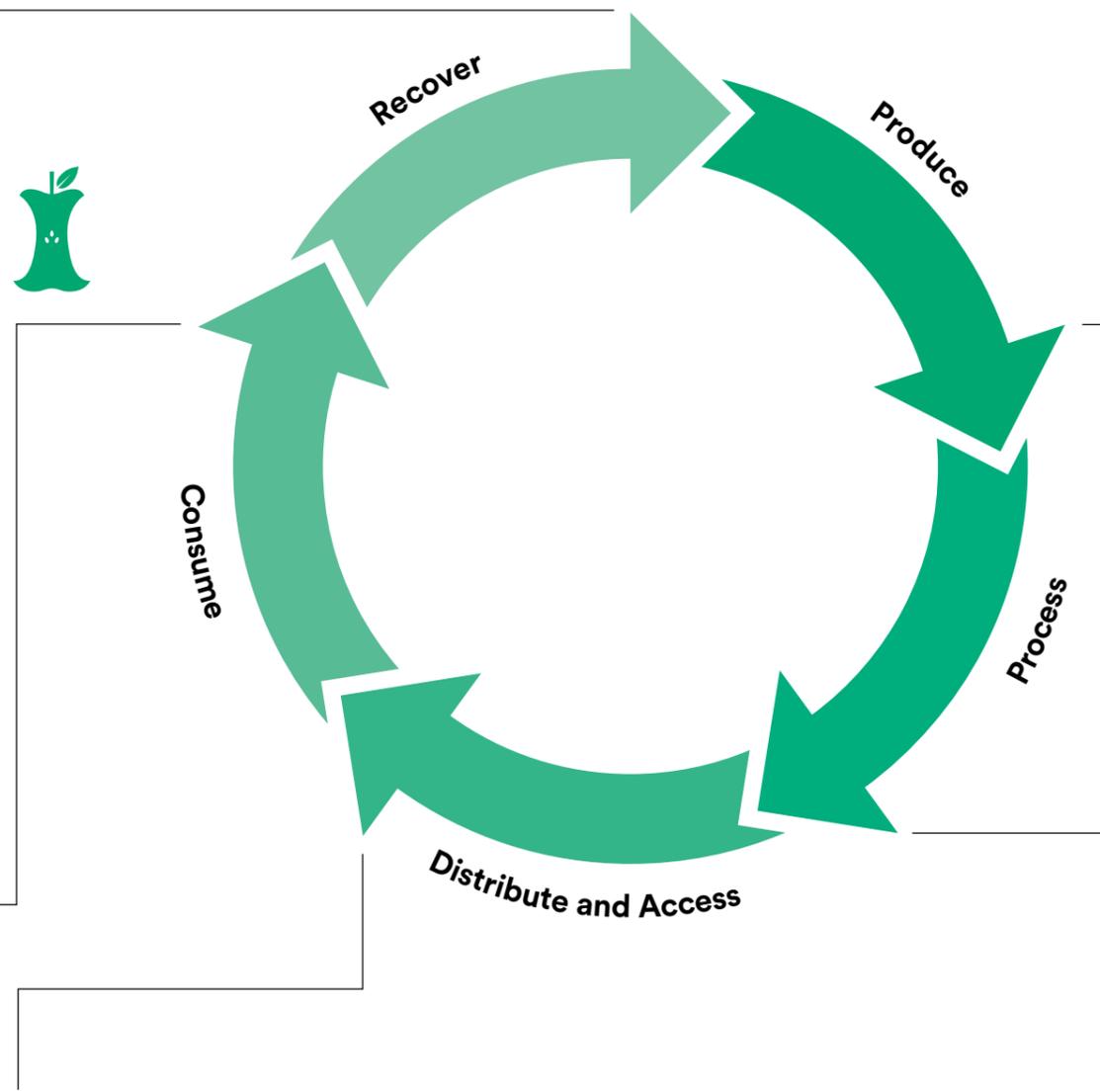
Partners: See Appendix 9 for complete partners list.



Next Steps:

- Convene local authorities to launch a cohesive behavioural change programme for healthier diets.
- Lobby national government for stronger regulations on fast food advertisements (near schools etc.).
- Provide support to existing community/volunteer groups including access to finance and space.

West Midlands' Circular Economy Routemap



Circular Food Hubs

What? Create circular food hubs with optimised logistics to collect and redistribute food that would otherwise be wasted.

Why? To improve local communities' access to healthy, affordable food, to reduce waste food, and to ensure better redistribution of food.

Role of WMCA? Enable and potential delivery partner.

Partners: See Appendix 9 for complete partners list.



Next Steps:

- Determine logistics requirements to bring in and redistribute food that would otherwise be wasted.
- Based on logistics requirements, determine best location for central food hubs, making best use of vacant/unused spaces or publicly-owned buildings.
- Convene existing community/volunteer groups and other key partners to develop funding proposal for hubs.

Regenerative Food Production

What? Support regenerative agriculture and permaculture practices as well as local food growing initiatives.

Why? To maintain soil health, to reduce food miles, to increase food security.

Role of WMCA? Enable and Influence.

Partners: See Appendix 9 for complete partners list.



Next Steps:

- Map existing sustainable, local food growing schemes and farms to identify best practice and gaps in provision.
- Convene key partners to develop incentives, support programmes and communal projects.
- Support local authority constituent members in implementing enabling policies, particularly in planning.

Circular Food Manufacturing

What? Develop circular strategies for food and drink processors and manufacturers, focusing on opportunity to use food waste as a productive resource.

Why? To mobilise circular food supply chains, to reduce resource consumption and pollution, to support further R&D in sustainable agro-business processes.

Role of WMCA? Enable and Influence.

Partners: See Appendix 9 for complete partners list.



Next Steps:

- Develop proposal for bio-packaging and no single-use plastic at the Commonwealth Games.
- Convene agro-businesses, food processors and other key partners to map flows of resources and identify opportunities to trade resources.
- Commission audit of existing food technologies to identify where further support into R&D and commercial application required, including bio-packaging.

Summary

A circular economy is a vital part of WMCA's overall approach to leading the green industrial revolution. There are many ways in which a circular economy can be developed, all of which should support a more inclusive and stronger economy, social value creation and a cleaner, greener environment.

The West Midlands already has exceptional strengths in its centres of excellence, research programmes, businesses and pilot projects focusing on circularity. These provide a fantastic springboard to accelerate the region's transition to a circular economy.

However, this transition remains a challenging, all-encompassing and demanding endeavour. It requires a set of coordinated enabling and strategic interventions across various sectors, involving multiple stakeholders and businesses as well as a radical shift in how we think about our economy.

It is why this routemap recommends that the West Midlands initially focuses on three priority areas and on builds enabling foundations to support a wider transition, based on extensive stakeholder engagement, a material flow assessment, existing circular economy expertise and aligned to the key regional and national strategies.

The priority areas selected are:

- **Circular manufacturing** with opportunities in advanced manufacturing, clean technology, vehicle and battery manufacturing, converting waste to high-value fuels.
- **Circular construction** with opportunities in brownfield land reclamation, repurposing vacant and unused spaces, circular design and construction processes and material recovery hubs.
- **Circular food** with opportunities in bio-technology R&D for agro-processing and agro-manufacturing, recovering and re-using food waste, and unlocking the potential of local social enterprises and community groups working on food issues.

Recommendations

This routemap is the first step in formalising the region's journey towards a more circular economy. We recommend that:

1. WMCA:

- Publishes this routemap and shares best practice across the region.
- Works with key stakeholders identified in the routemap to:
 - prioritise strategic opportunities and develop detailed project and funding proposals.
 - prioritise the enabling actions in the routemap.
 - commission in-depth material flow analysis for key sectors, when and where needed to inform future actions, as well as other sectors such as retail, tourism or health care and life science.
- Establishes appropriate internal and region-wide governance, refreshing the current Taskforce to align with priorities to support delivery of the routemap.
- Aligns the actions in this routemap with other internal programmes and strategies.
- Takes proposals on resource requirements and investment opportunities to WMCA Board, once this more detailed work has been completed.

2. Local authorities in the West Midlands:

- Work with WMCA on developing relevant strategic opportunities as above.
- Identify opportunities to use their enabling functions such as waste, planning, procurement and other key strategies, plans and policies, to support investment in critical waste, energy and transport infrastructure that will create the conditions for a more circular economy.

3. National government provides funding and policy support for industry-wide transitions to a more circular economy. This is essential since the West Midlands cannot transition to a circular economy without the support of the national government.

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Environment & Energy Board

Date	9 September 2021
Report title	Natural Environment Plan
Portfolio Lead	Environment, Energy & HS2 - Councillor Ian Courts
Accountable Chief Executive	Laura Shoaf, West Midlands Combined Authority email: laura.shoaf@wmca.org.uk
Accountable Employee	Ed Cox, Director of Public Service Reform email: ed.cox@wmca.org.uk Jackie Homan, Head of Environment email: jacqueline.homan@wmca.org.uk

Recommendation(s) for action or decision:

The Environment & Energy Board is recommended to:

- (1) Note the final version of the Natural Environment Plan.
- (2) Support delivery of the actions contained within the plan.

1. Purpose

- 1.1 This paper accompanies the final version of the first regional Natural Environment Plan (previously referred to as the Natural Capital Plan). This plan reflects on the independent advice from the WSP WM2041 Five Year Plan and extensive stakeholder engagement with natural capital leads from regional organisations, including local authorities.

2. Background

- 2.1 In June 2019, WMCA declared a climate emergency and in July 2019 a target date of 2041 was established for the region to achieve net zero carbon emissions. In January 2020, the WMCA strategy (*#WM2041: Actions to meet the climate crisis with inclusivity, prosperity and fairness*) was launched. This plan cut across the different actions that would be required to achieve the 2041 goal in a way that supported inclusive growth across the region. Natural environment played a key role in the strategy in terms of supporting resilience and adaptation; providing a route to mitigate climate change; and recognising the importance of green space for people across the region.
- 2.2 The recognition of the multifunctional benefits of the natural environment continued in the follow-up paper that went to the CA Board in June 2020 (*WM2041: A Programme for Implementing an Environmental Recovery*). This paper set out the urgent activity and need for the WMCA and stakeholders to produce five-year delivery plans (four in total) in support of delivering the zero carbon target for the West Midlands by 2041. The first of these WM2041 Five Year Plans (FYPs) was presented to the CA Board in March 2021 and has implications for regional natural environment programmes.
- 2.3 In terms of the natural environment specifically, the *WM2041: A Programme for Implementing an Environmental Recovery* paper highlighted the need to address inequalities of access to green space that had been magnified during the first Covid-19 lockdown. In response to this, the WMCA commissioned the New Economics Foundation (NEF) to produce a report on access to green space across the West Midlands. The Community Green Grants scheme, due to be launched in autumn 2021, and funded by the WMCA, will be a route to support action to redress the inequalities identified.
- 2.4 The WMCA has also launched the Virtual Forest website, as part of the commitment to plant more trees across the region. This is providing a focal point for people to register trees that have been planted and to share information about events and opportunities. This will be increasingly important as the WMCA accelerates delivery based on evidence in the first WM2041 Five Year Plan. This indicates that there needs to be a significant uplift in the tree planting effort across the region to support delivery of the net zero target; when Covid-19 restrictions lift the site will enable us to work with regional stakeholders to tackle this.
- 2.5 The Natural Environment Plan has previously been discussed and approved by the Environment and Energy Board at the March 2021 meeting. The plan articulates a vision for the region, bringing together the different initiatives described above whilst recognising the important work that other regional actors are doing:

'Our vision is of a West Midlands where everybody can enjoy the benefits of the natural environment and that, through careful planning and collaboration, we protect, restore and enhance the region's natural capital to address both the climate and ecological emergencies'.

2.6 The plan covers a broad range of natural environment projects focusing on tree and hedgerow planting, improving access to green space for all communities across the West Midlands and developing our wildlife corridors. The aim is to improve these environments in their own right, promoting biodiversity net gain, as well as for all the region's communities to enjoy. It also covers a number of enabling functions that will need to be put into place in order to ensure these actions are achieved (for example, securing financing and behaviour change initiatives). The actions that we propose taking fall under the following themes:

- **Widening access to green and blue spaces** for all communities across the West Midlands, initially focusing on places where there is a deficit of access.
- **Increasing tree and hedgerow planting**, but with an emphasis on 'right tree, right place', to support climate mitigation and adaptation.
- **Promoting wildlife corridors** and working with natural corridors (both green and blue) as well as those linked to infrastructure projects, e.g. along cycle ways.
- Recognising the importance of the **enablers of change** and supporting activity around financing and behaviour change that will enable the roll out, impact and scalability of the initiatives in this plan.

2.7 The priority projects for the WMCA, as outlined in the Natural Environment Plan, will be:

- Launch a **Community Green Grants** programme that provides communities with funding to deliver projects that improve access to, and quality of, green and blue spaces for those that need it most.
- Build on the launch of the **West Midlands Virtual Forest** to co-ordinate an ambitious regional tree planting programme, starting with the planting of the Commonwealth Games 2022 Legacy Forest by Severn Trent Water.
- Set up a **Wildlife Corridors Commission** to develop a 'doorstep to landscape' vision for the region, maximising the connectivity, for both people and wildlife, through green and blue corridors.
- Develop **regional natural capital data capture and mapping** to better understand the state of the region's nature and prepare the foundations for a Local Nature Recovery Strategy.
- Produce the first **West Midlands Natural Capital Investment Plan** that prioritises investment opportunities, funding requirements and routes to delivery, for the protection, restoration and enhancement of the region's natural capital.

2.8 Achieving this will require us to work closely with all regional stakeholders; these are clearly set out in Section 1.4 of the Natural Environment Plan. We are also proposing to establish a Natural Capital Board, which will drive forward the priority activity. The governance is set out in Section 4.2 of the Plan. We propose that this Board will prepare a 'State of the Region's Nature' report annually, based on the data and mapping. This will be the first of a series of five year plans on the natural environment; this timeframe has been adopted to mirror that of the five year carbon plan.

3. Financial Implications

- 3.1 There are no immediate financial implications as a result of the proposals within this paper.
- 3.2 However, the Natural Environment Plan will consist of several investment opportunities requiring investment through a variety of routes, including local authorities, central government, private finance models, crowdfunding models as well as WMCA. Each opportunity will require comprehensive business cases to be developed which will then be brought forward for approval in the first instance to the Natural Capital Board.
- 3.3 It is worth noting that WMCA Board has already approved a Community Green Grants programme in March 2021 (£725k), that provides communities with funding to deliver projects that create, enhance and improve access to green and blue spaces for those that need it most. This is due to launch this autumn.

4. Legal Implications

- 4.1 There are no legal implications as a result of this paper or the Natural Environment Plan. Any legal implications will be considered as part of the approach to delivery of the Natural Environment Plan.

5. Equalities Implications

- 5.1 The work that has been undertaken on the natural environment is central to the addressing the challenges related to climate change; the natural environment has a key role to play in both mitigation and adaptation. However, we have been clear from the outset that WM2041 must also have significant social and economic benefits for the region. The natural environment has emerged as an area where there are currently clear inequalities of access to high quality green space, either because of distance or pressure on what is currently available. The work that we will be taking forward will look to address this, driven by data that is available to us.

6. Inclusive Growth Implications

- 6.1 WM2041 was established as a programme that had inclusive growth embedded within it. The commitment to transition to net zero in the WM2041 plans, as well as the alignment with the UN Sustainable Development Goals, underpin our whole approach to addressing climate change. This also runs through the FYP, where we have highlighted co-benefits around addressing climate change. These range from reduction of fuel poverty through an extensive retrofit programme, through to natural capital solutions and widening access to green space for people across the region.

