

## APPENDIX B – STAKEHOLDER ENGAGEMENT

### 1. STAKEHOLDER LIST AND MAPPING

An initial exercise was undertaken with West Midlands Combined Authority (WMCA) to map the key stakeholders who were prioritised for engagement with as part of the WM2041 Five Year Plan.

The following list outlines the organisations that were identified within the stakeholder map to initially be consulted with.

▪ Accord Housing Association	▪ Network Rail
▪ Birmingham and Black Country Wildlife Trust	▪ Newman University
▪ Birmingham City Council	▪ North Warwickshire Borough Council
▪ Birmingham City University	▪ Nuneaton and Bedworth Borough Council
▪ Birmingham International Airport	▪ Redditch Borough Council
▪ Birmingham Metropolitan College	▪ Royal Society for the Protection of Birds – RSPB
▪ Birmingham Youth Strike 4 Climate	▪ RSSB
▪ Black Country Chamber of Commerce	▪ Rugby Borough Council
▪ Black Country Consortium	▪ Sandwell College
▪ Black Country Local Enterprise Partnership	▪ Sandwell Metropolitan Borough Council
▪ Cadent Gas	▪ Severn Trent
▪ Cannock Chase District Council	▪ Shropshire Council
▪ Cemex	▪ Shropshire Housing Group
▪ Citizen Housing	▪ Sixth Form College Solihull
▪ City College Coventry	▪ Solihull Metropolitan Borough Council
▪ City of Bristol College (Campus in Knowle)	▪ Stourbridge College
▪ City of Wolverhampton	▪ Stratford-on-Avon District Council
▪ Client Earth	▪ Sustainability West Midlands
▪ Climate Action Network West Midlands	▪ Sustainable Housing Action Partnership
▪ Colleges West Midlands	▪ Tamworth Borough Council
▪ Commonwealth Games	▪ Telford and Wrekin Council
▪ Coventry and Warwickshire Chamber of Commerce	▪ The Federation of Small Businesses
▪ Coventry and Warwickshire Local Enterprise Partnership	▪ Trades Union Congress
▪ Coventry City Council	▪ Transport for West Midlands

▪ Dudley College	▪ Transport for West Midlands,
▪ Dudley Metropolitan Borough Council	▪ Tyseley Energy Park
▪ Energy Capital	▪ University College Birmingham
▪ Energy Harmonics	▪ University Hospitals Birmingham NHS Foundation Trust
▪ Energy Systems Catapult	▪ University of Birmingham
▪ Engie	▪ University of Birmingham
▪ Footsteps	▪ University of Wolverhampton
▪ Friends of the Earth	▪ Walsall College
▪ Greater Birmingham and Solihull Local Enterprise Partnership	▪ Walsall Council
▪ Greater Birmingham Chambers of Commerce	▪ Warwickshire College Group
▪ Greener Birmingham Coalition	▪ Warwickshire County Council
▪ Halesowen College	▪ Warwickshire Wildlife Trust
▪ Harper Adams University	▪ West Midlands Combined Authority - Assets
▪ Henley College Coventry	▪ West Midlands Combined Authority - Finance Team
▪ Hereward College of Further Education	▪ West Midlands Combined Authority - Housing and Land
▪ Highways England	▪ West Midlands Combined Authority - Inclusive Growth
▪ Jaguar Land Rover	▪ West Midlands Combined Authority - Policy and Programmes
▪ Job Centre Plus	▪ West Midlands Combined Authority - Productivity and Skills
▪ King Edward VI College Stourbridge	▪ West Midlands Combined Authority Environment Team
▪ Low Carbon Officers Group	▪ West Midlands Growth Company
▪ Midland Engine	▪ West Midlands Housing Partnership (WHAP)
▪ Midland Heart	▪ Western Power Distribution
▪ Midland Metro	▪ Wilmott Dixon
▪ National Express	▪ WM Housing

Of the 110 organisations identified within the stakeholder map, 27 organisations identified could not be engaged. This was due to a number of reasons, including no response to a request to engage, unable to engage with the identified organisation within the given timescales or the stakeholder was not approached to engage on the project.

A full list of stakeholders engaged with on this project is listed below in section 3.

## 2. APPROACH

### 2.1 STAGES OF ENGAGEMENT

During the stakeholder mapping process, it was identified that there needed to be two stages of engagement carried out within this limited timescale;

- 1) the listening and information gathering stage and;
- 2) the testing stage.

The first stage of engagement, to ***listen***, was the largest piece of engagement. Typically, this included:

- an introduction to the project; and
- some initial information gathered around
  - organisational net zero aspirations;
  - regional programmes and projects;
  - areas of focus; and
  - barriers to implementation

The second stage of engagement, ***to present and test***, the findings of the report with selected groups. A set of standard questions were developed for engagement which were adapted as appropriate for each stakeholder dependent upon their responses, type of organisation and their areas of concern.

An initial Request for Information template (RFI) was developed for all seven constituent authorities.

### 2.2 ENGAGEMENT CHANNELS

Due to the variety and number of stakeholders proposed to engage with, a number of different stakeholder engagement channels were identified for participation, including (online) progress meetings, 1-2-1s, workshops and surveys.

The choice of the engagement channel was influenced by the existence of established meetings/forums that could be used for engagement. From this, the prioritisation rating was established as part of the initial stakeholder mapping.

A standard set of questions were developed to guide conversation and engagement focusing on four key focus areas:

1. Interventions
2. Jobs and Skills
3. Delivery Mechanisms
4. Resources

Those mapped stakeholders were initially contacted through existing networks, introduced through existing contacts or contacted directly. Further detail is provided below on the types of engagement channels.

- Regular progress meetings were used to inform and engage with existing stakeholders on the progress of the project and to update and gain feedback upon the types of interventions. The following regular meetings were periodically used for engagement:
  - Project specific progress meetings with the West Midlands Combined Authority Environmental team and additional less frequent progress meeting with the wider West Midlands Combined Authority team
  - Transport for West Midlands (TfWM);
  - Presentations to the West Midlands Combined Authority Environment and Energy Board and Energy Capital;
  - Low Carbon Officers Group (LCOG); and
  - Fuel Poverty Regional Retrofit (FPRR) programme working group
  
- One to one meetings included with but not limited to;
  - Various Representatives from all 7 constituent local authorities (e.g. Sandwell MBC, Walsall Council)
  - Private organisations with a strong regional presence (e.g. Birmingham Airport, Jaguar Land Rover (JLR), Cemex,)
  - Representatives from Energy Capital Board (e.g. Cadent, Energy Systems Catapult,)
  - Specialist Interest organisations (e.g. WM Growth company, Severn Trent)
  - Universities.

## **The Survey**

An online survey was drafted that covered the four key focus areas. The survey included a 5-minute presentation about the project and then the survey itself with a mixture of open text response or fixed choice responses. The survey was used to ensure that feedback could be received from those individuals or organisations that could not attend meetings or presentations and to ensure a wider reach of feedback (in particular for end user organisations). The survey was distributed through the following networks:

- West Midlands Combined Authority wider project team networks (to cascade to their own Task forces and working groups, e.g. Fuel Poverty and Retrofit working group, led by Energy Capital
- Low Carbon officers Group network
- Regional business networks including; Confederation for British Industry, Green Business Clubs Network, Federation of Small Businesses, Chambers of Commerce
- The regions Local Enterprise Networks (LEP)
- Transport networks (e.g. Bus Operators Network, Logistics UK network)
- A number of organisations directly (e.g. WPD, Engie)

Presentation at existing networks/ meetings included:

- Sustainable Housing Association Partnerships (SHAP)
- Mayor's Roundtable

Online Workshops

- West Midlands Sustainable Housing Association Partnerships (SHAP)
- Universities
- NGOs (including the Wildlife Trust, Natural England, Friends of the Earth)

### 3. STAKEHOLDER ENGAGEMENT

Overall, across the project 246 individuals were met, across 97 different organisations (some of whom were not originally identified in the stakeholder map), through a variety of different communication channels between October and December 2020. Due to the variety and number of stakeholders proposed to engage with as part of the stakeholder map, a number of different stakeholders' engagement channels were identified for participation, including:

- Regular progress meetings;
- One to one virtual meetings;
- Online surveys;
- Presentation at an existing West Midlands network or meetings; and
- Virtual Workshops (specifically to present on the WM2041 Five Year Plan).

Individuals from the following organisations have been engaged with through progress meetings, one to one virtual meetings, as part of an existing West Midlands network or meetings or as part of virtual workshops:

Anthesis	Leeds Beckett University
Ark Consultancy	LEVC
Aston University	Low Carbon Homes Ltd
Atkins	Malvern Hills Community Led Housing Group
Barnsley council	Mayors Roundtable
BBC Wildlife Trust	Midland Heart
Birmingham and Black Country LEP (BBCLEP)	Midlands Connect
Birmingham Airport	Midlands Energy Hub
Birmingham City Council	Midlands Metro
Birmingham City University	Natural England
Birmingham Open Spaces	Network Rail
Black Country Housing Group	NHF

Bmet	Orbit
Bournville & Cotteridge Ward	Perkins&Will
Bournville Trust	Pioneer Group
BRE Global	Platform
Bromford	Procure Plus
BT	Red Pillar Group
C&W Wildlife Trust	Rooftop Housing Group
Cadent	RSPB
Calderdale MBC	Rugby Borough Council
Canal and Rivers Trust	Sandwell Metropolitan Borough Council
Climate Action Network West Midlands (CANWM)	Sandwell Metropolitan Borough Council
Cemex	Severn Trent
Citizen Housing	SHAP
Climate Change Members Steering Group Sandwell	Solihull College
Connected to Growth	Solihull Community Housing
Coventry City Council	Solihull Metropolitan Borough Council
Coventry University	Sotherm SMS
Druids Heath and Monymhull Council	Sustainable West Midlands
Dudley and Black Country Unesco	Tamworth Council
Dudley College of Technology	Transport for West Midlands (TfWM)
Dudley Council	Totally Modular Limited
Environment Agency (EA)	Tyseley Energy Park
EcoBirmingham	University of Birmingham
Energy Capital	University of Warwick
Energy Systems Catapult	University of Wolverhampton
Engage Malvern	University of Wolverhampton
EON	Urban Growth Company
Footsteps	Urban Splash
Forest of Mercia Tree Planting	Walsall Council
Forestry Commission	Walsall Housing Group (WHG)
Friends of the Earth	Warwick Business School
Federation of Small Businesses (FSB)	Warwickshire County Council
Greater Birmingham and Solihull LEP (GBSLEP)	Wearablecare
GDHV UK LTD	West Midlands Combined Universities / University of Wolverhampton
Glen Dimplex Heating and Ventilation	West Midlands Growth Company
Housing Plus	West Midlands National Park
IOT	West Midlands Combined Authority
Pick Everard	Wolverhampton City Council
JLR	

