



WESTERN POWER DISTRIBUTION

Local Investment Workshops: Summary Report

September / October 2021



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Introduction

Between 28 September and 27 October 2021, Western Power Distribution (WPD) hosted eleven virtual workshops, covering the different regions in WPD's four distribution areas. See table in Executive Summary for a summary of the dates and locations of the workshops.

Each workshop was designed to obtain feedback from stakeholders on the following topics: supporting growth, the Green Recovery and the Transition to Net Zero; and planning the future network.

The workshops were hosted online, using Zoom. Each session consisted of a short presentation given by WPD representatives, followed by facilitated discussions in virtual breakout rooms. In addition, stakeholders were asked to vote in an online poll, using Slido, on a number of topics. Due to rounding to the closest whole number, figures may not always add up to 100%.

For the purposes of this report, feedback from each location has been grouped by WPD's four distribution areas: West Midlands, East Midlands, the South West, and South Wales.

WPD instructed EQ Communications, a specialist stakeholder engagement consultancy, to independently facilitate the workshop and to take notes of the comments made by stakeholders. Every effort has been made to faithfully record the feedback given. In order to encourage candour and open debate, comments have not been ascribed to individuals. Instead, notes have been made of the type of organisation each stakeholder represents.

The full presentation can be found [here](#).



Methodology

Maximising participation

Invitations for WPD's local investment workshops were sent to over 6,300 stakeholders. WPD's database contains the details of more than 5,000 elected local authority stakeholders, all of whom were invited to take part in the workshop series. The list of local politicians is refreshed following any local or national elections. Invitations were also sent to over 1,300 other stakeholders, including: those who had attended previous events; council officers with responsibility for the environment, sustainability, development, planning, and electric vehicles; housing developers; and other stakeholders identified by WPD local distribution managers.

The stakeholders on the WPD database were sent several email invitations for the workshops to ensure that they were given the opportunity to participate. The first invitation was sent on 13 Sep 2021 to give stakeholders at least three weeks' notice ahead of the first workshop. In addition to the email invitations, pre-identified stakeholders also received telephone calls with the aim of ensuring a mix of different stakeholder groups attended across the workshops. As standard practice, ahead of any workshops, all stakeholders who have registered are reminded about the event via telephone and email with a view to maximising participation.

Providing accessible information

At each workshop there were three presentations, each followed by breakout sessions in smaller groups to enable stakeholders to provide verbal feedback. The second and third breakout sessions were followed by electronic voting, with online voting software used to gather quantitative feedback on each topic. Stakeholders were given the option of 'don't know / can't say', or 'not sure', when voting and asked not to answer if they felt that they did not have enough information or the necessary level of expertise to take a view. The number of voters who abstained has been set out under each voting question in this report.

Stakeholders were emailed a pre-reading booklet, entitled "Investing In Your Future Electricity Networks: Supporting Local Growth and Decarbonisation" ahead of each workshop to provide them with additional background information for the event.



Executive summary

Events

Stoke and Telford, Birmingham and Tipton, and Gloucestershire, Worcestershire and Herefordshire in the West Midlands; Chesterfield, Derby and Nottingham, Coventry, Leicester and Northamptonshire, and Lincolnshire in the East Midlands; Plymouth, Devon and North Devon, Bristol, Somerset and Mendip, and Bodmin and West Cornwall in the South West; and Swansea and West Wales, and Cardiff and East Wales in South Wales.