7. Geographical Area of Report's Implications

- 7.1 The Natural Environment Plan covers all local authorities of the West Midlands and the delivery will also involve non-constituent members, which we have reflected in the membership of the Natural Capital Officer Group.

8. Other Implications

8.1 None.

9. Appendix

9.1 Final Natural Environment Plan

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West Midlands
Combined Authority

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West Midlands Natural Environment Plan: 2021 - 2026

Protecting, restoring and enhancing
our region's natural environment

September 2021

Forewords

The West Midlands Combined Authority is ambitious around plans to address climate change, resource efficiency and protection and enhancement to our natural environment.

This year, we had the first of our Five Year Plans approved by the Combined Authority Board, which identifies priorities for carbon reduction to keep us on track for reaching net zero by 2041. We will also see the publication of our first Circular Economy Routemap, which will outline the West Midlands' role in the conservation of precious global resources as well as highlighting new economic and social opportunities that could be realised through a circular approach.

The natural environment forms the third strand of our work on environment and energy. It has been highlighted as being of strategic importance in our Five Year Plan, and was a core theme of my 2021 manifesto, but we know that there is more to our natural environment than as a means to reduce carbon emissions. The plan we have produced here reflects a broad approach to natural capital, looking at both green and blue spaces and the actions we plan to take to protect, enhance and restore the region's biodiversity.

As well as the environmental benefits from the actions in this plan, we also know that natural capital has important benefits for people's health and well-being. This has been clearly demonstrated

during the last year, when access to green space was identified as so important for people during the Covid-19 lockdowns. Currently, this access is not equal across our region but through this plan, and the work programmes in it, we aim to improve everyone's ability to enjoy nature and reap the benefits from being in green space.

As a combined authority, we have already made some important commitments, for example we will be funding a programme of Community Green Grants to improve access to green space; we have established our Virtual Forest to encourage tree planting across the region and we have lent support to important region-wide initiatives such as the West Midlands National Park and the Severn Trent Water Commonwealth Games Legacy Forest. Our partners from local authorities, business and environmental NGOs are doing fantastic work as well, and some of this is reflected in case studies in this plan.

The ambition laid out here will require a collective effort, but I am excited about the plans we have for the region's natural environment and look forward to working with communities and regional stakeholders to create the change we all want to see. We commit to providing updates and monitoring of our progress on improving natural capital across the West Midlands through the annual publication of a 'State of the Region's Nature' report.

Andy Street
Mayor of the West Midlands





Natural capital, including water, clean air, trees and wildlife, is a central part of the region's work on improving the environment and tackling climate change. Important in its own right, nature is also central to creating better places for all of us. This could be a green corridor that we cycle along as part of a morning commute; easy access to a park for our children to play in; or a local woodland to walk in as part of our leisure time.

Our local authorities are already making fantastic progress in delivering great natural capital schemes and some of them are included in this plan as examples of leading national and regional best practice. Regional environmental NGOs are also delivering some great programmes of work involving communities and young people in improving their local environments, providing opportunities to gain valuable skills and training in the process. We will encourage and support acceleration of existing initiatives that build public awareness and engagement to create a regional momentum and national profile for our activity.

We can no longer separate the natural environment from other parts of the work we do across the region; it now needs to be fully integrated with our social and economic agendas. For the plan we are presenting here to be successful, it will need to be linked into our work around housing, skills and transport in the way we are now seeing with other work on environment, for example our work on net zero.

Further, as our climate continues to change, natural capital and nature-based solutions will be key to improving regional resilience and providing a means for us to adapt. This might be through cooling provided by increased urban tree-planting or through natural flood mitigation measures. This plan makes a commitment to better understanding the role that natural capital can play in this context.

This first five year Natural Environment Plan for the region will seek to coordinate efforts across the combined authority area. We will need to work with constituent and non-constituent authorities; business; communities and with environmental NGOs and third sector organisations. Our activities will celebrate the work that is already happening and find new opportunities for collaboration.

I am excited about the work we are presenting here. It is ambitious, but so important that we work together towards shared outcomes that address both the climate as well as the ecological emergencies that we are facing.

Councillor Ian Courts
Chair of the WMCA Environment and Energy Board

Partners

WMCA would like to thank the following partners for their contribution to the development of this Plan.



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Executive Summary of the Natural Environment Plan actions

In delivering the Natural Environment Plan over the next five years, the WMCA will:

- Launch a **Community Green Grants** programme that provides communities with funding to deliver projects that improve access to, and quality of, green and blue spaces for those that need it most.
- Build on the launch of the **West Midlands Virtual Forest** to co-ordinate an ambitious regional tree planting programme, starting with the planting of the Commonwealth Games 2022 Legacy Forest by Severn Trent Water.
- Set up a **Wildlife Corridors Commission** to develop a 'doorstep to landscape' vision for the region, maximising the connectivity, for both people and wildlife, through green and blue corridors.
- Develop regional **natural capital data capture and mapping** to better understand the state of the region's nature and prepare the foundations for a Local Nature Recovery Strategy.
- Produce the first **West Midlands Natural Capital Investment Plan** that prioritises investment opportunities, funding requirements and routes to delivery, for the protection, restoration and enhancement of the region's natural environment.
- Explore ways to ensure **biodiversity net gain across new transport infrastructure and other developments** funded by the WMCA.

WMCA will work with regional partners on key initiatives that will:

- Develop the West Midlands National Park concept and implement the awards programme
- Create a new national walking trail in the West Midlands
- Support the enhancement of the region's world famous canal network
- Provide natural capital apprenticeship opportunities
- Give people better understanding of how to get involved in local initiatives that can improve their natural environment

1.0 Context: where are we now?

The West Midlands has ambitious and exciting plans to protect, restore and enhance its natural environment. We have already laid out our plans to tackle the climate emergency through our work on #WM2041, and the natural environment plays an important role in that, but this plan also focuses on how we will simultaneously address the ecological emergency. It outlines the actions that we will prioritise over the next five years to improve the region's biodiversity and access to green and blue space for our communities. This is our first five year plan for the natural environment, but we are committing to a long-term vision for nature, with subsequent plans that will build on success, but also address ongoing challenges to the region's biodiversity.

We know that we are not beginning from a standing start – there is a huge amount of work happening at a local and regional level already, and we have highlighted a number of

these projects in this document. Addressing some of our most important challenges around the natural environment will require a sustained collective effort from a whole range of organisations, many of whom already have established projects and programmes in place.

To understand what the West Midlands can achieve in terms of expanding, restoring and enhancing its natural environment, we need to take account of the regulatory and policy environment that we are operating in. This is the case in terms of national, regional and local contexts. This section reviews policies, plans and projects that have the power to strengthen and enable our regional natural capital ambitions.

1.1 Supporting national policy

Urgent action is needed to address the rapid decline in the UK's biodiversity. The **UK's State of Nature**¹ report provides a detailed look at how the natural environment is changing across the UK against a 1970 baseline. The most recent (2019) report showed the following:

- 15 per cent of species are under threat of extinction
- The average abundance of wildlife has fallen by 13 per cent with the steepest losses in the last ten years
- 41 per cent of UK species studied show a decline in numbers and 133 species have already been lost from our shores.

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In addressing the challenges faced by nature in the UK, the **Environment Bill** is expected to provide a statutory framework for work on natural capital and biodiversity net gain. As a combined authority, we will be looking to play our part in the delivery of this and the **25 Year Environment Plan**², which has stated the urgent need for this generation to leave the natural environment in a better state than we found it. Of the 6 themes prioritised in the 25 Year Environment Plan, this Natural Environment Plan particularly picks up on:

- using and managing land sustainably;
- recovering nature and enhancing the beauty of nature; and
- connecting people with the environment to improve health and wellbeing.

It will also support the delivery of the national **Nature Recovery Network**³, with its focus on enhancing landscapes; improving connectivity between wildlife-rich places; climate resilience; protection of existing natural environments and supporting access to nature for health and well-being.

As the Environment Bill receives royal assent in autumn 2021, the plan provided here puts the West Midlands Combined Authority in a strong position to respond to challenges around the natural environment. Local Nature Recovery Strategies, with their focus on comprehensive habitat mapping and biodiversity net gain, will be central to this. These are themes that run through all our work on the natural environment. Our focus is on genuine net gain, not just covering losses from new development. There will also be a commitment to following the mitigation hierarchy to avoid impact where possible before moving through 'minimise, restore and offset' (with the latter as a last resort).

Ahead of this formal requirement, however, we are looking to implement actions that could support the principles of biodiversity net gain, both through a better understanding of the data that we already have available as well as the implementation of some practical projects. We will work with regional stakeholders, including our local authorities, environmental NGOs, LEPs and private developers as a key element of our work on biodiversity net gain.

In addition to supporting measures around biodiversity protection and enhancement, this plan also identifies the importance of connecting people and nature more effectively. This emerged as a priority in The **Landscapes Review 2019**⁴ (also known as the Glover Review). The report called for innovation in the way we think about our national parks and landscapes, how we connect them to urban communities, and how we ensure that there is representative diversity and inclusivity in their management. The **West Midlands National Park** (launched in July 2020) is cited as a positive example within the Landscape Review as a form of new, urban national park and we are working to turn the vision for this national park into a reality.

Finally, the fundamental benefits of our natural environment were highlighted in The **Dasgupta Review**⁵ on the Economics of Biodiversity, a landmark report commissioned by HM Treasury and released in February 2021. It calls for urgent and transformative change in how we think, act and measure economic success to protect and enhance our prosperity and the natural world, and puts forward ways in which we should account for nature in economics and decision-making. Its headline messages serve as a critical reminder of the importance of nature:

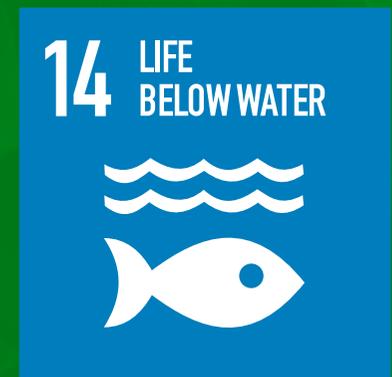
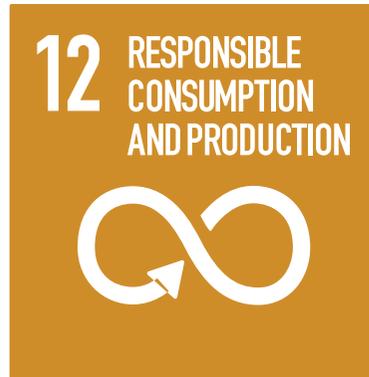
- “Our economies, livelihoods and well-being all depend on our most precious asset: Nature.
- We have collectively failed to engage with Nature sustainably, to the extent that our demands far exceed its capacity to supply us with the goods and services we all rely on.
- Our unsustainable engagement with Nature is endangering the prosperity of current and future generations.
- The solution starts with understanding and accepting a simple truth: our economies are embedded within Nature, not external to it.”

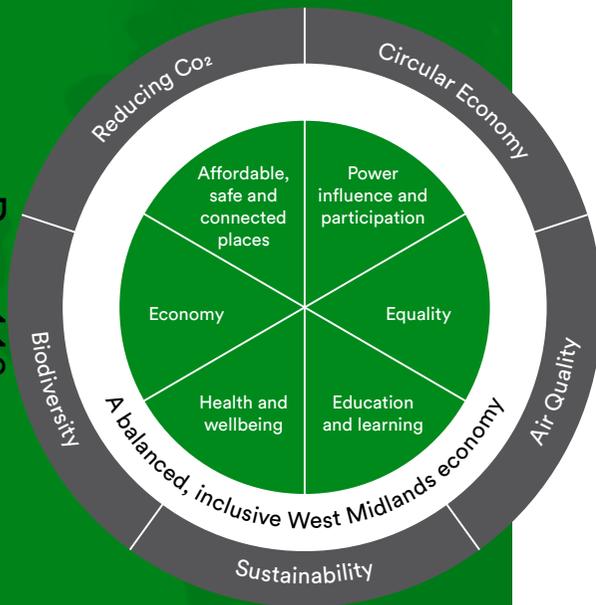
We will be taking this thinking into a **Natural Capital Investment Plan**, proposed as part of this plan.

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Recognising the many co-benefits from investing time, energy and resources into the natural environment, this plan will support delivery against the following United Nations Sustainable Development Goals⁶:

We will also explore the potential of working with other internationally agreed frameworks, for example in October 2021, parties to the UN Convention on Biological Diversity will meet to determine the post-2020 global biodiversity framework⁷. The outcomes of this could have an important bearing on our actions, including scale and pace.





1.2 The regional context

In June 2019, WMCA declared a climate emergency and in July 2019 a target date of 2041 was established for the region to achieve net zero carbon emissions. In January 2020, the WMCA strategy (**#WM2041: Actions to meet the climate crisis with inclusivity, prosperity and fairness⁸**) was launched. This plan cut across the different actions that would be required to achieve the 2041 goal in a way that supported inclusive growth across the region. The natural environment played a key role in the strategy in terms of supporting resilience and adaptation; providing a route to mitigate climate change; and recognising the importance of green space for people across the region as part of a balanced and inclusive West Midlands.

The recognition of the multifunctional benefits of nature continued in the follow-up paper that went to the Combined Authority Board in June 2020 (WM2041: A Programme for Implementing an Environmental Recovery⁹). This paper set out the urgent activity and need for the WMCA and stakeholders to produce five-year delivery plans (four in total) in support of delivering the zero carbon target for the West Midlands by 2041. The first of these WM2041 Five Year Plans (FYPs) was approved by the WMCA Board in March 2021 and has implications for regional natural environment programmes.

In terms of our natural environment specifically, we know that we need to work hard to address inequalities of access to green and blue space that were magnified during the first Covid-19 lockdown. In response to this, the WMCA commissioned the New Economics Foundation (NEF) to produce a report on access to green space across the West

Midlands. The data provided through the NEF report has now been turned into a publicly accessible data platform¹⁰ that highlights parts of the WMCA (by Lower Super Output Area) where there is low access to green space. Addressing these issues of inequality is an important part of our work on the natural environment; the **Community Green Grants** scheme that we are establishing will be a route to support action to redress the inequalities identified.

The WMCA has also launched the **Virtual Forest** website¹¹, as part of the commitment to plant more trees across the region. This is providing a focal point for people to register trees that have been planted and to share information about events and opportunities. This will be increasingly important as the WMCA accelerates delivery based on evidence in the first **WM2041 Five Year Plan¹²**. This indicates that there needs to be a significant uplift in the tree planting effort across the region to support delivery of the net zero target – our FYP indicates that this will mean planting an additional 5.7 million trees by 2026.

We have taken a broad approach to the natural environment in this plan and, through other work that we will be undertaking, will also be exploring the potential for using natural capital to support adaptation to climate impacts as well as improving air quality.