This does not currently include the organisations who responded to the online survey, as not all individuals left their details, (this was optional). However, in total there were 51 complete responses to the survey across 43 different organisations or institutions. This included the following:

Organisations	
AS Miles Consulting	Green Business Programme, Coventry City Council;
Accord Housing Association Ltd	Green Party Councillor - Birmingham City Council;
ACETEL (UK) Ltd.;	i-finance;
Arup;	Lawrence Cleaning;
Birmingham and Solihull Clinical Commissioning Group;	McCamley Power Ltd
Birmingham City University;	Midlands Energy Hub;
Birmingham Commonwealth Games 2022	National Express West Midlands;
Birmingham Metropolitan College;	Orbit Group;
Bromford;	Select Windows (Home Improvements) Limited;
Bryt Energy;	SIPS Education;
Built Environment Climate Change Solutions;	South & City College Birmingham;
Cadent Gas Limited;	Stagecoach Midlands;
Central England Quakers - Climate Emergency Action;	Stonewater Housing Association;
City of Wolverhampton Council;	The Pioneer Group;
Climate Action Network West Midlands	The Royal Wolverhampton NHS Trust;
Construction Futures Research Centre (CFRC) University of Wolverhampton;	The Woodland Trust;
Coventry College;	Thomas Dudley Limited;
Diamond Bus Ltd;	Tyseley Energy Park
Dudley MBC;	West Midlands Growth Company
Faraday Battery Limited	Western Power Distribution
First Midland Red Ltd;	Wolverhampton Homes
Fortel Services Ltd	

Further details on the responses to the online survey are provided in the Summary of Findings section below.

## 4. SUMMARY OF FINDINGS

### 4.1 REGULAR MEETINGS

The table below shows the organisations with whom regular meetings were held. Key points which arose during these meetings are also summarised under four key categories: interventions, jobs and skills, delivery mechanisms and resources.

Organisation	Interventions	Jobs and Skills	Delivery Mechanisms	Resources
<b>TfWM</b>	WM Transport Plan currently being developed. Atkins are developing a 'Green Paper'. Within this, modal change seen as main method to reduce emissions. Carbon quantification tools in progress of being developed.		Engagement key between transport and net zero carbon. Potential issue with lack of joined up approach in timescales.  Pop up stakeholder engagement work undertaken.	Resources: emphasised the need to 'stop talking about carbon targets and start talking about carbon budgets'. Concerns that budgets will be exceeded; transport reduction only option.
<b>Energy Capital</b>	Looking at alternative fuels and transport modes. Emphasise need to not just focus on electrification but also alternative fuels. ULEV programme and strategy (in development). Scaling up retrofit. Overall Steering Group taking strategic lead in this area.  3 PFER (Prospering from an Energy Revolution) Innovate UK sponsored projects: Coventry RESO, Rugeley Zero Carbon Housing Estate and Sandwell Greenskies. Antsy Clean Hub development.	Queries raised as to whether new competencies needed.	One to ones with key stakeholders. Existing partnership with energy sector / companies.  Regional Energy Strategy. ULEV Strategy and Energy Infrastructure Strategy also discussed.  Lobby activity on energy devolution with University of Birmingham.  Felt there is no mandate for decarbonisation and no overarching strategy.  Queries relating to demand and whether new powers are needed.	Queried whether central Government need to be asked for financial support. But caution also raised about sharing MAC curve; 'risk of politicians to focus on certain projects which have financial benefits rather than big picture'.  Resources may be required for the ULEV programme.  Queries raised regarding where the public sector might be able to add value and unlock barriers to market development.  Needing to go beyond ROI.



			<p>Preparation of the energy system to achieve decarbonisation needs addressing. Query raised in relation to whether certain partners should be worked with.</p> <p>Renewal of contracts.</p> <p>Needs to be an 'overall fundamental shift in the way we work, not bits here and there'.</p> <p>Hydrogen potential also discussed with reference to specific trials.</p>	<p>Electric infrastructure already at capacity in some parts of the Midlands.</p> <p>Lobbying role important for CA; rail industry finite budgets.</p> <p>There is a need to understand what happens to infrastructure and how this is paid for.</p>
<b>West Midlands Combined Authority Energy and Environment Board</b>	<p>Consideration of supply chain and local procurement key. As are utilities.</p> <p>Recognition of the value of green spaces by people during Covid discussed; 'there has not been equality of access to that green space'.</p> <p>Consideration of blue spaces also discussed.</p> <p>Key focus on landscape and how this is 'a feature of culture and identity'.</p>		<p>Emphasis on the need for people working together.</p> <p>People action and behavioural change is a key element.</p> <p>Consistent message required to engage people.</p>	<p>Financial cost and getting most from investments.</p>



## 4.2 WORKSHOPS

One-off workshops were also held. The organisations with whom these took place are listed in the below table as above with a summary of their responses in relation to interventions, jobs and skills, delivery mechanisms and resources, where relevant.

Organisation	Interventions	Jobs and Skills	Delivery Mechanisms	Resources
<b>Sustainable Housing Action Partnership (SHAP)</b>	<p>Fuel Poverty and Regional Retrofit Programme (FPRRP) in place.</p> <p>Hydrogen unlikely until 2038.</p> <p>Queries raised with regards to placemaking and how this should be factored in.</p>	Switching off the gas network (for hydrogen) may risk jobs and existing manufacturers.	Importance of self-build community led projects highlighted and engaging people around new affordable homes.	<p>Potential local hotspots of shortfalls with regards to grid capacity.</p> <p>Concerns over the carbon budget.</p>
<b>WM Housing Associations and Partnerships (WMHAP)</b>	<p>All respondents were acting on retro-fitting stock and upgrading where they can, but this is limited based on availability of technologies and existing stock characteristics. Only one respondent was already building net zero carbon homes as part of pilot.</p> <p>The immaturity of low-carbon / energy efficiency markets and products were highlighted. Many currently focusing on fabric of existing homes and improving EPC ratings.</p>	There is a lack of knowledge and training among current workforces with regards to design, delivery and implementation of heating and energy efficiency technologies.	Some benefits may be achieved through a combined delivery approach but there is also a need to recognise differences between different organisations.	<p>National energy infrastructure highlighted as a potential barrier or concern and as an area which needs to be developed to enable zero carbon houses to be reality.</p> <p>Higher costs / subsidy and investment requirements flagged as another potential concern with regards to delivery of zero carbon homes.</p>
<b>Wildlife Groups</b> (including: Natural England, Environment Agency, Black Country Consortium, Sandwell Council, Coventry and	<p>Some have set or are in the process of setting net zero carbon, or carbon neutral, targets by specified years.</p> <p>Some groups had not yet established specific net-zero</p>		<p>Respondents were asked 'how can we make it easier for organisations to support delivery of WM2041?'. Key points:</p>	Finance and funding structure was highlighted as one of the largest concerns / barriers to delivery. Followed by: infrastructure, technological,

<p>Warwickshire Wildlife Trust, Birmingham and Black Country Wildlife Trust, Dudley Council, RSPB, Friends of the Earth, Canal and Rivers Trust, Birmingham Open Spaces Forum (BOSF), SHAP, Forestry Commission.</p>	<p>targets but are working towards other green goals.</p> <p>Regional projects initiatives: Nature Recovery Network, WM National Park, woodland / tree-planting, Black Country Plan, Black Country UNESCO Global Geopark mentioned, for example.</p> <p>Most important opportunities for achieving net zero in the region believed to be: woodland and tree planting alternative modes of transport, industrial energy efficiency and commercial renewables.</p>		<ul style="list-style-type: none"> <li>- Becoming more open and transparent</li> <li>- Maximising engagement</li> <li>- Clear leadership and coordination</li> <li>- Provision of information and guidance</li> <li>- Provision of resources (e.g. financial support).</li> </ul>	<p>planning restrictions, legislation and human resource.</p>
<p><b>West Midlands Combined Authority and Universities Meeting</b></p>		<p>Only one comment regarding productivity knock on effect and inclusivity effect – multiplier effect (unsure to what this relates)</p>		
<p><b>West Midlands Combined Authority Policy Working Group</b></p>	<p>Over 160 interventions in total across the West Midlands Combined Authority. Actions plans are in place for 3 LEPS.</p> <p>Atkins undertaking work with TfWM.</p> <p>Method of carbon accounting and monitoring also being looked into.</p>		<p>Query raised on the public sector's role in de-risking projects and sectors. There is a need to consider systems and leveraging private finance; and for leadership from the West Midlands Combined Authority.</p> <p>MACC will help prioritise; but there is a need to understand 'what is palatable as well as politically acceptable'.</p>	

			HS2 and Green Recovery highlighted as potential delivery vehicles.	
<b>Mayor's Roundtable (including representatives from: Birmingham Airport, BT, Cadent, FSB, EON, Severn Trent, Leandlease, Urban Splash, LEVC)</b>	<p>Various perceived challenges discussed:</p> <ul style="list-style-type: none"> <li>- social acceptance and mindsets towards renewable energy</li> <li>- Defining net zero</li> <li>- Materials</li> <li>- Traditional supply chains</li> </ul> <p>What is being done:</p> <ul style="list-style-type: none"> <li>- Use of green electricity and renewable sources of heat</li> <li>- Tree planting</li> <li>- Transition of buildings to be net zero by 2030</li> <li>- Preparations to become H2 ready</li> <li>- Investments in offshore wind</li> <li>- Removing fossil fuel-based fleet</li> <li>- Engagement with supply chain</li> </ul>	Transformation of the industry may be required.	<p>Partnerships seen as key; 'traditional procurement is not great for effecting big change' (EON). Engagement will be required with suppliers.</p> <p>Integration also key, 'need to speak to one voice' (sharing energy demand) (EON).</p> <p>Consumer behaviour seen as important as many small businesses are home-based.</p> <p>Data sharing also seen as important.</p> <p>Energy planning works well at regional authority level.</p>	<p>Good to see paybacks in FYP. Bigger businesses can have longer investment cycles, smaller businesses may need quicker paybacks.</p>

## 4.3 ONE-TO-ONE MEETINGS

As above, findings and key discussion points from the organisations with whom one-to-one meetings were also held are included in this section. All seven of the West Midlands Combined Authorities constituent authorities were issued with a Request for Information (RFI) form to complete prior to one to one discussion.