1.3 Mapping activity across the West Midlands

During the stakeholder engagement it became clear that there is already a considerable amount of work underway across the region under different natural capital thematic areas:

Trees

- 1 Birmingham Urban Forest Master Plan
- 2 Solihull Urban Forest Strategy
- 3 Wolverhampton Tree Strategy
- 4 Coventry Tree Strategy (under consultation)
- 5 Black Country i-Tree project researching the urban forest.
- 6 Solihull Planting Our Future Arden Forest vision

Parks and Green Spaces

- 7 Rethinking parks NESTA/National Lottery programme (Sandwell, Walsall and Coventry)
- 8 Future Parks Accelerator (Birmingham)
- 9 Garden City (Wolverhampton/Black Country)
- 10 Black Country UNESCO Geopark
- 11 Love Solihull (Solihull, including tree schemes)
- 12 Linear Park (Coventry)

Habitats

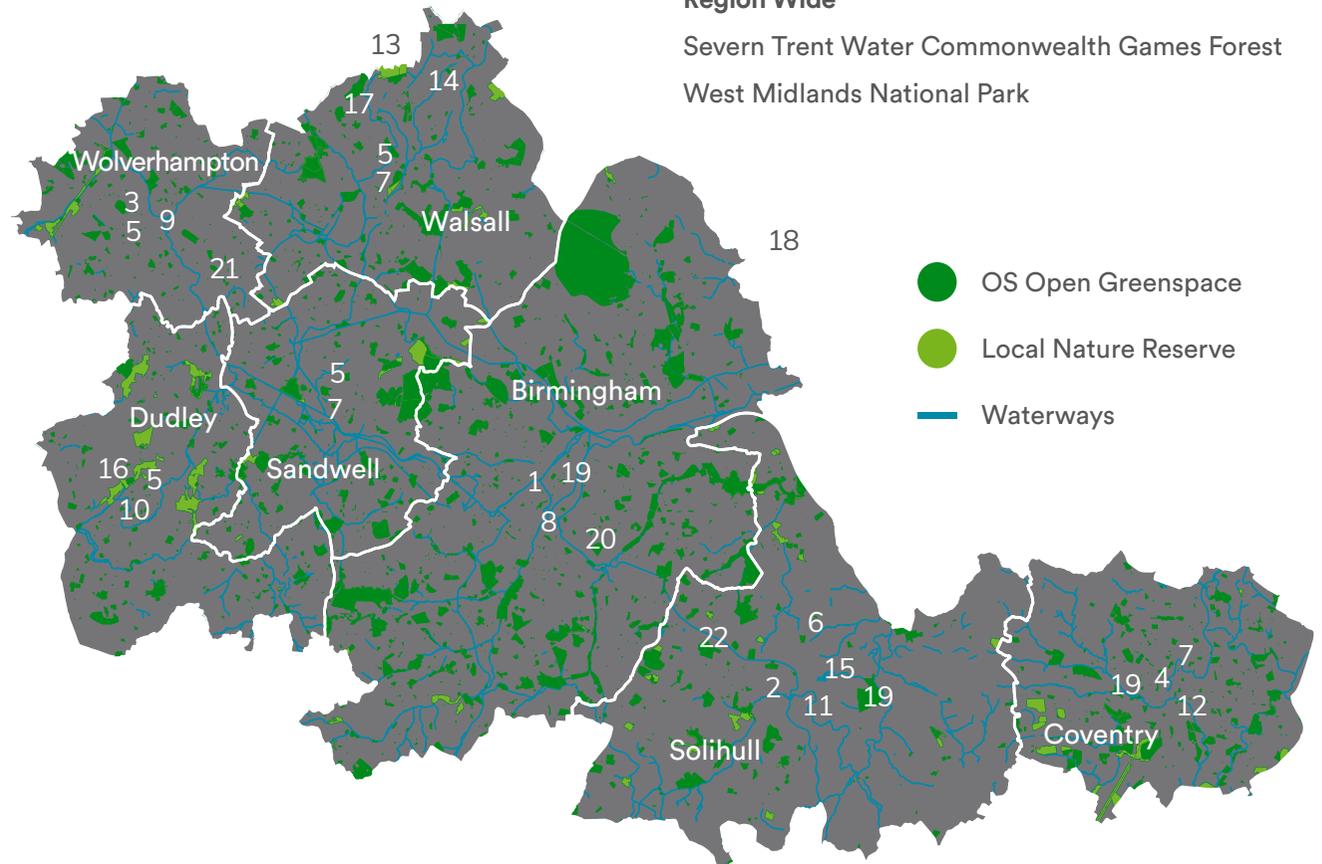
- 13 Natural England's Midlands Heathlands Heartlands opportunity mapping
- 14 North Walsall Heathlands
- 15 Highways green infrastructure planning (e.g. Wildlife Ways Solihull)
- 16 Fens Pools and Buckpool Nature Reserve, Dudley
- 17 Heathland restoration projects (Cannock Chase, Walsall, and South Staffordshire)
- 18 Thame Valley Wetlands Nature Improvement Area

Rivers

- 19 Opening and de-culverting (Rea, Sherborne, Alder Brook)
- 20 Development of corridors (Cole, Tame and Severn partnerships)
- 21 Flood management and restoration (Illey Brook, Smestow Brook, Tipton & Swan Brook)
- 22 Habitat restoration (Blythe and Stour)

Region Wide

- Severn Trent Water Commonwealth Games Forest
- West Midlands National Park



1.4 Key stakeholders

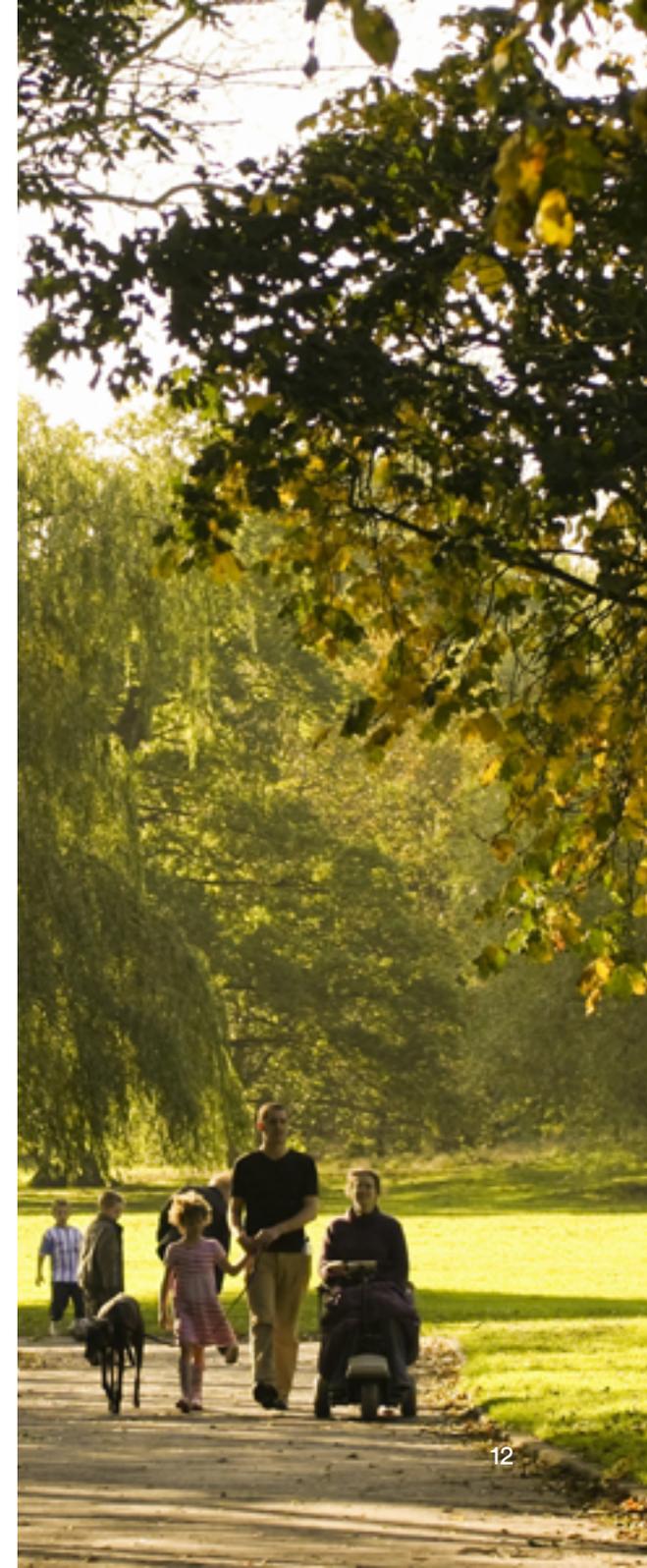
Delivering this regional Natural Environment Plan will require the involvement of a range of different stakeholders from the public, charity and voluntary, research and private sectors. A number of them have been involved in the development of this plan. These include:

- **Government organisations:** Department for Environment, Food and Rural Affairs (DEFRA), the Environment Agency, the Forestry Commission and Natural England
- **Local authorities:** the seven constituent authorities have been consulted to date, although we also commit to work with our non-constituent authorities on delivery
- **LEPs:** Black Country Consortium, Greater Birmingham and Solihull, Coventry and Warwickshire
- **Local Nature Partnerships:** Birmingham and Black Country LNP and Warwickshire, Coventry and Solihull LNP
- **Regional nature organisations and partnerships:** Wildlife Trust for Birmingham and the Black Country, Warwickshire Wildlife Trust, RSPB, Canal and River Trust, Woodland Trust, Local Nature Partnerships within WMCA region
- **Private sector:** working with individual businesses as well as with business-facing organisations (e.g. Business in the Community, Sustainability West Midlands, Growth Hubs)

- **Voluntary sector:** 'Friends of' groups, tree warden groups, volunteer groups
- **West Midlands communities:** Supporting and working with residents across the West Midlands to get involved in protecting, enhancing and restoring nature will be critical to the success of this plan.

As this work develops, it is clear that our engagement will need to stretch beyond this initial group, bringing in others that will be necessary to help us achieve the scale of intervention required. This will also include broadening the range of businesses involved; bringing significant landowners on board; and stakeholders who can support with understanding the routes to financing.

We are also proposing to establish a Natural Capital Board to oversee the work as part of the WMCA's formal governance structure (see Section 4.2)



2.0 Vision and outcomes

The natural environment plays an important role in helping the region achieve net zero by 2041. Our aim is to use our convening power to achieve biodiversity net gain across the region.

Our vision is of a West Midlands where everybody can enjoy the benefits of the natural environment and that, through careful planning and collaboration, we protect, restore and enhance the region's natural capital to address both the climate and ecological emergencies.

Our Natural Environment Plan sets out to deliver the following outcomes:

- 1 Everybody can access high quality green space within a 300m walk of their home.
- 2 Forestry cover should be increased from approximately 1.5% today to 13%, aligning as much as possible with the long-term aims for England (this equates to planting an additional 5.7m trees by 2026 and 19m by 2041)¹³.
- 3 Creation /restoration of 6 wildlife corridors along the Rivers Cole, Rea, Sherbourne, Stour and Blythe and HS2 development in line with our key stakeholder's priorities. We will also support work on the region's canals as important wildlife corridors.
- 4 All rivers to be restored to good condition by 2030, targeting 5 by 2025.
- 5 Support the creation of 200 jobs in natural capital by 2026 (and 700 by 2041), in line with the evidence in the Five Year Plan.

We know additional outcomes will need to be considered with the publication of the Environment Bill, for example the anticipated requirement for 10% biodiversity net gain in all new developments. We also plan to take forward strategies that have overlap with this Natural Environment Plan, for example a regional adaptation strategy that will identify an important role for nature-based solutions in increasing climate resilience. We also recognise that our constituent local authorities are working with locally derived targets that may differ from some of those expressed here.



3.0 Priority actions

The plan covers a broad range of natural environment projects focusing on tree and hedgerow planting, improving access to green space for all communities across the West Midlands and developing our wildlife corridors. The aim is to improve these environments in their own right, promoting biodiversity net gain, as well as for all the region's communities to enjoy. It also covers a number of enabling actions that will need to be put into place in order to ensure these actions are achieved (for example, securing financing and behaviour change initiatives).

The actions that we propose taking fall under the following themes:

- Widening **access to green and blue spaces** for all communities across the West Midlands, initially focusing on places where there is a deficit of access.
- Increasing **tree and hedgerow planting**, but with an emphasis on 'right tree, right place', to support climate mitigation and adaptation.
- Promoting **wildlife corridors** and working with natural corridors (both green and blue) as well as those linked to infrastructure projects, e.g. along cycle ways.
- Recognising the importance of the **enablers of change** and supporting activity around financing and behaviour change that will enable the roll out, impact and scalability of the initiatives in this plan.

These themes, and how we will deliver them, are covered in more detail in the following sections of the document. Each theme proposes a flagship project that the West Midlands Combined Authority will lead, as well as other projects where we will work alongside regional partners. A more detailed breakdown of the actions can be found in Appendix 1.

3.1 Access to Green and Blue Spaces

We know that there are considerable benefits from the natural environment for physical and mental health, as well as for reducing carbon and adapting to increasingly extreme weather events caused by climate change.

The UK National Ecosystem Assessment (NEA)¹⁴, funded by NERC, estimates the health benefits of living with a view of a green space are worth up to £300 per person per year, and that increasing green spaces could reduce run-off and urban flooding which costs around £270 million a year in England and Wales. Further, recent research by the RSPB¹⁵ shows that 'people in the UK with an annual household income under £10,000 are 3.6 times more likely to have no outdoor space where they live, and about 40% less likely to live within a 10-minute walk of any publicly accessible natural greenspace than people with a household income of £60,000 or more'.

Research by Fields in Trust, using the 2020 Green Space Index¹⁶, finds there is the equivalent of 32.94 square metres (sqm) of publicly accessible park and green space provision per person in Great Britain. But as population increases, by 2040 this figure will reduce by 7.57% to 30.44 sqm per person. In the West Midlands, this same data shows significant variation across the Combined Authority area and, by 2040, the data is showing that the West Midlands will fall below the minimum standard of provision. We are determined to reverse this trajectory by taking action to improve availability of high-quality green and blue space to all people across the West Midlands through the actions described below.

We will also work with emerging standards being developed by other organisations, e.g. Natural England's Access to Natural Greenspace Standard and the Woodland Trust's Access to Woodland Standard.

WMCA-led flagship programme

Community Green Grants

Using data that WMCA and other regional partners have available, we know that access to green space is not equitable, a situation that has been brought into sharp relief during the Covid-19 lockdowns. The data shows the neighbourhoods where there is currently deficit of access to green space and we are seeking to work with delivery partners across the West Midlands to provide community green grants to roll out projects to create, enhance and improve access.

In response to the evidence base provided by the Five Year Plan, the WMCA Board committed £725,000 to support regional organisations and communities in delivering projects associated with widening access to nature and green space. It is anticipated the grant will launch in autumn 2021 for an initial two years, although the intention is to find ways to extend the grants to continue to support this important area of work.

Priority actions

- Continue to work with the West Midlands National Park to transform their vision into practical action, encouraging new projects with an awards programme
- Create a new national trail in the West Midlands, working with local authorities, national organisations (like the National Trust, Canal and River Trust and Natural England) and walking groups.
- Develop a plan for including green infrastructure as part of the transport network at project development stage e.g. green roofs on shelters, semi-natural habitat into verges or leftover land.
- Creation and enhancement of urban meadows to increase biodiversity and amenity value of under-used open spaces whilst reducing maintenance costs.

We will also work to support regional projects that improve access to green space, where these align with our vision for the region's natural environment ambitions, for example:

- The opportunity to open the Duddeston Viaduct in Digbeth as a public green walkway.
- The Black Country programme of nature and visitor improvements to go alongside the new UNESCO Global Geopark status.



Case studies

Tame Valley Wetlands

Tame Valley Wetlands (TVW) is a strategic partnership established by Warwickshire Wildlife Trust in 2005, which oversees the delivery of environmental enhancements across the Tame Valley Wetlands Nature Improvement Area (NIA). The NIA includes the most extensive area of interconnected wetlands in the West Midlands straddling Tamworth, North Warwickshire, Solihull and Birmingham. The area is exceptionally important for both wildlife and people and it includes some of the key green spaces adjoining the conurbation such as Kingsbury Water Park, Middleton Lakes and Kingfisher Country Park. The vision is:

By 2030, the Tame Valley Wetlands will be a high quality, well-known and valued landscape, rich in wildlife, beauty and culture for all to enjoy.

The four key aims are to:

- 1 Landscape scale habitat creation and management
- 2 Maximising opportunities from strategic planning
- 3 Community engagement and ownership
- 4 Training and skills

In 2014 the partnership was awarded £2.5 million funding through Heritage Lottery Fund (now NLHF) to deliver a range of environmental enhancements across the area including:



Over **600m** of river restoration



16 ha wetland restoration



1,196m of hedgerows



Offering educational sessions to **3190 children**



5362 people participating in events and training





Further funding through schemes such as ERDF's Water Environment Grant and GBSLEP Small Habitats Grant has allowed further enhancement works to be carried out on the wider Tame catchment on the rivers Cole and Blythe, both key tributaries of the River Tame. This has included sustainable urban drainage schemes and invasive species control at Brueton Park, Earlswood and Meriden Park in Solihull.

At a more strategic level the partnership has been involved in the West Midlands National Park and Birmingham City University's Project Saturn. The partnership co-commissioned with the Environment Agency a strategic vision for the River Cole and secured £707,000 from Defra's Green Recovery Challenge Fund for the Love Your River Cole Project (LYRiC). TVW are working closely with Birmingham and Solihull Councils and The Wildlife Trust for Birmingham and the Black Country and other partners to deliver a range of enhancements along 17km of the River Cole. A major element of the project has been working with the Princes Trust to develop and deliver a range of learning opportunities for 144 18-24 year olds and provide them with skills to pursue a career in the green economy. The partners are also hosting 6 trainees from across the West Midlands.

TVW continues to offer a wide variety of education and outreach programmes based at the at Hams Hall Environmental Centre including schools from across Birmingham and the Black Country and bush craft to variety of groups. The partnership also has its own volunteer group, Tameforce, working actively across the area. Further information: <http://www.tamevalleywetlands.co.uk/>



Future Parks Accelerator (FPA)

The FPA programme is funded by National Heritage Lottery Fund, National Trust and Ministry of Housing, Communities and Local Government. This was formed to respond to the Parliamentary Inquiry into the Future of Public Parks 2016-17; which uncovered an out-dated approach to urban green space right across the UK.

Birmingham has come forward with a 25 year City of Nature Vision as a new city theme to run through all its policies, thinking and decision-making; reflecting the city's declared climate emergency. The Vision will be a people's vision, challenging the old Victorian top-down system; putting people first and their engagement with nature and their natural environment, where they live. To illustrate this, over 150 Earth Stories have been submitted by (mainly) younger Birmingham citizens capturing their enthusiasm and passion for living with nature.

Birmingham City Council has looked right across its organisation and partners to come forward with a new way of doing things. They have tested proposals within Children's, Housing, Employment, Health and Wellbeing and Planning to help the city better see the value of nature and our green spaces. The programme has created a space for an "ecosystem" of organisations and individuals to come together and treat issues relating to nature together; across 5 themes:-

- A Green City
- A Healthy City
- A Fair City
- A Valued City
- An Engaged City

A further innovation has been the development of an Environmental Justice Map for Birmingham that responds to the global issue highlighted through the COVID-19 lockdowns of unequal access to public green space. This map also captures climate change pressures through heat stress and flood risk; and peoples life expectancy affected by their postcode rather than their genetic code. This map highlights the need for urgency and action and a total rethink over the role of the natural environment in cities; and emphasises how this is everybody's agenda.

What will the 25 Year City of Nature Vision Deliver?

- Restore Birmingham's Nature Recovery Network
- Support the delivery of the West Midlands National Park
- Increase the city's tree canopy to 25%
- Introduce a Birmingham Fair Parks Standard
- Introduce a Sustainable Finance Framework
- Establish a City of Nature Community Alliance
- Mainstream healthy activities outdoors
- Establish Green Champions and widespread community engagement





3.2 Tree and Hedgerow Planting

Trees and hedgerows play an important part in the natural environment, as long as the ‘right tree, right place’ principle is followed. They offer a range of benefits for climate change mitigation and adaptation as well as biodiversity net gain. They bring multiple co-benefits for people’s physical and mental health, especially in urban areas. There is already significant work happening in all sectors across the West Midlands with local authorities, environmental NGOs and regional businesses making commitments and planting trees.

Currently, forest cover in the WMCA is about 1.5% of the area; agriculture 20% and urban/built up areas 70%, of which 57% comprises less built up areas, technically referred to as ‘discontinuous urban fabric’. The best opportunity for tree planting is on agricultural land of poorer quality and which will be repurposed with an associated shift in payments through the Environmental Land Management Scheme. The commitment made, through the Five Year Plan, is for 5.7 million additional trees by 2026 and 19 million by 2041 to support the regional net zero goals.

Ensuring that tree and hedgerow planting is well conceived, carried out and maintained is an important part of ensuring that carbon sequestration and other benefits can be realised – this therefore presents an opportunity to create jobs and encourage community ownership and stewardship.

We also recognise the importance of targeting tree planting, the benefits (ecosystem services) that can be maximised through this approach and the potential damaging impacts tree planting can have for both amenity and biodiversity if evidence is not followed. Any planting carried out, or sponsored by WMCA, will use native trees and trees which are UK and Ireland sourced and grown, wherever possible, to try to avoid introduction of new tree diseases from abroad.

In addition to planting new woodland, this plan also recognises the importance of protection for any areas of ancient woodland and any ancient, veteran or notable trees, as well as restoration of any ancient woodland that has been degraded through clearance and replanting with conifers. Protection and care of mature trees across the region is important for retaining biodiversity value, canopy cover and landscape quality, as well as to enhance air quality.

WMCA-led flagship programme

Virtual Forest: encouraging tree-planting

The West Midlands Virtual Forest website was launched in January 2020 as a tool for recording and promoting tree planting in alignment with the WM2041 ambitions to plant 19 million trees by 2041. The project works on a philosophy of ‘crowd planting’ and we will work in collaboration with a number of partner organisations such as local tree planting groups, local authorities, national charities (such as The Woodland Trust and Trees for Cities) and other groups with large scale tree planting initiatives. The site will also seek to link up trees, land and people able to assist with planting, as well as providing support on how to plant trees and how to get further involved with the initiative.

We are keen to continue to work with partner organisations to publicise activity, and the importance of tree planting, to enable people from across the West Midlands to get involved in some way this year. We are also seeking collaboration with stakeholders who are already planning on planting trees on private land to engage with the platform to help us reach our target. As part of this initiative, we would like to:

- Develop an annual plan/ targets for tree and hedgerow planting, to be delivered with partners through the Virtual Forest.
- Through the expansion of the Virtual Forest platform, explore ways we can replant historical forests like Shakespeare’s Forest of Arden
- Bring major regional landowners together in a ‘tree planting summit’ to promote collaboration and bring forward land for trees and other biodiversity projects.

Priority actions

- Support the Urban Forest Masterplan initiated in Birmingham and explore the potential to create a regional urban forest strategy.
- Support initiatives from partners that align with our outcomes, for example the Commonwealth Games Legacy Forest by Severn Trent Water
- Run a ‘right tree, right place’ campaign, for example, where trees work well as part of the climate adaptation solution to urban heat.
- Work with the Woodland Trust and other tree-planting groups to explore setting up a West Midlands Tree Nursery of British native species where residents with gardens or land where they wish to plant a tree can collect or purchase discounted saplings, potentially working with garden centres in the region.
- Explore incorporating tree-lined streets into the finished design for every West Midlands transport scheme which involves redesigning streets and is funded by the Combined Authority.

Case studies

The Severn Trent Commonwealth Games Forests

The aim is to create a forest or a number of forests (using only native trees, UK sourced and grown, in keeping with the local landscape), to celebrate the year of the Games and leave a lasting legacy for both our communities and the environment in the West Midlands. There will be a 2022 acre forest as well as 72 tiny forests, aimed at improving and enhancing the biodiversity of the region, with the potential to incorporate some existing forest/woodland areas that can be adopted into the wider landscape and brought into a coherent management strategy. They will follow watercourses and provide nature corridors across and through the area, wrapping around existing urban areas, providing a “green hug” and providing air quality improvements.

As well as the environmental benefits, the Commonwealth Games Forest will leave a lasting legacy for communities across the West Midlands by bringing a place for people to experience nature and be together without everyday life distractions. The project will embrace ‘social prescribing’, such as a forest workshop that could support community mental health and well-being. There is also the potential to provide jobs and skills through the creation and maintenance of the forest with others, as well as through the visitor-related activity.

The 72 tiny forests will each be linked to one of the nations competing in the Commonwealth Games. Severn Trent Water are working with Earthwatch to deliver this programme, which will link to communities through schools’ programmes and other community outreach initiatives.

SEVERN
TRENT
WATER





The Arden Free Tree Scheme (Solihull MBC)

Solihull Metropolitan Borough Council's Arden Free Tree Scheme is being run in partnership with Birmingham Airport to plant traditional native tree species as part of their carbon management plan. The aim is to enhance and protect the Arden landscape character of the borough, creating a strong sense of place and local distinctiveness. During the 20/21 winter this scheme supported 30 individual tree planting projects across Solihull and the wider Arden landscape with a total of 6,431 native trees and shrubs planted to create hedgerows and small woodlands. This initiative will have the added benefit of being planned to protect and enhance Solihull's strong rural character and those features characteristic of the wider Warwickshire Arden landscape.



30 individual tree planting projects



6,431 native trees and shrubs planted



3.3 Wildlife Corridors

Increased development of land, through housing, road building, or even agricultural activity, can be prohibitive to the mobility of wildlife. Areas become isolated, which can have detrimental effects on biodiversity. In order to prevent this, there needs to be more active creation of wildlife corridors, which can include river corridors, canals and contiguous corridors of high quality semi-natural habitat including woodlands, heathland and grasslands, but can also be constructed, for example, green bridges over new infrastructure. The National Trust describes wildlife corridors ‘as a link from one environment to another allowing wildlife to move freely and safely between them, without threat from predators or traffic’¹⁷.

Climate change, and its effects, mean that wildlife corridors could become increasingly important as species migrate to compensate for the change in temperature and natural environment. The West Midlands is significant geographically in this context as it will be an important part of the pathway for species moving north or south due to climate change. In addition, the role of the WMCA facilitates the ability to work across boundaries in the creation of new wildlife corridors.

We also need to ensure there are high quality areas of wildlife and biodiversity for the corridors to link together. Achieving nature recovery will need large areas and blocks of land in environmentally sensitive management, and considerable creation of habitat, in addition to having ecologically functioning corridors. We will work with partners to create, protect and enhance wetlands, grasslands and heathlands. Alongside tree and hedgerow planting, these environments also create important carbon sinks.

WMCA-led flagship programme

Wildlife Corridors Commission

The WMCA will establish a Wildlife Corridors Commission to understand how the region could maximise the connectivity, for both people and wildlife, through green and blue corridors – a ‘doorstep to landscape’ vision for the region. The Commission will also explore the ways that we can address barriers and blockages for wildlife due to transport and infrastructure. The overall aim of this work will be to support biodiversity net gain for the region; being able to take a pan-regional view across constituent, and into non-constituent, authorities maximises the spatial reach of impact.

The Commission will work with the evidence coming through mapping to identify priority areas of focus. This could be in terms of protecting and enhancing existing strategic wildlife corridors as well as creating new ones. The mapping will use the work undertaken by the Wildlife Trusts in anticipation of the Local Nature Recovery Strategy.

The initial six corridors of focus include those along the Rivers Cole, Rea, Stour, Sherbourne and Blythe as well as that being created by HS2. We will also support work on the region's canals as important wildlife corridors. Regional partners are already engaged in work in these corridors and the WMCA would use the work of the Commission to support this. The Commission will also work closely with existing stakeholders and partnerships operating in this space, for example the Local Nature Partnerships.

Priority actions

- Explore creating a regional 'Wildlife Ways' programme, building on the work in Solihull. Projects would include: tree, hedgerow and wildflower planting, small habitat grants for local conservation projects and improved cycling and walking access.
- Use our wildlife corridors to boost species recovery. The work towards a Local Nature Recovery Strategy will identify focus species (for example, those included in the draft Black Country LNRS Statement of Biodiversity Opportunities).

In addition to these actions, the WMCA will support partners in delivering projects that are regionally significant in enhancing wildlife corridors. These include:

- Support for the regional region's world-famous canal network, which provides important nature recovery networks, linking otherwise fragmented habitats. We will work with the **Canal and River Trust** on the natural environment on and around the canals; on improving towpaths, access and signage; and exploring opportunities for community engagement with nature and through their Explorers schools programme.
- Work with the **Environment Agency** to use nature-based solutions for flood alleviation and corridors, where appropriate. This will be included as part of a Regional Adaptation Plan.
- Work with **farmers and landowners** to enhance the rural and urban fringe agricultural land for biodiversity e.g. the Arden Farm Network across Arden Character area, led by Warwickshire Wildlife Trust.
- Work with **Natural England** and partners on projects to deliver the Nature Recovery Network including restoration of heathlands and exploration of peatland restoration as a nature-based solution.



Case studies

Wildlife Ways

Wildlife Ways is a £16.8 million programme (run by Solihull MBC) and part-funded by the European Regional Development Fund and WMCA. It opens up and improves existing routes, allowing wildlife to flourish and helping people to walk and cycle across the borough. In total, over 73 hectares of improved wildlife habitat has been created of benefit to the environment – through such things as local climate amelioration, surface water control and air quality improvements. These contribute to the health and well-being of the borough’s residents and visitors, education and regional economic investment and productivity.

The aims have been to improve the wildlife value and biodiversity of open spaces and highway verges and connect these areas together by improving 24 hectares of wildlife habitats along 69km of existing cycle ways and 23km of new shared surfaces. The highway verges act as green corridors for some fauna and flora to move and spread; without these, large open spaces can become isolated. These open spaces and parks support a variety of different habitats including woodlands (of which 11 have had works carried out through Wildlife Ways), 9 grassland sites (with over 25 hectares enriched with wildflower seed) and 1 watercourse, re-profiled with gravel riffles, changes in depth and new marginal vegetation. Habitat enhancements to a stretch of the Kingshurst Brook enable an increase in natural river processes, reconnect the brook to its floodplain, diversify the morphology of the brook and reduce flood risk downstream. The work also included planting over 300 native riverside trees along the brook including black poplar, alder and willow to provide habitat diversification and shading to sections of the watercourse to mitigate future increases in water temperatures due to climate change

Alongside the main Wildlife Ways programme, lots of smaller programmes have been developed as part of the Wildlife Ways / Greater Birmingham and Solihull Local Enterprise Partnership’s Small Habitats Grants Programme (part-funded by the European Regional Development Fund).



£16.8 million
programme



73 ha of improved
wildlife habitat



23km of new
shared surfaces



300 native
riverside trees





Natural Rivers and Green Corridors

In partnership with Birmingham City Council, Environment Agency, Birmingham and Black Country Wildlife Trust and part-funded by the European Regional Development Fund (ERDF), the Natural Rivers and Green Corridors aims to improve Birmingham's natural wildlife habitats and green spaces. In doing so, the project will benefit communities by making local green spaces more attractive and deliver wider environmental benefits including mitigating the impacts of climate change, air pollution and flood risk.