Organisation	Interventions	Jobs and Skills	Delivery Mechanisms	Resources
<b>West Midlands Combined Authority – Various including: Land and Homes, Productivity and Skills, Inclusive Growth, Finance and Investment, Strategic Transport Board</b>	<p>Land and Homes: Zero Carbon Homes by 2025 initiative involving baseline gap analysis and production of a Roadmap. Skeleton Zero Carbon Homes Charter.</p> <p>Zero Carbon Home Officer Working Group established and Zero Carbon House Taskforce.</p> <p>Inclusive Growth: Focusing on East Birmingham and North Solihull corridors. Have developed a Social Economy Business Plan, focusing on social enterprises. There is a Social Economy Taskforce. Community Energy Birmingham.</p> <p>Finance and Investment: There is a need to go beyond ‘business as usual’, current committed actions ‘will only move the dial a little’. In data gathering, accounting for projects where funding is likely.</p>	<p>Productivity and Skills: plans and strategies already exist e.g. Strategic Economic Plan; a work recovery programme ‘Recharge the WM Plan’; a Local Industrial Strategy; and the Fuel Poverty and Regional Retrofit Programme (FPRRP) (includes productivity and skills).</p> <p>Need to engage with universities. Engagement with colleges; ‘all colleges should be a high priority on the skills front’.</p> <p>Jobs in region need to be considered with relation to cars. Region utilises a lot of cars as well as manufacturers them.</p> <p>Need to focus on blue collar jobs and upskilling whole economy. Focus on inclusion</p>	<p>Planning White Paper – but still ‘vague’.</p> <p>See existing plans and strategies listed under Interventions.</p> <p>Engagement with other organisations, e.g. Greater Birmingham and Solihull LEP, Birmingham City Council. There is a need for a ‘structured approach in particular to large industry who are members of the Economic Impact Group’.</p> <p>Role of enabler with regards to community leadership. Creation of fund similar to Bristol City Fund. Consideration of crowd funding. Importance of Natural Capital and potential multi-benefits.</p> <p>Cannot leave all to the private sector to avoid people being ‘left behind’. Single assurance framework in place but does not currently include carbon.</p>	<p>Limited data relating to housing.</p> <p>‘Gap between rhetoric and actual response’, employers need to do more.</p> <p>Approach based on Doughnut Economics book. Must be a net benefit from developments. Region can contribute more to self-sufficiency.</p> <p>Constrained resources and capacity. Need to balance long and short-term needs.</p> <p>Quantification process in place, need to differentiate between what is funded or just plans.</p> <p>Value for money important, what will give the biggest impact for smallest investment. There is a need to understand likely payback and returns for different technologies.</p>

	<p>Projects themselves need to be understood first, then funding and pricing.</p> <p>Asset Discussion (with various): Car park lighting Co-location and rationalisation of office space Looking to produce asset register.</p>	<p>and opening up jobs to wider community. There is a need to consider heavy industry, transport, goods and services. Note recent redundancies in manufacturing and automotive sectors. Need to analyse demographics now and consider how this might change to 2041.</p> <p>Commitments will generate jobs.</p> <p>‘Asset release’ mentioned with regards to jobs.</p>	<p>Each intervention will need different delivery mechanism.</p>	<p>MACC curve to be created for pricing.</p> <p>Mention use of BEIS fund e.g. for car park lighting.</p> <p>OPE8 – funding applications must demonstrate how project meets an ambition; however, no real target so ‘loose’.</p> <p>There is a need to consider financing upfront costs alongside lifetime. Risk of recovery should also be addressed; ‘some investments are riskier than others’.</p> <p>Positive Net Present Value (NPV) can be privately financed, local authorities need to focus on projects with negative NPV. Costs and benefits may be split between different parties. Local authorities can operate and accept sub-market rates – presenting opportunities.</p>
<b>TfWM/ Atkins</b>	<p>Developing ‘Green Paper’. Highlighting gaps in policy and what is needed from central Government. Discussions centred on bans of petrol / diesel vehicles and</p>	<p>Impacts on car manufacturers highlighted, potential spikes in sales ahead of ban or purchasing of LGVs to escape ban.</p>		

	introduction of ICE cars on roads.			
<b>Birmingham City Council (BCC)</b>	<p>Council aiming to be carbon neutral by 2030, but recognise further work required for city as a whole.</p> <p>Further work to be done on retrofitting and procurement.</p> <p>Route to Zero – aiming to be first net zero city.</p> <p>Some actions already happening include:</p> <ul style="list-style-type: none"> <li>- Cargo bike / workplace parking levy</li> <li>- Birmingham Development Plan</li> <li>- Birmingham Local Plan and Future Homes Standard</li> <li>- EV charging network project</li> <li>- Clean Air Zone</li> <li>- Hydrogen buses</li> <li>- Passivhaus pilot project</li> </ul> <p>There are a number of major developments in the next 5 years in the City including for example: Commonwealth Games, HS2 and Curzon, Peery Barr Masterplan (transport), metro extension and housing regeneration schemes.</p>	<p>Route to Zero (R20) is the main route.</p> <p>The Covid-19 Recovery plan provides a hook to R20 and linking with the universities.</p>	<p>R20 will be main route for delivery. Movement for Growth to capture Birmingham Plan (update to commence).</p> <p>Birmingham Transport Plan has number of deliverables which should be aligned too.</p> <p>Replacement of Big City Plan is also taking place; to be replaced by Our Future City Plan – Birmingham 2040.</p> <p>Decision to be made with regards to how best to communicate with stakeholders.</p> <p>Working with West Midlands Combined Authority through:</p> <ul style="list-style-type: none"> <li>- lobbying around planning policy</li> <li>- freeing up resources for large scale retrofit</li> <li>- standards for rented properties</li> <li>- regional renewable energy potential</li> <li>- sharing best practice</li> </ul> <p>Council alone:</p> <ul style="list-style-type: none"> <li>- reducing own emissions</li> <li>- local transport infrastructure</li> <li>- own social housing</li> </ul> <p>Action plan is being developed in line with Anthesis report.</p>	<p>Part of BEIS decarbonisation of heat programme.</p> <p>Proposed WMCA can help support with:</p> <ul style="list-style-type: none"> <li>– Influencing government on areas like housing retrofit and new homes standards / regulations</li> <li>– Support collaboration between different stakeholders and policy agendas</li> <li>– Sharing best practice</li> <li>– Identifying funding sources e.g. for delivery of sustainable transport projects.</li> </ul>

<b>Wolverhampton City Council</b>	<p>Declared a Climate Emergency. Carbon reduction target consulted on; set for 2041 target for wider city and 2028 for council activities.</p> <p>Certified green electricity scheme implemented for streetlighting, signals and civic buildings. Office rationalisation taking place.</p> <p>Plans for fleet transformation, working alongside Midlands Energy Hub.</p> <p>Trialling some electric fleet (e.g. bin lorries).</p> <p>Feasibility study for a district heating scheme taking place. Heat mapping has already been undertaken. Plans in place for district heating scheme from council owned EfW plant.</p> <p>Building PV at Beaumont Harbour.</p> <p>EV charging points.</p>		<p>Discuss specifically delivery of district heating schemes; depend upon business case, e.g. council or private partnership.</p> <p>Working groups in place to inform internal climate change emergency strategic group. Also have a separate Climate Change Advisory Group consisting of internal stakeholders only.</p> <p>Delivery action plan in place (on website).</p> <p>Part of the Birmingham and Black Country LEP energy group.</p> <p>To engage with Universities and NHS trusts.</p>	<p>Mention some funding schemes, e.g. CEF financing from European funding for PV at Beaumont Harbour.</p> <p>Fund available for capital work.</p>
<b>Sandwell Metropolitan Borough Council</b>	<p>Have set net zero targets; 2030 for council themselves and wider 2041 target for the Borough. Carbon Plan in process of being updated. High level carbon strategy established which incorporates action plans.</p>	<p>In process of developing a Skills Strategy as part of wider 'Reset and Recovery Plan'. Within this, green skill sectors highlighted.</p> <p>Action plan also in place for 'community wealth building' that covers social value alongside jobs and skills.</p>	<p>Behavioural change important – people making right decisions. Behaviour Change Unit at Warwick University being worked with.</p> <p>Do raise a concern that acceptability of climate change interventions needs to be considered. Consideration of people's mindset is important; People</p>	<p>Won £50,000 for innovation in relation to heat networks (InnovateUK fund).</p> <p>Actions considered to be 'expensive but straightforward' (in reference to FYP).</p>



<p>LEAP scheme in Sandwell highlighted; installation of over 10,000 energy saving measures in over 800 homes. And ECO3 scheme which helps private sector residents to improve energy efficiency of own homes.</p> <p>Energy from Waste plant project mentioned in relation to 2 projects at West Bromwich and Smethwick. In addition to other smaller development projects.</p> <p>Interest in e-scooters as form of green travel.</p> <p>Only some wind sites realistic. Potential for solar on council buildings being assessed. Currently considering proposals for ASHP based district heating systems to 3 Council-owned high-rise blocks (and surrounding low-rise).</p> <p>Contractor appointed to manage Detailed Project Development (DPD) of two large heat network schemes within Sandwell. Currently procuring a contractor to undertake DPD itself.</p>	<p>Express desire to recognise new skills and discuss growth in logistics, health and welfare.</p> <p>SME manufacturers make up most of area that are looking to future proof themselves.</p> <p>Have a number of employment skills partnerships e.g. with DWP, Chambers of Commerce, Sandwell colleges. Also, a Business Ambassadors group.</p> <p>Construction is key in the area and this provides apprenticeships.</p> <p>Social value with contractors helping a shift toward local jobs.</p> <p>Highlight that there can be miscommunication between industry and colleges with regards to what skills are needed.</p> <p>Black Country Skills Partnership exists as LEP initiative to address skills shortages in advanced</p>	<p>are generally supportive of climate change but can find it difficult to change or spend money on it.</p> <p>Highlight certain schemes 'coming forward' e.g. heat networks and retrofitting schemes.</p> <p>Believe there is a need to work together, Sandwell focus on waste but economies of scale will help for aspects like transport and heat uses. Transport officers working with TfWM.</p>	<p>WMCA can support with the resources to be able to support homes and businesses to become low carbon through energy efficiency measures. Providing sources of funding which can be accessed by either councils, business, residents and schools which support low carbon measures and which are easy to apply for.</p>
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		manufacturing, transport, construction, environmental technologies and business services.		
<b>Walsall Council</b>	<p>Council operations to be net zero by 2050 but no target for wider authority. Declaration of climate emergency in September 2019 and subsequent climate emergency action plan.</p> <p>Schemes include Future High Streets Fund of £25m. Potentially to be invested in Active Travel. No other major delivery plans for decarbonisation. Carbon Reduction paper going to cabinet. Planning electric buses. Number of recycling plants in area. Significant developments include Willenhall and Darlaston station.</p>	<p>Black Country have a Recovery plan that includes green jobs, focused on sites and developments. Walsall College as part of their Capital Investment Plan have asked to expand their Engineering Centre for training around Electric Vehicles / new service centre There is a need to understand more on who the suppliers are. Recognise that "green homes" issue is growing and the need for installation of smart meters, etc. Currently no overall strategy in place.</p> <p>Largest devolution element is in adult education (currently £120,000 in adult skills). Also, huge demand around logistics (HGV drivers).</p> <p>Regional plans focus on engineering, automotive etc. Walsall is focuses on Health and social care, logistics.</p>	<p>Climate emergency action plan derived from climate emergency declaration in 2019 for carbon reduction. Internal working group has since also been established.</p> <p>Feeding back on planning white paper; currently unclear on how this will affect ability to guide.</p> <p>Delivery with regards to transport need to be joint, in partnership with West Midlands Combined Authority. Housing needs to have a regional delivery approach, need to avoid local authorities 'playing each other off with lower standards'. Have a Housing Strategy in place for 2020-2025.</p> <p>Land use requires consistent policy that each local authority can then use and tweak.</p> <p>Other relevant strategies in place / planned:</p> <ul style="list-style-type: none"> <li>- Black Country Core Strategy</li> <li>- Movement for Growth and Walsall's Transport Strategy 2017-2022</li> <li>- Walsall Cycling Strategy</li> <li>- Draft Waste Strategy</li> </ul>	<p>Creating resource in 'Clean and Green Directorate': business case put together for a fixed term Climate Change Programme Manager into Clean and Green Service Structure; part of wider Proud Transformation Programme.</p> <p>Future High Streets fund mentioned (£25m).</p> <p>Funding secured for re-opening of Darlaston train station.</p> <p>However no major climate change investment programmes currently underway.</p> <p>Place emphasis on aligning ambitions with WMCA in Carbon Neutral Council cabinet paper October 2020; particularly for making cases for investment in the region.</p>

		<p>There is no green jobs and skills plans/ strategy. Although there will be planning documents on how to use the low carbon network. There are also economic plans locally. Regionally there is a sector skills plan developed that call off funding based upon skills plan. Where there are not enough skills in that regional plans, then locally would put in a specific request and follow up with a pilot.</p> <p>With regards to jobs and skills, could be delivered through a number of different mechanisms through - local colleges looking for capital investment e.g. through town deals or growth deals.</p>		
<b>Solihull Metropolitan Borough Council</b>	<p>Have agreed a Climate Change Emergency Statement of Intent which outlined activities. 2030 net zero target for the council; preliminary target of 2041 for region Carbon Management Plan in place; emissions reduction of 49% so far.</p>	<p>Local jobs – but keen to collaborate and be regional. Economic Recovery Strategy in place – emphasise desire to be more linked to West Midlands Combined Authority approach.</p> <p>Working on employment and skills piece pushing ‘forward</p>	<p>Alignment with West Midlands Combined Authority targets for carbon reduction (2041). Net Zero Action Plan development in progress; expected to be finalised in Summer 2021.</p> <p>Carbon Management is governed by a Carbon Board chaired by an Assistant Director. Progress is also monitored</p>	<p>The WMCA can help support with joint access to funding and financing, and access to novel financing.</p> <p>Note they are ready to use funding, when available in relation to social housing.</p>

	<p>Purchasing green electricity to reduce emissions from streetlighting.</p> <p>A Climate Change Prospectus also exists which is reviewed annually and outlines activities which will contribute to Solihull's transition to a low carbon economy, and an Annual Carbon Report.</p> <p>Major projects:</p> <ul style="list-style-type: none"> <li>- UKC hub area – focused on new HS2 interchange station (includes mixed used development)</li> <li>- 15,000 new homes anticipated in next Local Plan cycle</li> <li>- Town centre redevelopments (and other specific areas) e.g. Eastgate / Westgate, Kingshurst Village centre regeneration project.</li> <li>- DHN in town centre to be ASHP based</li> <li>- Renewable energy potential; about to conduct feasibility studies into possibilities</li> <li>- Social housing potential (ready to use funding when available)</li> </ul> <p>Other interventions:</p> <ul style="list-style-type: none"> <li>- Kingshurst development aiming for net zero</li> </ul>	<p>thinking' on economy. Key considerations raised in relation to alignment with existing strategies, alignment of delivery plans with workforce and industry, what the 'green agenda' really means, upskilling.</p> <p>Already working with Solihull College, however historically some cases of no jobs materialising. Key employers are NEC, airport and JLR.</p> <p>Refer to a 'green recovery' but emphasise the need to understand 'what are the jobs and when are they going to be available'.</p>	<p>annually by the Council's Budget Strategy Group against an approved carbon budget. Solihull Climate Change Commission also in place for carbon management.</p> <p>Engagement with West Midlands Combined Authority One Home Agenda with regards to social housing.</p> <p>Uncertainty with regards to achieving net zero for housing but note that stock 'pretty good'.</p> <p>Regional approach needed for offsetting.</p> <p>Have JLR, the NEC and the airport, although tend to be more service sector focus.</p> <p>Delivery mechanism for jobs and skills well established, partners in place already (e.g. DWP).</p> <p>Social value elements need to be factored into larger contracts e.g. HS2 mapping out monthly skills to identify what jobs would be required and when. Something similar would be ideal.</p>	
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	<ul style="list-style-type: none"> <li>- UK Central Hub Area HS2 station and 5000 homes</li> <li>- Electrification of airport and JLR by 2030</li> <li>- Energy Innovation Zone</li> <li>- Use of biomass for tower blocks</li> </ul>			
<b>Coventry City Council</b>	<p>No climate emergency plan currently in place; however, an existing Climate Change Carbon Reduction Plan was in place which is now due for renewal. This is to focus on whole City as opposed to just City Council.</p> <p>Undertake own greenhouse gas reporting and part of Climate Disclosure Project (CDP) submissions.</p> <p>Potential Joint Venture to address energy issues. Looking into use of biogas and hydrogen for vehicles. Feasibility studies considering solar farm conversion. Regional Energy Systems Operator (RESO) project in Coventry. Using new SPDs (SUDs and energy). 3 main RSLs which focus on discussions around energy</p>	<p>Developing low skilled people to fill new high skilled jobs. Also working with Coventry University through a Social Enterprise Unit.</p> <p>Council also considering how enterprises could provide opportunities for training long term unemployed and low skilled workers to develop new transferable skills. Also focusing on supporting innovation and the development of new environmental technologies, (seen as a source of employment to many in the future).</p>	<p>RESO project to guide – major infrastructure works (see Resources column).</p> <p>Joint Venture commission being proposed to address energy issues across the city. This is yet to be confirmed but they report that this may look at community ownership of infrastructure.</p> <p>Formation of multi-agency commission to lead the development of a city wide Sustainable Coventry Strategy.</p> <p>Highlight importance of a regional approach to maintain standards, e.g. zero carbon homes work, with regards to energy infrastructure, retrofitting homes and transport where there is overlap with the CA.</p> <p>As highlighted in interventions – new Climate Change reduction plan / strategy aimed to be finalised Spring 2021. Key focus of this reported to be</p>	<p>Support of the WMCA and funding from the UK Government's Innovate UK has enabled the set-up of a Regional Energy Systems Operator (RESO) Project to look at the environmentally sound ways of generating and supplying heat and power across the City. Outcomes of research will provide vital information to help addressing climate change within the organisation.</p> <p>City Council will also establish an independent commission of stakeholders to mobilise businesses, communities and voluntary organisations across the City into developing a new Citywide Climate Change and Sustainability Strategy and Action Plan.</p> <p>Programmes recently announced which are yet to be fully operational:</p>

	<p>efficiency (Midland Heart and Citizen Housing). Bidding for Gigafactory.</p>		<p>buy-in and commitments from key organisations across the city.</p> <p>Also refer to developing / progressing the following:</p> <ul style="list-style-type: none"> <li>- Supplementary planning documents for zero carbon framework</li> <li>- Review of the Local Plan</li> <li>- Pilot of 'people friendly' street transformations</li> <li>- New transport strategy</li> <li>- Social value and sustainability policy</li> <li>- Build a green infrastructure plan and biodiversity action plan for the city; and</li> <li>- a Policy Impact Assessment methodology to assess council decisions against sustainability criteria.</li> </ul>	<ul style="list-style-type: none"> <li>- Green Homes Grant LAD Scheme</li> <li>- ERDF Solar PV Project for Council buildings.</li> <li>- The set-up of the commission of stakeholders will drive investment throughout the City.</li> </ul> <p>A lot of resource also invested into the development of EVs. Investment secured for the Gigafactory for the region. Have also invested in Smart Energy Hubs and EV charging – plus the full cycle of VLR (so eventually having it manufactured in and exported from Coventry).</p>
<p><b>Black Country Local Enterprise Partnership (LEP)</b></p>	<p>Key focus decarbonisation of industrial cluster. £1.5m for a pilot across the SME sector looking at “sustainability”. Co-locating industry close to each other. Focusing on the circular economy.</p> <p>Discuss two broad sectors associated with building construction and technologies that they focus on: transformational (aerospace, automotive, medial) and enabling (health, education).</p>	<p>Some careers focus though presentations for students which focus on Careers of the Future.</p> <p>Highlight the need for industrial engagement around new jobs and ones where transition will be required.</p>	<p>Discuss interaction with local authorities, Black Country LEP have co-ordinated with the update of the Local Plan which will focus on land use and zero carbon homes.</p> <p>Also engaging with cornerstone businesses and Growth Hubs</p> <p>Also reference the Black Country Economic Strategy and how they are working with Liberty Group on industrial decarbonisation.</p> <p>Working with SHAP on retrofitting.</p>	<p>Highlight a need to capture and measure progress. £1.5m for a pilot across the SME sector looking at “sustainability” – see interventions column.</p> <p>Reference made to Black Country Economic Strategy.</p>