The programme includes restoration of the Bourn Brook through removal of weirs and deculverting of a watercourse in Senneleys Park to improve public safety, reduce flood risk and restore natural processes to allow wildlife to thrive. Invasive species alongside water courses in the upper Rea catchment are being managed to reduce flood risk and restore native biodiversity and public woodlands are being restored through thinning and planting of native ground flora.



Birmingham & Black Country

This £1.25m investment supports the delivery of strategic green and blue infrastructure objectives set out in Birmingham's Green Living Spaces Plan, the Environment Agency's Humber River Basin Management Plan and Birmingham and Black Country Nature Improvement Area Ecological Strategy 2017-2022. The project will result in 125ha of improved wildlife habitat.





Birmingham &
Black Country

Love Your River Stour

The Love Your River Stour has recently secured substantial funding (> £600k) including from the government's Green Recovery Challenge Fund. Love Your River Stour is a project working to improve the River Stour catchment for wildlife and people. The Stour and tributary, the Smestow Brook, are key ecological corridors identified as priorities for restoration in the draft Black Country Local Nature Recovery Opportunity Map (April 2021). However, the wildlife of the river suffers from problems including poor habitat and water quality (diffuse pollution), artificially modified banks, artificially created barriers to fish movement (e.g. disused weirs), litter and invasive species. The project takes an ecosystem services approach, investing in green and blue infrastructure to provide high quality open space for deprived urban communities, restore aquatic and terrestrial habitats for ecosystem-critical species such as salmon and otter, and address environmental issues including flood risk and pollution through nature-based solutions. The project is a partnership of The Wildlife Trust for Birmingham and the Black Country, Worcestershire Wildlife Trust, Severn Rivers Trust and the Environment Agency.



3.4 Enablers of change

This plan has highlighted some ambitious nature-based solutions for the West Midlands to implement in its mission to address the ecological emergency. Their success will require us to also create the right conditions amongst all stakeholders, from communities to NGOs businesses to play their part. We also need to understand how to take account of nature more effectively in decision-making, understanding how we value it, and enable a consistent approach to mapping and data so that we have a clear idea on the state of the region's nature.

The actions described in this section start to bring together opportunities and communities of action to implement the different projects and programmes that will be necessary. These range in scale and size, from citizen science programmes that can be run in an adhoc way, through to apprenticeship and trainee schemes to ensure that we are able to provide opportunities in jobs related to nature. In particular, we will work to ensure that these opportunities represent the West Midlands population and that all opportunities focus on inclusion and improving access for everybody.

WMCA-led flagship programme

Spatially defining the region's natural environment through maps

Understanding how and where we should protect, restore and enhance nature needs to be driven by data and an understanding of the different needs, requirements and opportunities across the region. Central to our work on the natural environment needs to be an understanding of the right kinds of interventions in the right places, including where priority action should be focused. Without this understanding, we risk implementing projects that could be detrimental to the region's biodiversity. As a result, we are aiming to complete full habitat mapping across the WMCA area before the end of 2022; this will build on existing work undertaken by the **Wildlife Trust for Birmingham and the Black Country**.

In addition to this more technical mapping, we also aim to create and share an interactive map to provide up-to-date information on nature across the WMCA area. This will enable additional layers to be added to build up a comprehensive overview of the natural environment and its potential contribution to climate adaptation and resilience and air quality improvements, for example. It will also allow understanding of where areas could be targeted for investment into nature, building in the work around access to green space, and existing/ developing programmes of activity, e.g. West Midlands National Park awarded programmes or the new West Midlands trail as it progresses.

Having a clearly mapped evidence base will also support the understanding of potential impact of the different projects and programmes contained within this plan, which will be important for all regional stakeholders in terms of targeting investment and action in a coordinated way to support biodiversity net gain outcomes. The WMCA will work with existing extensive data held by Eco Record and Habitat Biodiversity Audit, to avoid duplication of data gathering and to draw in extensive local knowledge and expertise.

Priority actions

- Build natural environment into the WM Net Zero Business Pledge so businesses understand how they can support nature.
- Implement effective data collection and monitoring of the region's natural environment as a foundation for a Local Nature Recovery Strategy.
- Develop a Natural Capital Investment Plan and explore new finance mechanisms, e.g. leveraging of private sector finance.
- Work with the proposed Net Zero Citizen's Panel (to be set up in response to the work developed for the Five Year Plan) to support natural environment initiatives.
- Run a programme of citizen science activity to support engagement in natural environment activities.
- Trial a natural capital apprenticeships scheme as part of the Green Skills Strategy (to be delivered as part of the FYP), working alongside existing programmes of activity such as the successful Level 2 traineeships offered by the Wildlife Trusts.
- Include natural environment projects as part of the region's Net Zero Neighbourhood demonstrator.
- Implement behaviour change initiatives to support the natural environment vision and outcomes, e.g. provide information on planting climate resilient species on the WMCA website; support initiatives on water efficiency to conserve resources; provide guidance for planting for climate resilience, e.g. rain gardens and other SUDs initiatives; or using trees to provide shade and mitigate urban heat.



Case study

The West Midlands National Park

The West Midlands National Park (WMNP) is a concept, developed and led by Birmingham City University, that unites the people of the West Midlands with their landscape, culture and heritage. Its purpose is to create a better quality of life, opportunities and environment for the future with thriving, healthy and resilient communities. Recognised in the UK Government's Landscape Review, it is backed by many local stakeholders. It resonates with the aims and projects in this Plan, as well as the region's climate emergency response, WM2041, and our 'brownfield first' approach to development.

Potential WMNP projects include:

- Sequences of parks and squares connecting communities across and through the West Midlands to create a walkable region.
- Publicly accessible clean rivers, canals, streams and working floodplains to walk and cycle along, and the start of long-distance journeys to the UK coast.
- The sight and sound of nature all around, clean air, limited traffic, extensive garden and street planting, forests and woodlands to define the region.
- Housing/development designed to exploit views, horizons, skylines and inherent beauty of the region.
- Celebration of regional food, through allotments and urban agriculture networks, local food markets.
- Networks of local supplies, shops, working places and circular economies.
- Projects demonstrating carbon capture, the storage, cleansing and purification of flood and storm water.



The WMNP Lab at Birmingham City University has identified a range of initial projects and they are considering the following as priorities for a WMNP award:

- A plan for using parks and the public realm as part of the regional recovery from Covid-19. This has four elements to it:
 - 1 Creating alternative futures for Birmingham City Centre. This would be a collaborative study to inform the radical rethink of the purpose, scope and economic viability of dense city centres in a post-Covid economy, climate emergency and the urgent need to kick start a green recovery.
 - 2 The Knowledge District, including The Birmingham Central Park. Developing a spatial strategy for a Birmingham Central Park, the creation of the Knowledge District and the relationship of HS2 Curzon Street with its environment, all in the context of its canal and river network.
 - 3 Birmingham National Ring Parks. This project will develop the economic case and the spatial strategy for the Birmingham National Ring Park; a green, healthy alternative to the notorious ring roads that encircle our cities, starting with Birmingham.
 - 4 The WM City Centre Parks. Building on the success of the Black Country Urban Park and the Black Country Garden City, the WM Central Parks project will create a strategy for a series of central parks in each major city of the West Midlands.

- A vision for the region's waterways. Development of a vision for canal and river navigations, including the green energy and social agendas etc.
- A spatial strategy for the Tame Valley and HS2. A strategy to improve Multiple Deprivation Indices, encouraging integrated working and holistic solutions, bringing different disciplines, external investment and expertise together to achieve more whilst lifting aspirations and design quality.

This work will bring together the many partners already active in this space across the region, acknowledging the significant visioning and delivery work that is already taking place.



4.0 Delivery

4.1 Funding and financing

The scale of this challenge will require significant levels of new investment in natural capital. Public sector funding sources will continue to play an important role in protecting and enhancing the natural environment. However, for us to achieve our goals it is critical that more private sector investment is also leveraged. Over the next 12 -18 months, the WMCA will work with all regional stakeholders, and national government, to identify ways to re-wire the financing of actions that help enhance our natural environment. We will also work to identify new sources of investment, some of which are described in this section.

The green finance landscape is changing, we need to engage with this to convert challenges into opportunities. Issues around nature need to be part of a 'whole place' approach to development and bringing smaller funding pots together where appropriate to do so. The funding and financing for natural environment schemes will be developed on a project-by-project basis. Some of the delivery could be funded through traditional **grant-based approaches**. Each of these schemes has different scale and criteria, some of which would be more appropriate for delivery partners to apply for. The main ones that are currently available include:

- Potential to apply for Environmental Land Management Scheme¹⁸, particularly in relation to local nature recovery and landscape recovery.
- National Lottery Heritage Fund for wider landscape schemes

- Health and wellbeing funding routes, e.g. social prescribing
- Potential funding options through DEFRA e.g. NEIRF (Natural Environment Investment Readiness Fund¹⁹), Nature for Climate Fund.

In addition to support for natural environment programmes in the constituent local authorities, there is also the potential to work with non-constituent Combined Authority councils to encourage West Midlands farmers and landowners outside the main urban areas to improve nature on their land, by taking advantage of the new post-Brexit agricultural subsidy regime

There is also the potential to consider **new financial solutions** for nature that take us beyond a grant-based approach. These sources could include:

- Crowdfunding models
- Private finance models e.g. through river catchment partnerships
- Both commercial and non-commercial tree planting funds
- Locally developed initiatives e.g. co-operatives, community interest companies
- Including the natural environment as part of a wider systems approach to net zero, e.g. in 'zero carbon neighbourhoods as a service' approaches.

Finally, as mentioned in Section 3.1, WMCA will be rolling out a programme of **Community Green Grants** to boost nature, and promote biodiversity net gain across the region, as well as addressing the inequality of access to green space that the New Economics Foundation work identified. The grants scheme will support work with delivery partners across the West Midlands to provide community grants to roll out projects to create, enhance and improve access to green space. We would work with local authorities and environmental NGOs whose expertise would ensure that the right schemes are delivered in the right places.

4.2 Structure for delivery

To support delivery of the Natural Environment Plan the WMCA will convene a Natural Capital Board for the region, to bring together stakeholders to co-ordinate action. This will include a wide range of issues, including: tree planting, taking a leading role on nature recovery and work to support funding and roll out of Community Green Grants. Delivery will happen in conjunction with local partners and working with large scale projects like the Commonwealth Games and HS2.

The Natural Capital Board will sit alongside other significant WMCA boards, recognising the importance of this area of activity in enhancing the future prosperity of the region. The Natural Capital Board and the Net Zero Infrastructure Delivery Board will report directly to the Environment and Energy Board, and will have direct accountability to this Board.

For the other WMCA thematic boards, there is not a formal reporting route into the Environment and Energy Board, but a clear reflection that they have an input to make into the environment and energy agenda and to the successful delivery of the WM2041 ambitions. In the same way, we would expect the work programme of the Natural Capital Board to be of interest to other thematic boards on an issue-by-issue basis.

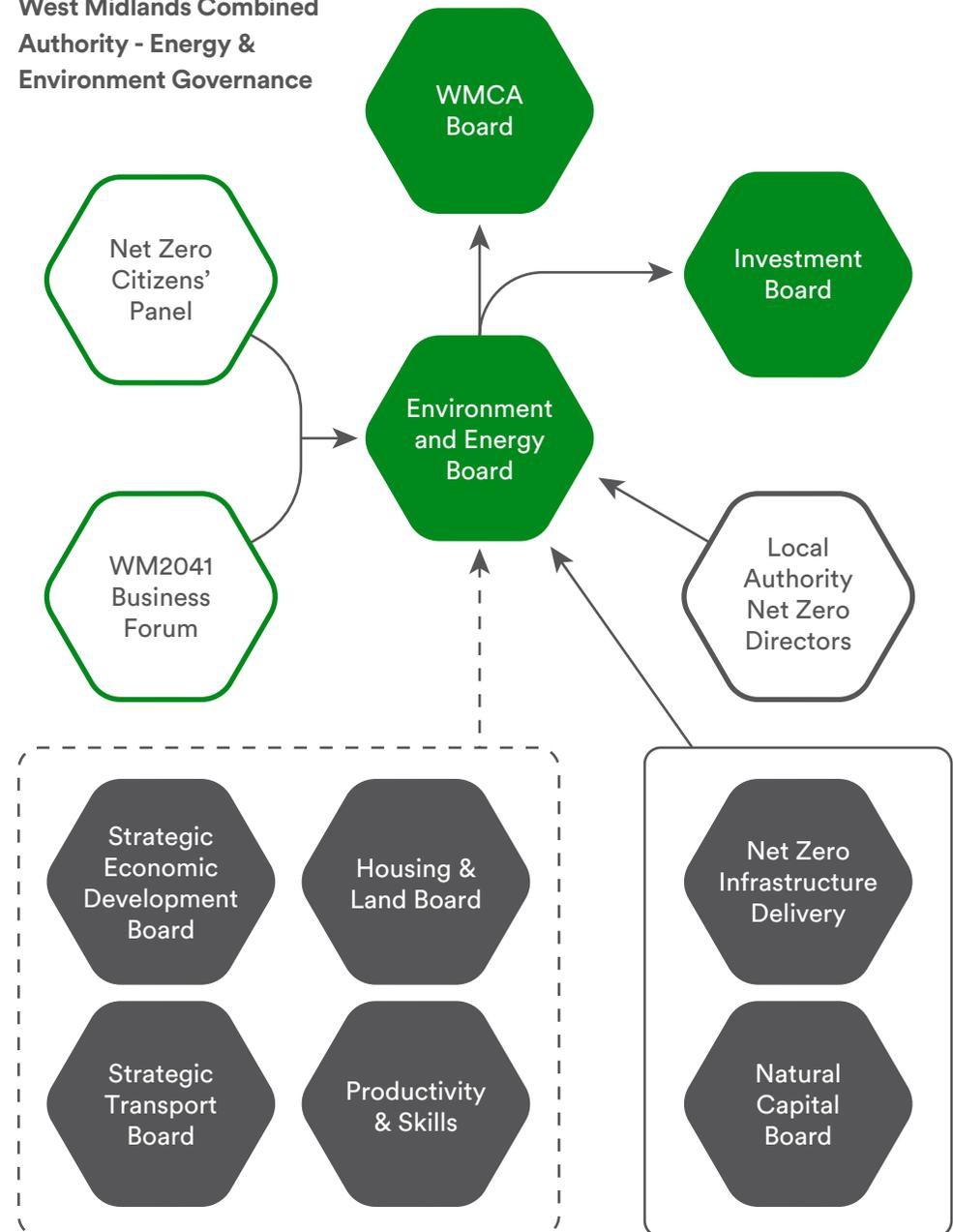
The diagram shown here is a representation of how the governance will operate, recognising that there is no way of perfectly representing the reality in action. The Natural Capital Board will follow the governance arrangements of other WMCA boards. All board reports will be publicly available.