	<p>With regards to homes – Black Country Garden City – where they are building 4,000 homes a year, aiming for brownfield land, but trying to ensure that they fit with garden city principles. (63,000 homes across 30 towns.) Aiming for retrofit – SHAP leading but linked to that.</p> <p>Focusing on active travel and EV charging points.</p> <p>Also focusing on environmental aspects and working alongside Environment Agency on flood risk.</p>		<p>Believe the 3 LEP areas or WM need to be ‘scale of focus’ due to size of agenda. Felt that WM ‘show alignment and scale as a framework’ that LEPs and local authorities can then take forward.</p>	
<b>Dudley Metropolitan Borough Council</b>	<p>The Council has declared a climate emergency; however, carbon reduction targets are yet to be set. A working group was launched on the 19th October 2020. An Energy and Carbon Reduction Strategy (2018-2021) which contains an action plan for focusing on reducing energy at corporate sites.</p> <p>There are a number of major developments in the next 5 years, including a Metro Extension and a major mix use development amongst others.</p>		<p>Black Country Plan (replacing the Black Country Core Strategy).</p> <p>Newly formed Working Group (as highlighted in interventions column).</p> <p>West Midlands Combined Authority can support / adopt a joint approach in Transport policy / electric vehicle strategy, approach to decarbonise SMEs / industry, new approach to eco-funding and regional approach to the private sector.</p> <p>Local authorities best to deliver on energy efficiency retrofit of existing</p>	

	<p>£2.5m ERDF project to fit council homes with A rated gas boilers and smart thermostats. Heat mapping undertaken but concluded few opportunities. Similar outcome for wind turbines. (Both looked at as part of Black Country Utilities Infrastructure Study).</p> <p>£2.5m ERDF (£5m total) “low carbon place” project in place which is a joint initiative between Corporate Landlord Service and the council housing department. Council homes are being fitted with A rated gas boilers and smart thermostats that link to a landlord portal.</p> <p>A retrofit contractor has also been appointed and is delivering whole building energy efficiency retrofit to certain corporate buildings, such as the Council House.</p>		estate and social housing (part of Energy extra – vehicle for delivery).	
<b>Connected to Growth Meeting</b>			Potential of travel policies discussed and how politically viable these are.	Economic gain key focus of work.
<b>Cadent</b>	<p>Have committed to be carbon neutral by 2026 (including offsets).</p> <ul style="list-style-type: none"> <li>- Converting emergency response vehicles</li> <li>- Purchasing green energy</li> <li>- Looking into heat and flexible power and transport (recognition</li> </ul>	<p>Replacing pipes is going on until 2032. Once that is done there won't be such an emergency need as they will be safer or just in the replacement market.</p> <p>Are keen to invest in hydrogen and other skillsets.</p>	<p>Hynet being focused on for commercial and industrial.</p> <p>Flexible power – growing power generation required locally to balance and be used with solar and wind.</p> <p>Need a plan for everyone on home heating.</p>	<p>Highlight that 2026 target for own business operations subject to funding.</p> <p>Recognise potential of hydrogen in future.</p> <p>Biomethane also discussed but limited end resources.</p>



	<p>that there is a need to move away from natural gas)</p> <ul style="list-style-type: none"> <li>- Hydrogen indicated as potential for future in relation to vehicles. Looking at also blending 15% hydrogen into gas network but no set date. Envisage late 2030s for complete hydrogen switch out.</li> <li>- Encouraging biomethane for home heating but limited end resources</li> </ul>	<p>There is no skills gaps because it isn't required yet, but there will be.</p>	<p>West Midlands Combined Authority can help by creating Regional Energy System Operator and having local energy plan.</p> <p>National plan also needed however to work beyond regional approach.</p> <p>Need to raise awareness in the public at scale.</p>	<p>Final determination in 2021 on regulated revenue.</p> <p>Will be a mechanism to ask for regulated funding and money for trials.</p> <p>Can unlock net-zero re-opening funding if strategic scale opportunity exists.</p>
<b>Climate Change Members Steering Group Sandwell</b>	<p>Maintain an Action Log.</p> <p>PV alternative funding stream – public sector decarbonisation scheme (moved from oil / gas fired), and potential pledge to join UK100 scheme.</p>	<p>Expectation FYP to explain what types of jobs we will see, and skills required, don't want to take away from people.</p>	<p>Behavioural change; focus on being inclusive – 'best teachers in our society are children'. Should be getting people to think about choices.</p> <p>Want to ensure alignment of aims of targets with West Midlands Combined Authority and ensure collaboration.</p>	<p>PV alternative funding stream.</p>
<b>WM Growth</b>	<p>There are three main aims of the company:</p> <ul style="list-style-type: none"> <li>- Transformational capital attraction</li> <li>- End-occupier attraction</li> <li>- Visitor attraction (though not really tourism)</li> </ul> <p>Currently looking at:</p> <ul style="list-style-type: none"> <li>- Future mobility space</li> <li>- Life sciences</li> <li>- Demographics and device manufacture</li> </ul>	<p>Main growth around 'prof-tech' currently.</p> <p>Megatrends around digitalisation and urbanisation.</p> <p>Long term declines in manufacturing taking place, due to Brexit and now affected by Covid.</p> <p>Systemic change / gear shift projects now a focus (e.g. giga factory, circular</p>	<p>May have more qualitative targets in future. Working on fewer projects. Focusing on green growth and economic inclusion.</p> <p>Mention work with University of Birmingham in relation to demographics and device manufacturing.</p>	<p>Global markets will take long time to recover. Demand for offices changing.</p> <p>Want to move away from facilitation to investment promotion.</p>

	<p>- Digital and creative</p> <p>Also refer to a £23.9 million programme working with the halo effect from the commonwealth games.</p>	<p>economy centre of excellence).</p> <p>Work with Warwick University and University of Birmingham in relation to skill development.</p>		
<b>Cemex</b>	<p>Refer to a site in Rugby which is responsible for 1.2 million tonnes CO<sub>2</sub> annually.</p> <p>Work undertaken on alternative fuels to help reduce process emissions from clinker. Using hydrogen generated on site (low quantities).</p> <p>Also recirculating high-grade heat.</p> <p>Global target of zero carbon by 2050 for Cemex globally; 35% reduction for cement by 2030 (likely to be achieved sooner in UK).</p>	<p>Net zero brings in contracts for specialist jobs, alongside using the global network and experts (from Cemex) if needed.</p> <p>How CEMEX communicate with employees is their concern; however, work is 'CAPEX heavy which brings confidence'. One of area's biggest employers.</p> <p>Have 3 priorities:</p> <ul style="list-style-type: none"> <li>- Confidence</li> <li>- Reputation</li> <li>- Communication</li> </ul>	<p>In discussions with BEIS (carbon capture team). Conscious that carbon capture technologies need to 'link up' to meet targets.</p> <p>Planning support will be required for new equipment, particularly where residents in close proximity.</p>	<p>Plan needs to include real costs, practicalities, constraints.</p> <p>Within the Tyndall report there is a specific exclusion for cement production which is 'a necessity for growth'; feel therefore this should not be included in FYP budget.</p> <p>Demand for electricity and grid constraints reported as big issues. Carbon capture requires additional electricity demand.</p>
<b>Energy Systems Catapult</b>	<p>Refer to Innovating Net Zero Report (one digitalisation, one nuclear) and an ESME model which factors in energy and costs required in two emissions reduction scenarios.</p> <p>Energy Path Networks tool – what local area energy plans need to do.</p>		<p>ESME model.</p> <p>WM need local energy plan. Example discussed in Newcastle between network operators and local authority. Queries around funding for this.</p>	<p>Energy and costs considered in model for emissions reduction.</p> <p>Useful graph showing policy gaps and subsidies.</p> <p>Discussions around how local authority budgets are restricted for implementation of tools (e.g.</p>

	Have a 6-point plan for steps to zero carbon buildings.			<p>2050 calculator) and local carbon budgets.</p> <p>Price control mechanism through Ofgem. Attempting to lobby government on energy systems.</p> <p>WM lack of capacity; needs to be addressed now.</p> <p>Pace financing – link to property assets – property tax/ council tax. Could use that to finance some of these initiatives. Finance mortgages – could that be used to finance initiatives.</p>
<b>University of Birmingham</b>	<p>Currently working on strategy and have zero carbon target for 2050. Report against UNSDGs. There is a lot of pressure from students who want the University to declare a climate emergency.</p> <p>R20 Task Force – heat task force for Birmingham. Pilot projects with Tyseley Energy Park mentioned and potential for scaling up hydrogen.</p> <p>Also refer to:</p> <ul style="list-style-type: none"> <li>- Low carbon fuels, and hydrogen buses, hydrogen for rail.</li> </ul>	<p>Belief that skills are currently under-invested in however some colleges are helping with this. Many boiler manufacturers in the region; engineers need upskilling (e.g. to fit heat pumps). Currently this seen as a 'massive' skills gap. Big opportunities for regional investment in jobs and skills.</p>	<p>Preparing delivery of strategic framework to council June 2021.</p> <p>Discussed potential of joining Mayor Round Table.</p> <p>Raised a query regarding costs / penalties for not meeting 2041 targets.</p> <p>Collaboration with industry / wider organisations mentioned several times (e.g. JLR, Tyseley Energy Park, City Council, Airport).</p> <p>Emphasis placed on understanding 'realism' of how to deliver different efficiency technologies (e.g. hydrogen and heat referred to).</p>	<p>Reviewing investment opportunities to 2026 and also in process of identifying funding streams.</p> <p>Need to identify what is 'reasonably accessible'; what they do or don't have access to in terms of funding.</p> <p>Critical infrastructure needed to help deliver.</p> <p>Local authority need more resource to help with planning and capacity to deliver.</p>