4.3 Get Involved

For further information, please go to: <https://www.wmca.org.uk/what-we-do/environment/>

Please also contact: wm2041@wmca.org.uk

West Midlands Combined
Authority - Energy &
Environment Governance



Appendix 1: Delivery plan

Theme 1: Access to green and blue space

Action	Aim	Y1 focus (2021-2022)	Success by 2026	WMCA role (lead/ enable/ convene)	Stakeholders include	Investment secured
Community Green Grants programme	To support delivery of new projects to improve access to green space (e.g. creation of community pocket parks) or other projects supporting biodiversity in communities (e.g. food growing projects).	To establish the grant scheme and roll out the first Community Green Grants, working with regional stakeholders.	A network of WMCA green spaces, owned by community groups. Additional funding secured for the continuation of the programme.	Lead	Business community. Third sector organisations. Community groups. Local authorities. Landowners.	An initial £725k committed by WMCA with the intention to find additional resource and align with complementary activity, for example, Woodland Trust's community tree packs.
West Midlands National Park	We will continue to work with Birmingham City University on the West Midlands National Park to transform the vision into practical action through the implementation of their awards programme.	Finalisation of the awards programme and initial projects identified. The WMNP website developed for mapping projects and programmes.	To have a network of projects awarded by the West Midlands National Park showcased on the dedicated website.	Enable	Birmingham City University. WMNP Foundation Board. Local authorities. Other stakeholders engaged through BCU governance.	An ongoing programme requiring investment. An initial £25k of support has been provided to the WMNP.
National walking trail	Work with partners to create a new national trail in the West Midlands.	To identify the process for establishing a new national trail and convening the relevant stakeholder group	Have identified a potential route, bearing in mind rights of access and landowner permissions. Initial sections mapped.	Convene	Local authorities. national organisations (including the National Trust, The Ramblers Association, the Canal and River Trust and Natural England) and local walking groups.	TBC – investment sought for implementation once initial scoping completed.

Action	Aim	Y1 focus (2021-2022)	Success by 2026	WMCA role (lead/ enable/ convene)	Stakeholders include	Investment secured
Greening transport infrastructure	We will work with Transport for West Midlands at the early stages of programme/ project development to include green infrastructure as part of the transport network, e.g. green roofs on shelters, semi-natural habitat into verges /leftover land.	TfWM and WMCA will work together to develop a pipeline of projects that we can influence immediately. In addition, we need to understand what we can influence through the Local Transport Plan.	We will work through the Local Transport Plan and with existing governance structures, including Strategic Transport Officers Group, to understand potential and deliver projects across the region.	Enable	TfWM. Local authorities. Private sector.	Understand how we might leverage additional investment from existing schemes to support this initiative in the first instance.

Theme 2: Tree and hedgerow planting

Action	Aim	Y1 focus (2021-2022)	Success by 2026	WMCA role (lead/ enable/ convene)	Stakeholders include	Investment secured
Virtual Forest	<ul style="list-style-type: none"> Develop an annual plan/ targets for tree and hedgerow planting, to be delivered with partners through the Virtual Forest. Through the expansion of the Virtual Forest platform, explore ways we can replant historic forests like Shakespeare's Forest of Arden Bring major regional landowners together in a 'tree planting summit' to promote collaboration. 	We will bring together regular meetings of the Virtual Forest stakeholders to discuss tree planting targets and events and opportunities for the coming year. We will produce a tree planting pipeline and ensure trees are registered on the website. We will also organise a tree planting summit and start to build a potential land bank for natural environment projects, with a focus on tree planting	The Five Year Plan has a target to plant 5.7m trees by 2026.	Lead	Local authorities. Local tree planting groups. Environmental NGOs. Landowners. Other private sector investors. Woodland Trust.	Funding available through the WMCA environment budget for convening. Tree planting will require additional budget.
Supporting other tree-planting strategies	<ul style="list-style-type: none"> Support the urban forest masterplan initiated in Birmingham and explore the potential to create a regional urban forest strategy Support initiatives from partners that align with our outcomes, for example the Commonwealth Games Legacy Forest by Severn Trent Water 	Showcase and support regional projects to provide profile and support delivery where these align with WMCA priorities.	Work with other partners across the region to support the delivery of the five year tree planting target.	Enable	Local authorities. Regional business. Tree planting groups.	Support will be through communications and strategic support where appropriate.
Awareness raising around tree planting	Run a 'right tree, right place' campaign.	The campaign will be run as part of the wider WM2041 communication activity in the 2021/22 tree planting season.	Updates will be made to the communications each year via the Virtual Forest website.	Lead	Woodland Trust. Wildlife Trusts. Forestry Commission.	N/A. This will form part of the new WMCA website Environment pages and the Virtual Forest platform

Action	Aim	Y1 focus (2021-2022)	Success by 2026	WMCA role (lead/ enable/ convene)	Stakeholders include	Investment secured
Ensuring supply of native species of tree	Work with the Woodland Trust and other tree-planting groups to explore setting up West Midlands Tree Nursery locations of British native species where residents with gardens or land where they wish to plant a tree can collect or purchase discounted saplings, potentially working with garden centres in the region.	Scope out the potential for the WM Tree Nursery, including sites and developing the business case	Depending on interest from regional stakeholders, including local businesses, roll out initial locations ahead of 2022/2023 tree planting season.	Enable	Woodland Trust. Virtual Forest stakeholders. Local authorities. Garden centres.	TBC – this will require a full business case to be developed.
Street trees	Explore incorporating tree-lined streets into the finished design for every West Midlands transport scheme which involves redesigning streets and is funded by the Combined Authority.	TfWM and WMCA will work together to develop a pipeline of projects that we can influence immediately. In addition, we need to understand what we can influence through the Local Transport Plan.	We will work through the Local Transport Plan and with existing governance structures, including Strategic Transport Officers Group, to understand potential and deliver projects across the region.	Enable	TfWM. Local authorities. Private sector.	Understand how we might leverage additional investment from existing schemes to support this initiative in the first instance.

Theme 3: Wildlife Corridors

Action	Aim	Y1 focus	Success by 2026	WMCA role (lead/ enable/ convene)	Stakeholders include	Investment secured
Wildlife Corridors Commission	Establish a Wildlife Corridors Commission to maximise the connectivity, for both people and wildlife, between green spaces and along blue corridors.	Build Commission Advisory Group and launch tender for work. Establish priority corridors for investment through mapping.	To have a Local Nature Recovery Strategy in place delivering biodiversity net gain through improved wildlife corridors. Activity taking place on the 5 priority corridors identified in the plan.	Lead	Local authorities. Environmental NGOs. TfWM. Private sector partners.	The Commission will be run within the budget of the WMCA natural capital programme. Additional resource will need to be identified for projects.
A regional 'Wildlife Ways' programme	Roll out regional good practice, for example explore potential of a regional Wildlife Ways programme, building on the work in Solihull. Projects would include: tree, hedgerow and wildflower planting, small habitat grants for local conservation projects and improved cycling and walking access.	Explore the potential with partners across the region and develop a business case.	Support delivery if funding secured.	Enable	Local authorities. TfWM. Private sector partners. Environmental and conservation NGOs.	This will require identification of external funding in order to invest in a region-wide programme. We will explore all opportunities identified in Section 4.1 of this plan.
Species recovery	Identify links to specific species recovery as part of work for the Local Nature Recovery Strategy.	<ul style="list-style-type: none"> Work with stakeholders to identify priority species for recovery Include in habitat mapping 	Evidence of further species recovery through natural capital interventions as part of the annual State of the Region's Nature report.	Enable	RSPB. Natural England. Wildlife Trusts. Local authorities.	This will require significant additional funding, to be included as part of other funded work. The action will mainly be to partner with other organisations.
Spatially defining the region's natural capital through maps	Complete a habitat map, building on the work already being undertaken by regional stakeholders, to indicate priority areas for nature recovery. Build this into a more comprehensive interactive map to provide up-to-date information on the natural environment across the WMCA area.	Scope out the requirements needed for the mapping and identify where there are gaps in data/ data requirements. We will work with regional stakeholders to identify what these are.	Up-to-date and relevant maps that guide the region's investment into natural capital. Additional layers will also enable an understanding of potential links with nature-based solutions for climate adaptation and air quality improvements, for example.	Lead	Local authorities. Wildlife Trusts. Other environmental NGOs. Defra.	Investment to be secured.

Action	Aim	Y1 focus	Success by 2026	WMCA role (lead/ enable/ convene)	Stakeholders include	Investment secured
WM Net Zero Business Pledge	Build natural environment indicators into the WM Net Zero Business Pledge so businesses understand how they can support natural capital.	Work with businesses and business organisations to support natural environment investment.	Develop a 'natural environment exchange' platform where project ideas, land, investment and skills can be shared to support acceleration of project delivery.	Lead	Sustainability West Midlands. LEPs. Business in the Community. Individual organisations (of all sectors and sizes).	Investment secured for business pledge start-up. Identifying sponsorship to expand the programme.
Data and monitoring	Implement effective data collection and monitoring of the region's natural environment as a foundation for the Local Nature Recovery Strategy.	Have a clear baseline for the state of the region's nature. This will form part of the work of the Centre for Climate Data approved as part of the WM2041 Five Year Plan.	Produce an annual 'State of the Region's Nature' report, to be presented at the Environment and Energy Board.	Lead	Local authorities. Wildlife Trusts. Other environmental NGOs. Defra. Local Nature Partnerships	Some funding has been secured for the Centre for Climate Data as part of the Five Year Plan.
Natural capital financing	Develop a Natural Capital Investment Plan and explore new finance mechanisms, e.g. leveraging of private sector finance, taking on board the Dasgupta Review recommendations.	Scope Natural Capital Investment Plan to cover investment in green and blue space across the region supporting biodiversity net gain but also nature-based solutions for climate resilience.	Continue to build and diversify the Natural Capital Investment Plan. Secure investment for natural capital programmes.	Lead	Local authorities Defra Financial institutions Private sector Environmental NGOs	Funding to be secured. Work with WMCA Green Finance Lead to develop proposition.
Citizen engagement	<ul style="list-style-type: none"> Work with the proposed WM2041 Citizen's Panel to support new natural environment initiatives. Run a programme of citizen science activity to support engagement in natural environment initiatives. 	The citizen's panel will have been established and it will be clear how all parts of the environment/ net zero work will be part of the conversation.	Natural environment and access to green space for West Midlands communities will form an ongoing part of the Citizen's Panel work programme	Lead	Local authorities. Universities. Wildlife Trusts. NGOs. Community groups. Commonwealth Games.	The WMCA has committed £150k to establish and run a Citizen's Panel to work on regional net zero and environment priorities.

Action	Aim	Y1 focus	Success by 2026	WMCA role (lead/ enable/ convene)	Stakeholders include	Investment secured
Natural capital apprenticeships	Trial a natural capital apprenticeships scheme as part of the Green Skills Strategy (to be delivered as part of the FYP).	Build on work that is being trialled elsewhere (including as part of Birmingham City Council's Future Parks Accelerator) to explore opportunities and career pathways.	Trials undertaken to test natural capital apprenticeships and uptake.	Enable	Colleges and FE providers. Potential employers. Local authorities. Wildlife Trusts.	To be secured as part of the WMCA's work on green skills.
Net Zero Neighbourhood Demonstrator	Include natural environment projects as part of the region's Net Zero Neighbourhood Demonstrator.	Work with the selected neighbourhood(s) to identify priority areas for the natural environment as part of the system change.	Natural capital and biodiversity net gain will feature in the delivery of the selected neighbourhood, along with other elements of the net zero 'system' (energy, mobility and built environment)	Lead	Energy Capital. Local authorities. Communities in selected neighbourhood(s).	The WMCA has committed £2m to the Net Zero Neighbourhood demonstrator programme. Further funding will be leveraged for this programme.
Behaviour change	Implement behaviour change initiatives to support the natural environment vision and outcomes, e.g. provide information on climate resilient species to plant on the WMCA website.	Have a clear programme for behaviour change, as well as the methods, to begin running campaigns. The first campaign will be linked to tree planting.	Develop other initiatives that can be supported through behaviour change, e.g. water efficiency; planting to support climate resilience.	Lead	Local authorities. Commonwealth Games. Private sector. Environmental NGOs.	Have some budget to run behaviour change work. Have also secured some funding linked to the Commonwealth Games from DCMS. Further funding will be secured on a programme-by-programme basis.

Endnotes

- 1 <https://nbn.org.uk/stateofnature2019/reports/>
- 2 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/693158/25-year-environment-plan.pdf
- 3 <https://www.gov.uk/government/publications/nature-recovery-network/nature-recovery-network>
- 4 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/833726/landscapes-review-final-report.pdf
- 5 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/962785/The_Economics_of_Biodiversity_The_Dasgupta_Review_Full_Report.pdf
- 6 <https://sdgs.un.org/goals>
- 7 <https://www.iucn.org/resources/issues-briefs/post-2020-global-biodiversity-framework>
- 8 <https://www.wmca.org.uk/media/4008/wm2041-final-003.pdf>
- 9 <https://www.wmca.org.uk/media/4009/wm2041-a-programme-for-implementing-an-environmental-recovery-june-2020.pdf>
- 10 Available here: <https://maps.tfwm.org.uk/portal/apps/opsdashboard/index.html#/3e4d8d9006c64e74a575b00a08c89c6c>
- 11 <https://www.wmca.org.uk/media/4009/wm2041-a-programme-for-implementing-an-environmental-recovery-june-2020.pdf>
- 12 <https://www.wmca.org.uk/media/4870/wm-net-zero-fyp-tech-report.pdf>
- 13 This has come from modelling undertaken as part of the work on the region's first Five Year Plan for achieving net zero: <https://www.wmca.org.uk/media/4870/wm-net-zero-fyp-tech-report.pdf>
- 14 <http://uknea.unep-wcmc.org/>
- 15 https://www.rspb.org.uk/globalassets/downloads/recovering-together-report/recovering-together-report_nature-and-green-recovery_rspbyougov_june-2020.pdf
- 16 <https://storymaps.arcgis.com/stories/83b164ac89d14890a7004772da10ada4>

17 <https://www.nationaltrust.org.uk/lodge-park-and-sherborne-estate/features/keeping-wildlife-connected->

18 <https://www.gov.uk/government/publications/environmental-land-management-schemes-overview>

19 <https://deframedia.blog.gov.uk/2021/02/10/new-10-million-fund-to-boost-investment-in-nature-projects/>



West Midlands
Combined Authority



Environment & Energy Board

Date	9 September 2021
Report title	Environment & Energy Programme Update
Portfolio Lead	Environment, Energy & HS2 - Councillor Ian Courts
Accountable Chief Executive	Laura Shoaf, West Midlands Combined Authority email: laura.shoaf@wmca.org.uk
Accountable Employee	Ed Cox, Director of Public Service Reform email: ed.cox@wmca.org.uk Jackie Homan, Head of Environment email: jacqueline.homan@wmca.org.uk

Recommendation(s) for action or decision:

The Environment & Energy Board is recommended to:

- (1) Review the environment and energy programme update and provide comment/insight into the work being taken forward.
- (2) Identify areas of particular interest where there could be potential for specific collaboration with other work and stakeholders.
- (3) Provide feedback on how members would like to be engaged or informed on specific areas of the programme, outside of any Board meetings.

1. Purpose

- 1.1 To provide an overview of the environment and energy programme, including work on net zero, natural capital and circular economy. The paper also covers an update on the enabling activity being put in place to ensure successful delivery, including behaviour change, business and community engagement, data and financing.