<b>Severn Trent</b>	<p>Operational target for Scope 1 and 2 emissions reduction by 2030.</p> <p>Looking at alternative power sources (e.g. reducing GHGs from sewage) and heat recovery possibilities.</p> <p>Circular economy and getting more value from sewage.</p> <p>Focusing on water efficiency and behavioural experiences.</p> <p>Big Nature Boost (biodiversity improvements).</p>	Ensuring people are upskilled; no specific gap currently.	<p>Key areas of focus for meeting emissions reductions: electric vehicles, renewable energy sources (purchasing and producing).</p> <p>West Midlands Combined Authority could help by linking up EV and public transport opportunities, and through broader climate change awareness. Believe that overall there are a number of opportunities to work together.</p> <p>Climate Adaptation plans a good opportunity to collaborate.</p>	Believe realistically 10-15 years to make changes.
<b>Low Carbon Officers Group</b>	<p>Aiming to get a routemap completed for journey to zero carbon homes standard and charter.</p> <p>Some PassivHaus housing being developed.</p> <p>Have reviewed planning policies with 17 local authorities in region.</p>			<p>Human capital and technology key.</p> <p>Building Regulations.</p> <p>Query if possible, to build completely zero carbon homes.</p> <p>Capital cost uplift – does not consider economies of scale.</p>
<b>Network Rail</b>	<p>Emissions limited; instead point to relevance of modular shift.</p> <p>Currently looking at 'rapid response rail'.</p>		<p>Most of Birmingham is accessed by the ports of Southampton and Felixstowe so would be very difficult to get to by train, using the existing network.</p>	
<b>ULEV Strategy Working Group</b>	<p>Queries as to whether focus should be on electrification only.</p>		<p>Encouraging modal shift in transport. Potential co-location of energy infrastructure for this.</p>	<p>Standoff from investors until clear what direction to take.</p>

	Continues to be challenges with regards to decisions about alternative fuels. Potential for hydrogen possibilities in region discussed.		Lobbying role for the West Midlands Combined Authority.	Refer to finite rail budgets which should be spent within the region as opposed to elsewhere.  Issues with diesel cars in Birmingham City Centre; a way off electrification yet.
<b>Midlands Metro</b>	Delivery of tram network. Currently only transport people; would potentially need to consider moving goods too.	Particular concern over jobs and skills within this context. Will employ additional 120 people in next year and 450 by 2023.  New jobs will be around maintenance and engineering; currently training own workers for these skills. However unsociable hours and low pay. Would welcome more apprenticeships. Benefit to night time economy (most jobs undertaken during this period).		Discuss investments (£millions) being made in trams and tram extensions over next few years.
<b>Forest of Mercia Tree Planting</b>	Chat about the Forest of Mercia aims, project ambition and progress to date.			
<b>Midlands Connect</b>	Currently refreshing strategy which will have key sustainability theme.	Wider Midlands Engineer perspective – looking to support substantial economic growth	Emphasis importance of the need to target stakeholders to consider end-to-end journeys, currently trying to gather mobile data for this.	Narrative for why and when investment in road schemes required.

	<p>'End to End' journeys project mentioned which looks at stakeholders' journeys. Study planned on offsetting.</p> <p>Also discuss projects relating to their Transport Decarbonisation Pathway work:</p> <ul style="list-style-type: none"> <li>- Carbon Baseline Study and 'MCTool'</li> <li>- Acceleration of EV charging infrastructure</li> <li>- Alternative fuels for freight and logistics</li> <li>- Rail decarbonisation and electrification of the network</li> </ul>		<p>They are considering 'triple planning' which focuses on role of digital mobility.</p> <p>Local strategy review. Need to establish policy position on acceptable impacts of infrastructure on natural capital.</p> <p>Focused on medium to long term opportunities and timeframes and understanding Future Transport Zones; query 'who is responsible for which policy lever?'</p>	
<b>Natural England</b>	<p>Chat about the NE initiative of the Heathland Heartland project to connect Cannock Chase SAC and Sutton Park and some information on carbon storage for different habitat types.</p>			
<b>Birmingham International Airport (BHX) and Urban Growth Company</b>	<p>Sustainability Strategy 2020-2025 in place. Net zero carbon airport by 2033 through focusing on operations and increasing use and generation of renewable energy (solar key). Have already invested in electric vehicles.</p>		<p>For reducing scope 1 and 2: smart meters, building management systems, data management, measuring performance and target setting, behavioural change, asset replacement, energy saving projects, carbon programme manager.</p> <p>Scope 3: review of flight paths, use of green fleet, green airfield strategy.</p>	<p>Nothing seen as coming from hydrogen until 2030s.</p> <p>Money and resources seen as 'immediate' issues. Currently looking into other funding streams.</p>

	Looking at alternative jet fuels – refer to UK Government's Jet Zero programme. Potential opportunity for heat network also highlighted.		Gas is seen as key challenge. Looking to work with others on innovation and feasibility.	
<b>Virtual Forest</b>	Website records which trees are planted where. Have worked with ESRI UK on new site.		Makes up the 3 LEP areas and non-constituent members (Shropshire) + the Local Authorities. Signposting to the woodland trusts, trees for cities etc. Facilitating the network.	
<b>Anthesis / Solihull / West Midlands Combined Authority</b>	Working on Green Paper currently (same as Birmingham). Members workshop being ran, due for completion February 2021. Main issues on hydrogen and micro-nuclear. Business workshop being undertaken.		Queries raised about inclusion of waste and aviation emissions in Scatter. Query also raised in relation to freight emissions and HMRC lorry park post-Brexit.  Including some messages around behaviour change. Interested in nature based solutions and natural capital.	Aside from 'obvious' ones (JLR, airport), not much industry in region.  More information wanted on: - Local Authority specific projects - Inclusive growth - Budgets / assumptions
<b>Energy Capital Board</b>	Place emphasis on infrastructure and health & wellbeing (avoiding unintended consequences).		Emphasise that 'we can't just focus on carbon'. Discussion must be wider on natural capital as a whole.	Need to consider wider impacts such as unintended consequences of energy efficiency relating to health and wellbeing.
<b>Route 2 Zero Task Force (various)</b>	Presentation by WSP and then some questions			
<b>JLR</b>	Looking wider at Net Zero and are producing a renewable energy plan for reinvigorating the heat network and EIZ and partners.	Opportunities for universities to be involved with regards to understanding hydrogen potential. Automotive industry facing skills challenges in terms of autonomous driving and	Supply chain engagement key to reducing carbon emissions (extraction, production and transportation of components).  Work with wider hub partners (NEC, Airport).	Pause on energy efficiency projects with greater than a year payback.  JLR's energy bill around £80m per year. Are in process of buying

	<p>Refer to Destination Zero which is part of their internal strategy and comprises various workstreams.</p> <p>Identification of significant carbon emissions pieces – tail pipe emissions and carbon associated with components.</p> <p>Key focus on more efficient boilers and radiant gas.</p> <p>Carbon offsetting done in the UK and abroad.</p> <p>Internally made a commitment, although there is not a formally published target; encouraging sites to aim for net zero. Undertake carbon and energy reporting.</p> <p>Looking at district heating and alternative fuel sources. Partial heat replacement with hydrogen discussed. Use of CHP motors in plants.</p> <p>Have installed solar panels at some sites and looking to expand. Also discuss involvement with EfW.</p>	<p>connected cars. There is a lot of work going on in battery development; R&amp;D in Coventry, electric motors will be developed in Wolverhampton. A lot of skill required in design, also welding etc. Electric cars straighter forward to put together - still have a lot of both.</p> <p>Have a software hub in Manchester and have automation skills centre in Ireland and other pockets in Gaydon and Coventry.</p>	<p>Discuss potential for finance model / commercial relationship with regards to installing solar panels on land adjacent to plants (based on cost per year reductions where JLR buy electricity).</p>	<p>REGOs (carbon free energy for this year).</p> <p>Have an electricity use prediction for each plant but have not estimated what electricity would be needed to replace methane.</p>
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## 4.4 SURVEYS

An online survey was also distributed through a number of different groups, task forces and organisations to seek engagement from a wider range of stakeholders.

The survey consisted of both open and closed questions, relating to the four key topic areas including proposed interventions, jobs and skills, delivery mechanisms and resources. A summary of the questions asked and the findings from the surveys has also been outlined below.

Individuals who responded to the questions had the opportunity to leave their names and their organisations. The organisations that provided a response to the survey is outlined above.

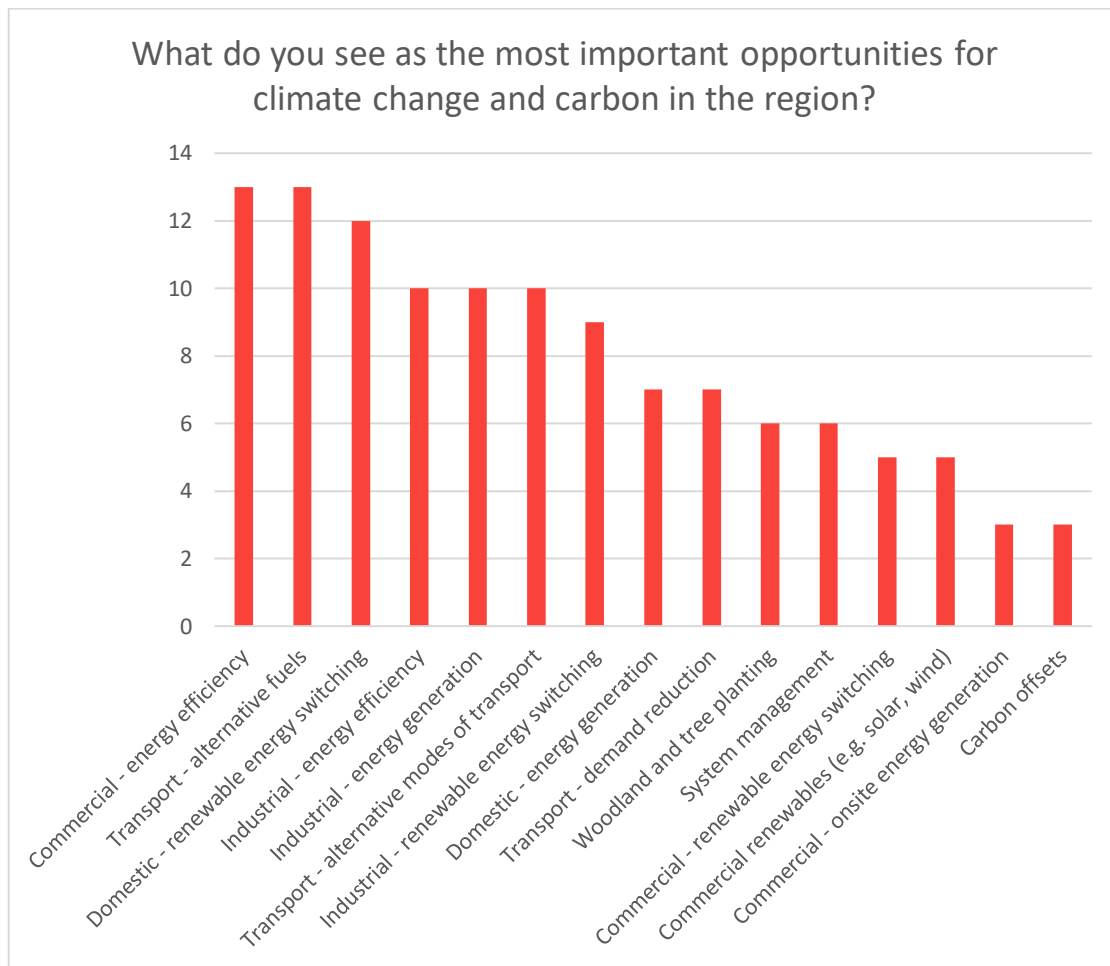
A summary of the findings have been outlined below.

### **Q1: If you have set carbon ambitions and targets please outline what these are.**

- Zero carbon futures, several mentioned targets to become net zero by particular dates (e.g. 2030, 2050), others point to specific emissions reduction targets across Scope 1, 2 and 3 (specific to individual organisations).
- Common approaches (from housing respondents) to achieving carbon ambitions / targets mentioned include fabric first approaches, minimum EPC ratings (e.g. C or above by a particular date), technological and renewable energy solutions, offsetting. Others mention reducing reliance on fossil fuels (e.g. Stonewater).
- Others point to personal emissions reductions being encouraged, e.g. through transport choices.
- Some organisations (e.g. The Pioneer Group, Central England Quakers, Birmingham Metropolitan College) have no direct carbon targets currently but reductions are planned as part of wider initiatives (e.g. SAP, SHIFT metrics, Eco Church scheme framework, engagement with Carbon Trust).
- Some organisations do not currently have their own specific carbon targets; others however are in the process of formulating (e.g. Bromford, The Woodland Trust, SIPS Education, South and City College Birmingham)
- Some respondents reported no specific targets or were uncertain (e.g. i-finance, Coventry College, Birmingham Commonwealth Games).



**Q2: What do you see as the most important opportunities for climate change and carbon in the region?**



**Q3: What climate change and carbon management plans, strategies and projects have already been completed in your organisation?**

- References made to existing environmental and sustainability management systems, strategies and corporate plans / roadmaps which commit to carbon footprint reductions and net zero strategies (e.g. Orbit Group, Stonewater, CFRC University of Wolverhampton, Midlands Energy Hub, Western Power Distribution). Some of these appear to be more developed than others (based on response).
- Many highlight existing commitments and stand-alone policies (Coventry College, Pioneer Group).

- Others mention specifics such as: installation of renewable energy technologies and replacement of fossil fuel sources, use of green energy tariffs and grants to support RE implementation, retrofitting of workplace / public buildings and houses (e.g. Bromford, Stonewater, Central England Quakers, Birmingham City University, South and City College Birmingham, Wolverhampton Homes, City of Wolverhampton Council to name a few).
- Others highlight internal behavioural changes among employees such as staff travel, water and energy usage at workplaces (The Woodland Trust South and City College Birmingham, Birmingham City University), educational efforts also mentioned e.g. posters, climate change champions by Climate Action Network West Midlands and staff training rollouts at City of Wolverhampton Council.
- Some no response or limited information: Stagecoach Midlands, i-finance, SIPS education, Thomas Dudley Ltd, Dudley Metropolitan Borough Council.
- Some mentioned specific forums / groups which have been set up or run with a focus on carbon (or wider sustainability): e.g. City of Wolverhampton Council have held a citizen's consultation to advise on the Climate Action Plan, South & City College Birmingham have established a new Sustainability Focus Group, Climate Change Champions in schools by Climate Action Network West Midlands

#### **Q4: What projects have you delivered, or will you deliver, to reduce carbon emissions?**

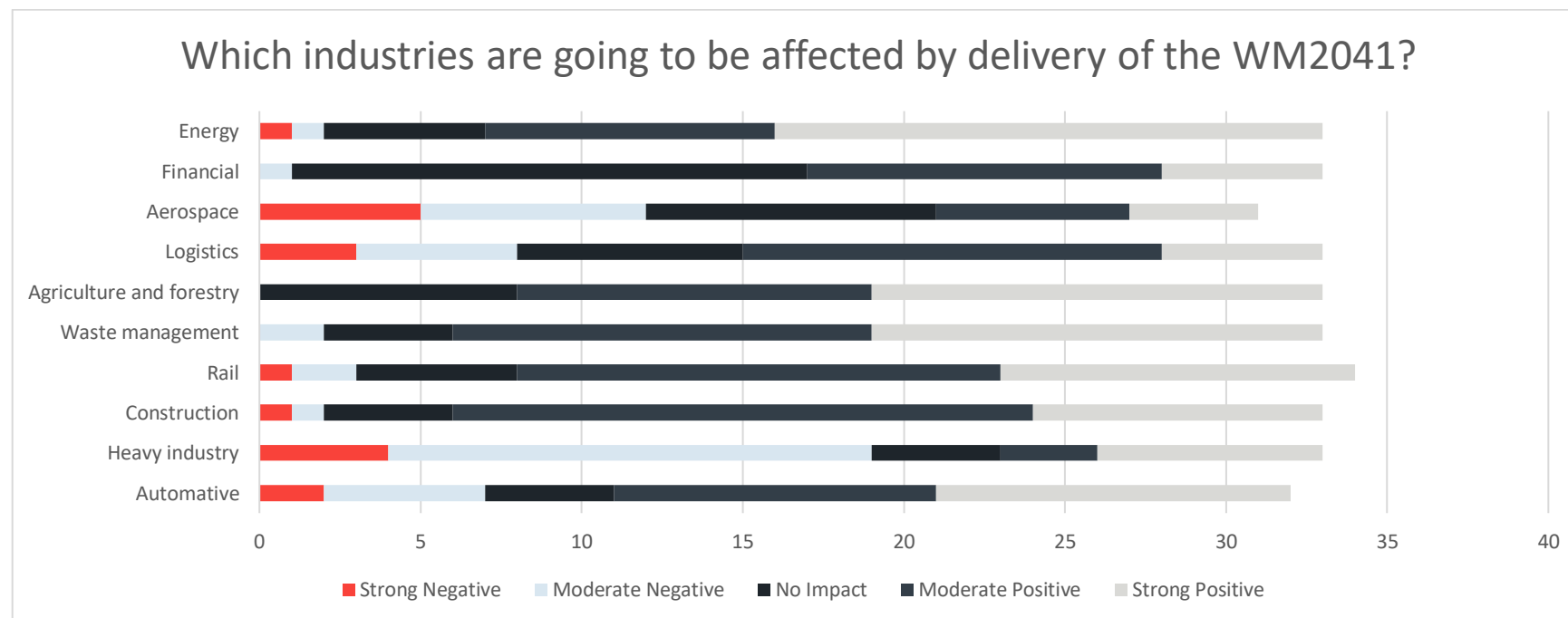
- Key aspects mentioned:
- Corporate commitments and calculation of carbon footprints.
- Procurement approaches e.g. social value in contracts (Orbit Group), specific procurement strategy targets (The Pioneer Group).
- Sustainable transport initiatives e.g. shifts to electric vehicles / hybrids (Orbit Group, The Pioneer Group, BCU, City of Wolverhampton Council); use of technology to reduce travel also highlighted by A S Miles Consulting Ltd specifically.
- Switches being made to purchase renewable energy in buildings and implementation of renewable energy technologies. Dudley MBC also specifically mention determining planning applications which incorporate use of renewable energies.
- Behavioural changes being encouraged among employees – e.g. focusing on transport again, energy use, waste and use of materials (Coventry College, South & City College).
- Creation of specific groups focusing on carbon e.g. Carbon Forum and Innovation Hub by Orbit Group, Woodland Trust Virtual Forest tool.
- Housing association respondents highlighted specific initiatives / projects in new homes e.g. utilising of renewable energy technologies, SAP ratings, modular housing, achieving certain EPC ratings. Built Environment Climate Change Solutions point to battery storage pilots with Wolverhampton Homes for example.

- Some talked about working in partnerships or influencing others e.g. The Woodland Trust working with number of councils to strengthen tree policies, Central England Quakers influence national / local government on achieving net zero, Climate Action Network West Midlands – school carbon champions.