2. Background

- 2.1 In June 2019 the West Midlands Combined Authority (WMCA) declared a climate emergency and the Combined Authority Board agreed a target for the region to reach net zero carbon emissions by 2041. A 'green paper' was written to indicate how the region could take action in order to reach net zero carbon emissions by 2041. This was approved by the Combined Authority Board in January 2020 for consultation until 12th March 2020.
- 2.2 The unfolding events of the pandemic resulted in the feedback from the consultation being combined into 'WM2041: a programme for implementing an environmental recovery' which was approved by the CA Board in June 2020, outlining the priority actions for a 'green recovery' from Covid-19 including broader environment and energy work on natural capital and the circular economy.
- 2.3 Since the approval of that paper the environment and energy programme has developed into the following areas, with corresponding plans or strategies that shape the delivery:
- **Climate change** – decarbonising our economy and society to net zero by 2041 with the first Five Year Plan approved by the WMCA Board in March 2021.
 - **Energy** - leading on energy devolution, retrofit and energy infrastructure.
 - **Natural environment** – protecting, restoring and enhancing our green spaces, and improving our air and water quality.
 - **Circular economy** – designing out waste from our economy and keeping products and materials at their highest value.
- 2.4 Updates for the relevant environment and energy projects and actions that support delivery of the above are provided within this programme update, as well as the cross-cutting activity that includes:
- Programmes to support behaviour change; this was something that people asked for support with as part of the WM2041 consultation.
 - Work with business, particularly the development of a WM Net Zero Business Pledge launched in March.
- 2.5 The environment and energy governance arrangements are also covered including how WMCA is working closely with the constituent local authorities through a:
- Net Zero Officers Group.
 - Net Zero Directors Group.
 - Natural Capital Officers Group.
- 2.6 Other programme or project specific groups also meet to ensure consistent and effective input from stakeholders across the region.

3. Financial Implications

- 3.1 The financial implications will emerge on a project-by-project basis and there are no implications as a result of the programme update.

4. Legal Implications

- 4.1 There are no specific legal implications for the programme as a whole. Legal implications will be understood as part of the programme delivery for each area.

5. Equalities Implications

- 5.1 There are no specific equalities implications from this report – these will be assessed as project plans and business cases are progressed in more detail.

6. Inclusive Growth Implications

- 6.1 We see the delivery of our environment and energy programme as being very closely tied to the WMCA inclusive growth agenda and it will form a key part of the projects and programmes developed. Ensuring the climate change transition is fair and provides opportunities and improvements in quality of life for people across the West Midlands is a fundamental part of our approach to delivery.

7. Geographical Area of Report's Implications

- 7.1 The focus of much of the work will be on the 7 constituent authorities, but there will be some programmes where we will make links with non-constituent members, for example, around natural capital and other natural cross-boundary issues.

8. Other Implications

- 8.1 None.

9. Appendices

- 9.1 Environment and Energy Programme Update

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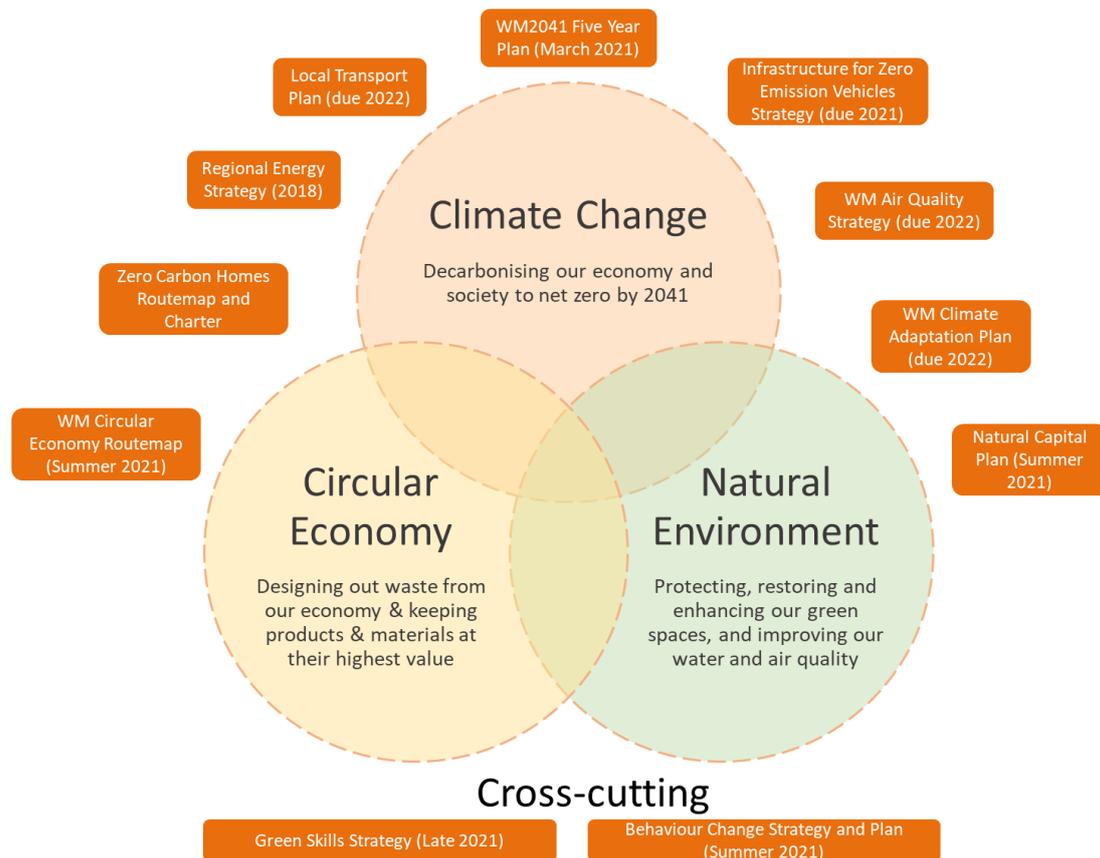
Environment & Energy Programme – September 2021 update

Background

In June 2019, the West Midlands Combined Authority (WMCA) declared a climate emergency and the Combined Authority Board agreed a target for the region to reach net zero carbon emissions by 2041. A ‘green paper’ was written to indicate how the region could take action in order to reach net zero carbon emissions by 2041. This was approved by the Combined Authority Board in January 2020 for consultation until 12th March 2020.

The unfolding events of the pandemic resulted in the feedback from the consultation being combined into ‘WM2041: a programme for implementing an environmental recovery’ which was approved by the CA Board in June 2020, outlining the priority actions for a ‘green recovery’ from Covid-19.

Since the approval of this paper the Environment & Energy Programme has developed into the following areas, with corresponding plans or strategies that shape delivery activity.



Updates for the relevant Environment and Energy projects and actions that support delivery of the above are provided within this programme update.

Summary of activity

The Environment and Energy programme priority theme to date has been climate change. Delivery activity will be added to Natural Environment and Circular Economy as this work develops in 2021.

Theme	Sub-theme	Delivery Activity
Climate Change	Net Zero System Management	Net Zero Infrastructure Delivery Board
		Green Finance
		Centre for Climate Data
		Net Zero Officer Group / Net Zero Directors Group
	Regional Fuel Poverty and Retrofit	Net Zero Neighbourhood
		Establish SMART Hub
		Establish Warm Homes Save Lives (WHSL) partnerships
	Zero Carbon Homes	Zero Carbon Homes Charter and Routemap
	Regional Energy Strategy	Energy Devolution
		Local Area Energy Planning
		Commercial Green Energy Taskforce
		Large scale renewable energy projects in the WM
		Decarbonisation of manufacturing
		Support WM LAs with heat network infrastructure
WM Infrastructure for Zero Emission Vehicles Strategy (WM IZEV)		
Transport	Local Transport Plan	
	Active Travel	
Natural Environment	Natural Capital Plan	Natural Capital Plan
		WM Virtual Forest
		Community Green Grants
		West Midlands National Park
		Natural Capital Officers Group
WM Air Quality Strategy	WM Air Quality Strategy	
WM Climate Adaptation Plan	WM Climate Adaptation Plan	
Circular Economy	WM Circular Economy Routemap	WM Circular Economy Routemap
Cross-Cutting	Behaviour Change Strategy and Plan	
	Net Zero Business Pledge and business engagement	
	COP26 and Commonwealth Games	
	Green Skills Strategy	
	Net Zero Citizens' Panel	
	WMCA Carbon Literacy	
	5SPRING Green Innovation Programme	
	Birmingham Tech Accelerator	
	Carbon Disclosure Project (CDP)	

Environment and Energy Programme Recruitment

To support delivery of the entire programme, WMCA is currently recruiting to 10 new roles to join the Environment Team and Energy Capital. Funding for the posts was approved as part of the approval of the WM2041 Five Year Plan in March 2021 and most of the roles will be in post by mid-September 2021. Roles include:

Environment Team	Natural Capital Programme Manager Community Green Grants Project Officer Graduate Environment Project Officer Environment Behaviour Change Project Officer Circular Economy and Green Economy Project and Delivery Officer
Energy Capital	Warm Homes Saves Lives Delivery Manager SMART Hub Lead (Retrofit) Net Zero Neighbourhood Delivery Manager Energy Research Analyst and Partnership Co-ordinator Commercial Energy Delivery Manager

Climate Change

WM2041 Five Year Plan
Aim: To identify activity required to ensure the West Midlands stays on course to reach net zero carbon by 2041.
Progress: WMCA approved the first Five Year Plan 2021 – 26 in March 2021. The programmes of work across energy, buildings, transport and natural environment, to support delivery of the FYP, are outlined in the sections below.
Contact Jacqueline.homan@wmca.org.uk

Net Zero System Management

Net Zero Governance
Aim: To support and advise on the progress and delivery of activity to reach net zero by 2041.
Progress:
Contact ed.cox@wmca.org.uk

Net Zero Infrastructure Delivery Board

Aim: To establish local involvement and governance over energy infrastructure investment, pave the way for energy devolution and establishing a Regional Energy Systems Operator

Progress: Energy Capital have designed the governance associated with a Regional Energy Systems Operator through their WM RESO project. This project ends in December 2021 and it has been agreed that we will establish a Net Zero Infrastructure Delivery Board as the mechanism to take the RESO forward. We have spoken to BEIS about this and submitted a proposal to the Minister requesting support to run a pilot RESO in the West Midlands with OfGEM, as part of the national consideration of how the energy system will evolve (see [FSO consultation](#)). This item has been discussed at the Energy Capital Board to solicit input on objectives and membership. Energy Capital have now drafted the initial Terms of Reference in collaboration with interested partners and are working with the WMCA on how this can sit within the wider governance set up.

Contact cheryl.hiles@wmca.org.uk

Green Finance

Aim: Develop priorities for green finance and investment and development of business cases

Progress: WMCA holds regular internal meetings looking at the investible propositions for achieving net zero. WMCA will be recruiting a Green Finance Lead who will develop the scope and approach to delivery, building on the work of the Five Year Plan.

Contact ed.cox@wmca.org.uk

Centre for Climate Data

Aim: Working closely with regional partners to bring together information to inform decisions on net zero and produce independent models and predictions

Progress: WMCA is currently scoping the data and remit required for the Centre for Climate Data.

Contact ed.cox@wmca.org.uk

Net Zero Officer Group / Net Zero Directors Group

Aim: To ensure co-ordination at a local authority level with relevant Directors and Officers

Progress: WMCA brings together the NZOG every 6 weeks and Net Zero Directors on a monthly basis to discuss relevant and timely issues and regional alignment.

Contact Jacqueline.homan@wmca.org.uk

Regional Fuel Poverty and Retrofit

Net Zero Neighbourhood

Aim: To invest in a 'demonstrator' neighbourhood where we can show the potential to unlock a place-based approach to achieving several decarbonisation goals.

Progress: WMCA has developed a Net Zero Neighbourhood Partnership Framework, which has been circulated to potentially interested partners. The new Energy Capital team role of Net Zero Neighbourhood Manager will lead the development of the programme under the guidance of the SMART Hub lead. Both roles have been advertised and recruited with new colleagues joining the team in October/November 2021.

Contact Cheryl.hiles@wmca.org.uk

Establish SMART Hub - (Sustainable Market for Affordable Retrofit Technologies)

Aim: To create a core capacity in the region to unlock funding and activate a sustainable market for affordable retrofit technologies.

Progress: The new SMART Hub lead has been appointed and will join us in November 2021, alongside the Net Zero Neighbourhood Delivery Manager, who will join us in October 2021. Energy Capital has sought expressions of interest from partners to form an advisory board to support the development of the new SMART Hub and the new team. This will be set up in 2022 once the team have taken up their roles.

In the meantime Energy Capital have been funded by BEIS/ Midlands Energy Hub to support West Midlands Local Authorities to access LAD 2 funding and are now building on this, to position the region to access £82m of the [Sustainable Warmth funding](#) which closed to bids on 4 August. This consists of the third phase of the Local Authority Delivery scheme and the initial phase of the Home Upgrade Grant scheme: WMCA's share of this would be £3m to retrofit 300 owner-occupied properties.

The first wave of the government's Social Housing Decarbonisation Fund, (£160m of £3.8bn over 10 years) opens on 23 August with a deadline of 15 October 2021 – Energy Capital is working to assemble a consortium of local authorities and housing associations to bid for the first wave of this grant, which will deliver energy efficiency measures to social housing across the region in 2022. Wave 2 will open to bids in Spring 2022.

Contact Cheryl.hiles@wmca.org.uk

Establish Warm Homes Save Lives (WHSL) partnerships

Aim: To develop a co-ordinated approach to help shape and access national programmes and ensure long-term funding is directed to where it is needed most in the West Midlands, to support people in fuel poverty.

Progress: Energy Capital has responded to the recent ECO consultation recommending increased devolution of funding. £1bn of funding will become available next year under ECO4 and offers an opportunity for Energy Capital to deliver measures under this scheme.

The Warm Homes Saves Lives Delivery Manager role to develop the WHSL partnerships with ECO providers and others remains unfilled, but we are in discussion with Western Power Distribution about sharing resources to increase impact.

Contact Cheryl.hiles@wmca.org.uk

Zero Carbon Homes

Zero Carbon Homes Charter and Routemap

Aim: To set out how we can achieve zero-carbon homes in the region by 2025.

Progress: In January 2021, the WMCA Housing & Land Delivery Board agreed the principles and contents of the Zero Carbon Homes Charter and Routemap, to guide WMCA's approach to meeting its commitment to delivering a ZCH standard by 2025. Concurrently, government set out transitional legislation to deliver its 2025 Future Homes Standard (FHS).

The Routemap provides an implementation plan for delivering the charter's vision, with a number of interim low carbon requirements and aspirational targets to 2025 and beyond. These interim requirements would ensure all schemes in which WMCA invests or intervenes meet a standard of net zero operational carbon by 2025. This is in line with the FHS requirement for all new homes to be 'zero carbon ready' from the same year.

WMCA officers are currently exploring options to establish WMCA's position as a national leader in the delivery of Zero Carbon Homes. For example, WMCA could include the FHS requirements within its funding agreements and Single Commissioning Framework prior to its formal adoption of government. Other options include addressing 'gaps' within the FHS, such as those around fabric and embodied emissions.

Contact mia.higgins@wmca.org.uk

Regional Energy Strategy

Energy Devolution

Aim: To ensure the West Midlands has the relevant energy infrastructure powers and responsibilities to support the transition to net zero.

Progress : A cross departmental lobbying group has been established within the WMCA, led by the PR team and fortnightly meetings are being held to monitor and shape our influencing work to secure energy devolution. Following the Mayor's engagement with Kwasi Kwarteng, engagement with officials has increased, and a letter summarising our devolution asks has been sent to the Minister at his request. A communique has also been developed by the WMCA team in partnership with UK100 to gain the support of other Mayoral Authorities in pursuit of this goal. Additional communications resources are also being procured to help take this Pathfinder work forward.