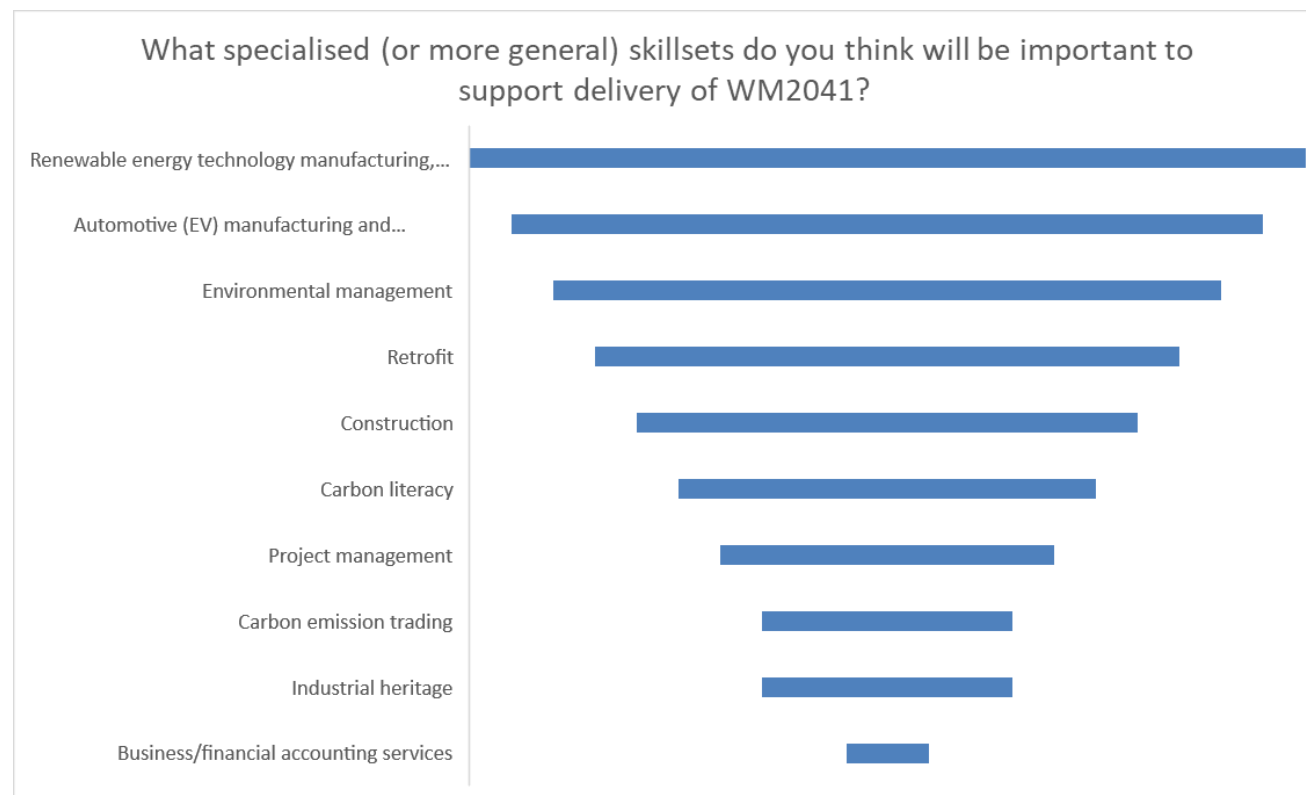
**Q5: Which organisations or networks do you think will play a key part in the success of the delivering net zero carbon for the region by 2041?**

- Some respondents stated that everyone has a role to play (including authorities, government, general public, housing associations) (e.g. Orbit Group, National Express West Midlands, City of Wolverhampton Council).
- Others were more focused on specific organisations; e.g. the role of local authorities was mentioned by majority of respondents.
- Respondents tended to include themselves in addition to other specific networks and organisations (particularly policy leaders including local authorities and national government, several mentioned local regional networks too like enterprise partnerships and colleges for delivering skillsets).
- Respondents from energy / infrastructure sectors appear to show recognition that their input key to aiding delivery also.

**Q6: Which industries are going to be affected by delivery of the WM2041 (positively and negatively)?**



**Q7: What specialised (or more general) skillsets do you think will be important to support delivery of WM2041?**



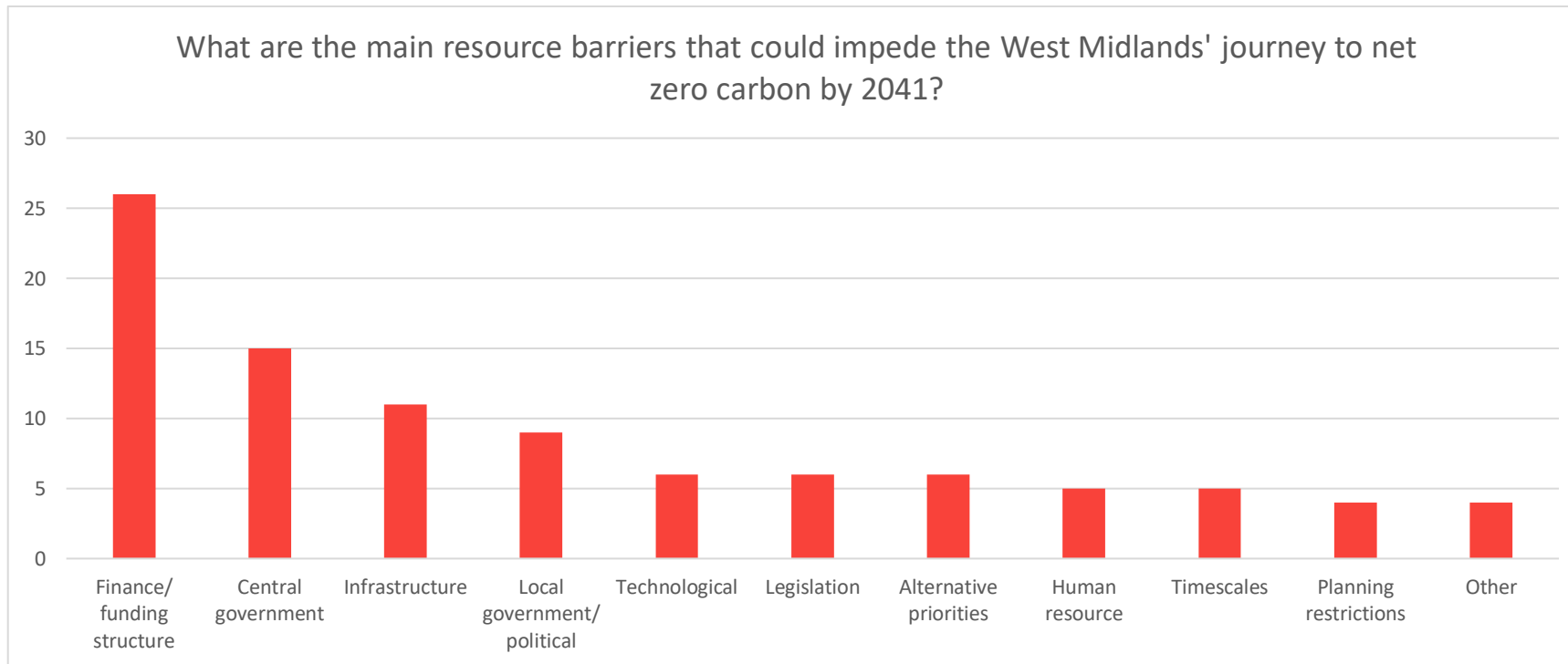
**Q8: How do you see the labour market and skills base will change in the West Midlands to adapt to net zero and clean growth?**

- General overview that more skills are needed when it comes to developing and implementing renewable technologies / low carbon products. Growth of this market is also required and suitable education / training to be made available.
- Many respondents also discuss the need for upskilling and adaptation of existing workforce, and supply chains for retrofitting, offsite construction, implementation of renewable energy technologies and low carbon products.
- Investment may be required for upskilling. For example, Stonewater summarise that people with existing skills in fossil fuel technology will be required to adapt. Some believe labour market will require restructuring (e.g. Central England Quakers, CFRC University of Wolverhampton, The Pioneer Group).



- Potential loss of traditional engineering jobs highlighted by some (Midlands Energy Hub).
- SMART technology expected to be key.
- Shifts expected to electric vehicles and sustainable transportation methods (The Woodland Trust, Orbit Group, Birmingham Metropolitan College).

**Q9: What are the main resource barriers that could impede the West Midlands' journey to net zero carbon by 2041?**



**Q10: How can we address those resource barriers?**

- Many mention more incentives and funding being made available (Bryt Energy, Tyseley Energy Park, Accord Housing, Midlands Energy Hub, Birmingham City University, SIPS education, Stonewater, The Pioneer Group), similarly others pointed to alternative financial sources.
- Lobbying / discussions and collaboration between different organisations and parties (McCamley Power Ltd, Birmingham 2022 Commonwealth Games, Built Environment Climate Change Solutions, Climate Action Network West Midlands, Bromford, Orbit Group). The Woodland Trust mention specifically public engagement in lobbying also.

- Some suggested more training and investment being made to educate (e.g. Dudley Metropolitan Borough Council, South & City College, Birmingham Metropolitan College).
- Others also highlighted changes may be required in legislation / policy (City of Wolverhampton Council, Dudley Metropolitan Borough Council).

**Q11: Have potential sources of funding been identified for future projects related to net zero and Clean Growth? If so, what are these?**

- Some respondents have identified what funding will be required, some of these also mention specific sources (Orbit Group, CFRC University of Wolverhampton, Coventry College, Climate Action Network West Midlands, Birmingham City University, South & City College Birmingham, Midlands Energy Hub, City of Wolverhampton Council and some more).
- Some respondents left section blank, potentially indicating that this has not been looked into or uncertainty.
- Several said no, with some indicating further clarity is needed (e.g. Dudley Metropolitan Borough Council, Birmingham Metropolitan College, SIPS Education, Stonewater, Select Windows, Accord Housing Association, Birmingham 2022 Commonwealth Games, Western Power Distribution).

**Q12: How can the FYP support your aims and ambitions?**

- Building infrastructure, providing education and 'levelling the playing field in planning against other developers' (Orbit Group).
- Securing and enabling funding central and bringing down costs of innovative low carbon products mentioned by some (Stonewater, Bromford, CFRC University of Wolverhampton).
- Setting clear focus and priorities was mentioned by several respondents, some also pointed to sharing ambitions and knowledge (e.g. South & City College, Midlands Energy Hub).
- Some mentioned specifics, e.g. Birmingham City University focused on transport, procurement and planning commitments and requirements.
- 'Co-ordination for the deployment of retrofit measures' (Bromford).
- Several respondents left this question blank. Others were unsure (e.g. SIPS Education, Built Environment Climate Change Solutions).

**Q13: Is there anything else you would like to add?**

- Orbit Group discussed the importance of working with other social housing landlords, ensuring people have appropriate skills and queried suitable sustainable supply chain frameworks (asking for specific feedback).
- Climate Action Network West Midlands left a comment stating that 'carbon neutral by 2041 is too late'.
- Birmingham City University indicated that they would like to be 'kept in the loop' with future West Midlands Combined Authority developments in this area.
- Midlands Energy Hub wanted to see 'more ambitious actions' from West Midlands Combined Authority.



- Accord Housing Association left a comment that 'There is a need to understand that this will take time and investment to see a ROI, having greater impact.'
- Tyseley Energy Park emphasised the importance of developing an integrated approach to aspects such as power, transport, heat, waste and recycling across the west Midlands.
- Respondent queried whether there should be more appeal to the public for action, and whether there could be more incentives for people to look after planet.
- Bryt Energy raised a concern about the impact of COVID and the fact that some solutions are 'not breakeven by 3-5 years.'