Contact Cheryl.hiles@wmca.org.uk

Local Area Energy Planning

Aim: To work with local authorities to develop Local Area Energy Plans that map out the implications of transport, housing and industry’s decarbonisation plans to support effective investment in the region’s energy infrastructure.

Progress: This is closely linked to the development of the Net Zero Infrastructure Delivery Board which would oversee the production and implementation of a LAEP. Work has progressed with Cadent and WPD, who have agreed to fund a study to take us to the next level of detail regarding planning for energy, but this is unlikely to be as detailed as a local area energy plan for each local authority, which will require government funding. Funding for a LEAP in Rugeley has been secured.

Contact Cheryl.hiles@wmca.org.uk

Commercial Green Energy Taskforce

Aim: To bring together a taskforce to support the region in accelerating the retrofit and renewable potential of commercial buildings.

Progress: The recently recruited Commercial Energy Delivery Manager is developing an outline internal strategy and identifying key partners to form the core of the commercial energy task force.

Contact Kate.Ashworth@wmca.org.uk

Large scale renewable energy projects in the WM

Aim: To map, investigate and prioritise opportunities for utility scale solar and wind electricity generation across the region.

Progress: Based upon WSP’s technical analysis for the Five Year Plan, we are working to access and collate relevant data and incorporate it into our spatial analysis to enable a more targeted approach to delivering this outcome.

Contact Cheryl.hiles@wmca.org.uk

Decarbonisation of manufacturing

Aim: To support the decarbonisation of local manufacturing by facilitating the replication of BEIS industrial clusters project in the Black Country.

Progress: Initial meetings with the Black Country project have taken place to explore if the WMCA circular economy work can support this programme.

Contact Cheryl.hiles@wmca.org.uk

Support WM LAs with heat network infrastructure

Aim: To ensure West Midlands Local Authorities can take forward heat network development opportunities where they are viable.

Progress: We are in discussions with the HNDU team in BEIS and Walsall Council about whether the WMCA can pick up the sponsorship of a heat network in the city, as the council do not have the resources to continue to drive the project forward following initial feasibility work undertaken for BEIS which identified the scheme as viable. An OBC has been written to access £200k of BEIS funding to supplement £50k allocation from WMCA to enable procurement of the next phase i.e., Detailed Project Development, which refines technical design and financial options ahead of commercialisation stage.

Contact Kate.Ashworth@wmca.org.uk

WM Infrastructure for Zero Emission Vehicles Strategy (WM IZEV)

Aim: To work with regional stakeholders to ensure an integrated approach to infrastructure planning and delivery for zero emission vehicles across the region.

Progress: The draft Infrastructure for Zero Emissions Vehicle Strategy was published in July for consultation, with a series of workshops with stakeholders taking place in August, to enable input to finalise the Infrastructure for Zero Emission Vehicles strategy in September.

Contact kate.ashworth@wmca.org.uk

Transport

Local Transport Plan

Aim: To update the statutory transport plan for the West Midlands to reflect the objectives of an inclusive, de-carbonised and integrated system, connecting lives and livelihoods cleanly and safely.

Progress: In July 2020 WMCA Board approved the approach and timescale to update the Plan. A transport green paper, was published in July 2021 and marked the start of an ongoing conversation to inform the development of the new Local Transport Plan. Public, stakeholder and political engagement has been taking place across a range of channels including a deep dive into issues through the Keep the West Midlands Moving online community. Alongside this work has been ongoing to develop a deeper evidence led understanding of the level of change needed in the transport system and the measures that can deliver that change in a number of scenarios: to decarbonise by 2041 or faster, by 2050 and also to demonstrate the implications of a business as usual transport strategy.

This will help shape conversations with Leaders in September later in the year to shape the level of ambition in the new West Midlands LTP. This will also form the basis of a transport policy / position statement to be produced to support WMCA engagement around COP 26 later in the year. The next stage of technical support to develop the new LTP is currently being procured. It is anticipated that a draft new West Midlands Local Transport Plan will be ready for consultation in early 2022 and formally adopted later in the year.

In parallel to the work on the Local Transport Plan, TfWM and local authorities are developing initial proposals for the City Regional Sustainable Transport Settlements (the funding stream formerly

known as Intra-City Transport Settlement). It is anticipated that the West Midlands will receive between £800m and £1.3 bn of capital funds to take forward transport investments. The value of the settlement (between the range above) will depend on the quality of the bid and assessment against DfT's criteria (key ones of which include: driving growth and productivity, levelling up and decarbonising transport). Proposals are currently being developed in collaboration with local authorities and a report seeking authority to submit the West Midlands' proposals to Government is planned for WMCA Board in September.

Also of note is work on the West Midlands Bus Service Improvement Plan. This is required in response to the Government's National Bus Strategy published earlier in the year. Bus Service Improvement Plans (BSIP) are how the WMCA, working closely with their local bus operators and local communities to plan and deliver a fully integrated service with simple, multi-modal tickets, more bus priority measures, the same high-quality information for all passengers in more places and better turn-up-and-go frequencies that keep running into the evenings and at weekends. It is anticipated that a BSIP for the West Midlands will be presented to WMCA Board in September.

Contact david.harris@tfwm.org.uk

Active Travel

Aim: To develop the walking and cycling infrastructure for the region and support people to increase the amount of active travel that they do.

Progress: This is a TfWM-led programme which has received over £15m investment from Department for Transport via the Emergency Active Travel Fund (Tranche 1) and the Active Travel Fund (Tranche 2). There are over 50 infrastructure schemes across all LA's for pop up cycle lanes, pavement widening, cycle parking schemes and road closures. To support this infrastructure TfWM have delivered a package of 8 supporting measures including cycle parking, online engagement, social prescribing pilot in the Black Country Roll & Stroll, a regional campaign launched to promote Cycling and walking. These projects are scheduled to be delivered over the next 2 years.

TfWM will be delivering 31 community led projects through the £2m Better Streets Community Fund including upgrading three crossings in Dudley, delivery of Parking Buddies to Clifton Primary School in Birmingham and resurfacing of pathways at Woodgate Valley Park to create an inclusive cycling centre and many more. All schemes will be delivered by July 2022.

West Midlands Cycle Hire was launched in March 2021 and is now live in all 7 West Midland Local Authorities with expansion plans underway.

The next round of funding available in 2021/2022 includes £1.9m in revenue, which is now secure. In addition, WMCA has recently submitted an application to the capital fund and await the outcome.

Contact Claire.williams@tfwm.org.uk

Natural Environment

Natural Environment Plan

The Plan has been finalised and is being launched week beginning 6th September.

Supporting projects being delivered currently include:

WM Virtual Forest
Aim: To provide an online platform that brings together tree planting organisations across the region to champion and support of the ambitious plans for tree planting to support the net zero transition as well as broader natural capital outcomes.
Progress: WMCA launched the Virtual Forest website in November 2020. A wide range of regional stakeholders have joined as partners. Over 18,000 trees have been planted on the site, with many tree planting opportunities postponed due to Covid-19 restrictions. It is anticipated that there will be significant activity in the next tree planting season starting November 2021. WMCA is also working with Severn Trent Water as part of the Commonwealth Forest initiative to identify suitable locations for the extensive tree planting targets.
Contact Richard.rees@wmca.org.uk

Community Green Grants
Aim: To provide grants to regional organisations to support outcomes associated with the Natural Capital Plan as well as other areas of Environment and Energy activity.
Progress: The project received £725,000 in grant funding as part of the Five Year Plan approval in March 2021. WMCA is currently designing the grant programme with regional partners and the new Community Green Grants Officer will lead the delivery once in post. It is anticipated the grant will launch in Autumn 2021 for two years.
Contact Jacqueline.homan@wmca.org.uk

West Midlands National Park
Aim: To develop a new type of national park, bringing together the region's green and blue spaces.
Progress: WMCA has continued to work with Birmingham City University to identify a full project pipeline to begin to deliver on the WMNP activity and the governance arrangements around it. We are also working with the National Trust to support their work on the Eight Hills Regional Park (which will be located in Bromsgrove), which compliments our programme of work on natural capital.
Contact Jacqueline.homan@wmca.org.uk

Natural Capital Officers Group

Aim: To ensure relevant co-ordination at a local authority level around WMCA's emerging Natural Capital Plan and work programme.

Progress: WMCA brings together the Natural Capital Officers Group every 6 weeks.

Contact Jacqueline.homan@wmca.org.uk

WM Air Quality Strategy

Aim: To produce a WMCA Air Quality Strategy that outlines the current issues, policy context and required actions to improve regional air quality.

Progress: WMCA is working with the University of Birmingham's WM Air to develop an understanding of the scope, policy context and interventions that could form a regional plan. There will be new regulations coming through the Environment Bill due for publication in autumn 2021 that will inform the Strategy. An options paper is being developed on air quality for the WMCA Board in November 2021.

Contact Jacqueline.homan@wmca.org.uk

WM Climate Adaptation Plan

Aim: To produce a Plan that outlines the key risks to the West Midlands from climate change impacts and the actions required to adapt and manage risks.

Progress: Following the publication of the latest UK Climate Change Risk Assessment, 16th July 2021, Sustainability West Midlands were involved in this work and are currently engaging regional (West Midlands wide) stakeholders to share findings and develop a WM Climate Change Risk Assessment and Action Plan. WMCA is working with SWM to understand how this work could be used to inform a WMCA adaptation plan, as well as identifying what further work local authorities are currently engaged.

Contact Jacqueline.homan@wmca.org.uk

Circular Economy

WM Circular Economy Routemap

Aim: To identify the West Midlands' strengths and opportunities in transitioning to a more circular economy that maximises the value of resources and materials.

Progress: WMCA has formed a regional taskforce and appointed Useful Projects to support the production of the routemap. Extensive stakeholder engagement has been completed and a draft Routemap is being produced. The Routemap identifies priority sectors and projects for manufacturing, construction and food as well as the conditions and policies required to maximise social impact from the transition. The routemap will go to WMCA Board in September 2021.

Contact Richard.rees@wmca.org.uk

Cross-Cutting

Behaviour Change Strategy and Plan

Aim: 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.

Progress: WMCA has appointed Behavioural Insights Team to deliver this project. The team have completed the evidence review and will shortly be launching a trial with their Predictiv tool to test key messages and visuals. The project will be completed by mid-September 2021 with resource and advice to support WMCA, local authorities and partners in delivering communications and behaviour change activity that supports delivery of the Environment and Energy programme.

Contact Richard.rees@wmca.org.uk

Net Zero Business Pledge and business engagement

Aim: To engage and celebrate regional organisations on the journey to net zero

Progress: The [WM Net Zero Business Pledge](#) launched in March 2021 following its development with a range of regional businesses. It is being managed by Sustainability West Midlands who have a unique regional network of sustainability champions and events. A communications and events programme aligned to the build-up to COP26 is currently being produced.

Contact Richard.rees@wmca.org.uk

COP26 and Commonwealth Games

Aim: To engage with external events as an opportunity to promote West Midlands business and provide community support in relation to our Environment and Energy Programme.

Progress: WMCA is convening a regional group to support the WM@COP26 campaign. In the build up to COP26, WMCA is working with UK100 to host a local leaders summit and conference mid-July 2021. WMCA is chairing the CWG 2022 Sustainability Legacy Group, covering carbon reduction, conservation and circular economy, as well as a cross-cutting behaviour change theme.

Contact Richard.rees@wmca.org.uk

Green Skills Strategy

Aim: To work with regional stakeholders to develop a Green Skills Strategy linked closely with investment and job growth, introducing skills training in key areas that exhibit early job demand and demand for new or updated skills

Progress: Building on WSP's analysis in the Five Year Plan, the Productivity and Skills Team are working on a plan for immediate skills requirements as well as 'green skills foresighting' to understand the long-term picture for skills needs for climate change and environment across the region.

Contact Jacqueline.homan@wmca.org.uk

Net Zero Citizens' Panel

Aim: To develop a Citizen's Panel that can inform and influence regional plans for WM2041.

Progress: WMCA are scoping the remit and stakeholders required for a Panel to be established.

Contact ed.cox@wmca.org.uk

WMCA Carbon Literacy

Aim: To support WMCA employees in developing their understanding of climate change

Progress: WMCA has produced Carbon Literacy materials, using the templates provided by [Carbon Literacy Project](#). The Environment Project Officer starting in September will be delivering the training to WMCA staff once appointed.

Contact Richard.rees@wmca.org.uk

5PRING Green Innovation Programme

Aim: To support businesses in finding solutions to our energy and environment challenges using 5G

Progress: The WM Green Innovation Challenge was set up by WMCA with WM5G's 5PRING Accelerator to support the work of innovative SMEs across the region, particularly in finding solutions to some of our most pressing challenges. 10 SMEs completed the 5PRING programme (touching on energy, natural capital, circular economy, build environment and behaviour change). Further information - [Ten start-ups pioneering new 5G tech in West Midlands](#)

Contact Richard.rees@wmca.org.uk

Birmingham Tech Accelerator

Aim: To support businesses in developing solutions to our energy and environment challenges

Progress: The Environment Team is working with Birmingham Tech as part of a programme to support scale-ups with an interest in low carbon solutions. WMCA is sponsoring firms focused on net zero as part of an action from the Digital Roadmap. See [New 'accelerator' will grow start-ups that tackle climate change](#)

Contact Richard.rees@wmca.org.uk

Carbon Disclosure Project (CDP)

Aim: To report WMCA activities and progress to address carbon emissions to the globally leading initiative.

Progress: WMCA Environment Team submitted the report on behalf of WMCA in August 2020 and were awarded a B. The submission for 2021 went in at the end of July and we are awaiting results.

Contact Jacqueline.homan@wmca.org.uk

WMCA Environment & Energy related news

- 11 Aug 2021 - [Mayor launches Great Clean Up campaign](#)
- 04 Aug 2021 - [Work begins at eco-homes development in Telford](#)
- 29 Jul 2021 - [Mayor praises Wolverhampton Circular City status](#)
- 23 Jul 2021 - [Agreement signed to create 5000 sustainable homes](#)
- 22 Jul 2021 - [Transport plan launched with climate change at its core](#)
- 13 Jul 2021 - [Local leaders unite in call for new net zero powers](#)
- 12 Jul 2021 - [New green skills investment to benefit thousands](#)
- 08 July 2021 - [Mayor visits revolutionary local battery business](#)
- 06 Jul 2021 - [E-scooters help to cut car emissions](#)
- 05 Jul 2021 - [Low carbon manufacturing is region's fastest growing sector](#)
- 01 Jul 2021 - [Mayor states case for region as a net zero leader](#)
- 28 Jun 2021 - [Second phase of Wolverhampton railway station opens](#)
- 25 Jun 2021 - [Free travel to be included in Games ticket price](#)
- 23 Jun 2021 - [Call for more businesses to sign up to Net Zero Pledge](#)
- 21 June 2021 - [West Midlands Cycle Hire arrives on the streets of Sandwell](#)
- 15 June, 2021 - [West Midlands company putting the wind in the sails of the push to net zero](#)
- 09 June 2021 - [On your bike! Secure 'cycle pod' opens at Birmingham New Street](#)
- 09 Jun 2021 - [Electric vehicle training centre launches at Walsall College](#)
- 07 Jun 2021 - [Cycle hire scheme success with almost 500 bike rides a day](#)
- 05 Jun 2021 - [Registration opens for international net zero conference](#)
- 02 Jun 2021 - [Futuristic 5G-enabled transport projects unveiled](#)
- 24 May 2021 - [Cycle hire scheme rolls in to Birmingham](#)