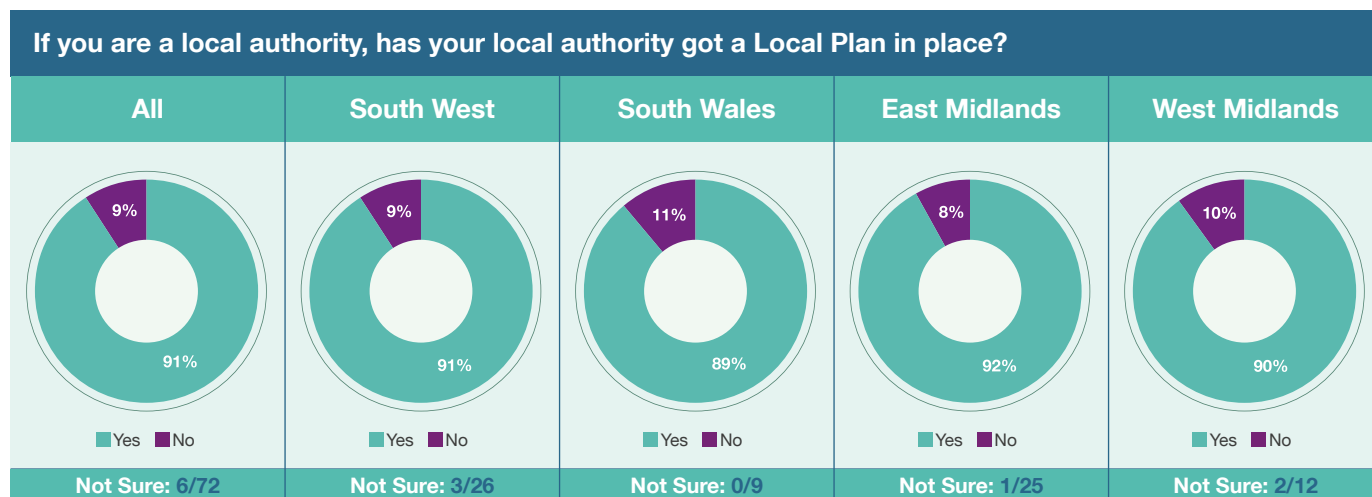
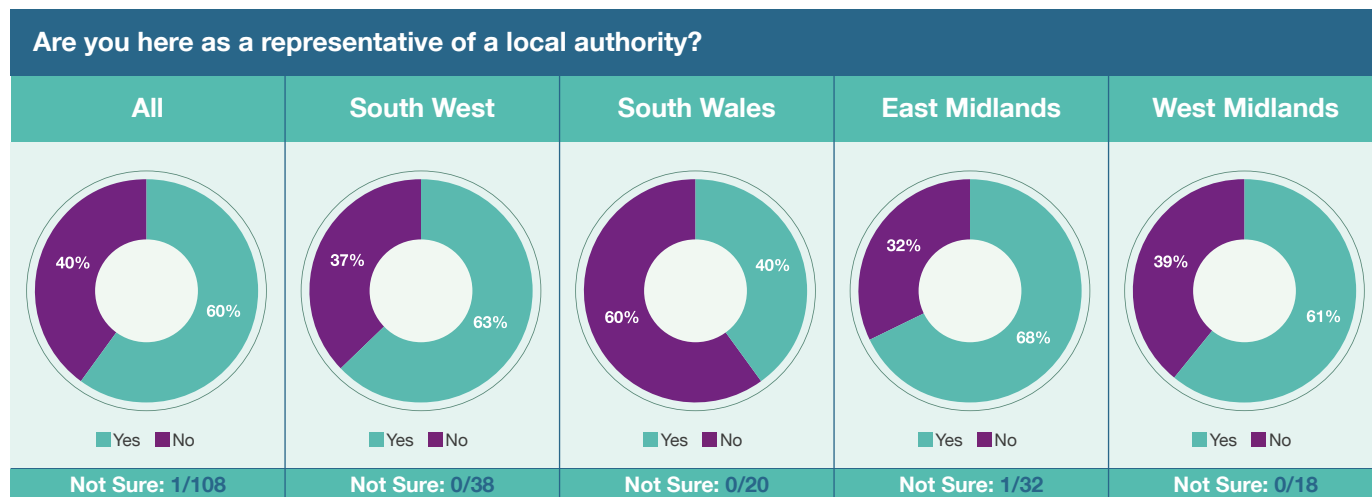
Workshop	Distribution area	Date
Plymouth, Devon and North Devon	South West	28 September 2021
Chesterfield, Derby and Nottingham	East Midlands	5 October 2021
Swansea and West Wales	South Wales	7 October 2021
Cardiff and East Wales	South Wales	8 October 2021
Stoke and Telford	West Midlands	12 October 2021
Bodmin and West Cornwall	South West	14 October 2021
Lincolnshire	East Midlands	19 October 2021
Gloucestershire, Worcestershire, Herefordshire	West Midlands	21 October 2021
Birmingham and Tipton	West Midlands	22 October 2021
Bristol, Somerset and Mendip	South West	26 October 2021
Coventry, Leicester and Northamptonshire	East Midlands	27 October 2021



Participants

- A total of 129 stakeholders participated in the workshops, representing 88 organisations.
- 59% of stakeholders were representing local authorities, whether as elected members or officers.
- 62% of attendees who filled out a feedback form told us that they found the workshop to be 'interesting', with another 27% opting for 'very interesting'.

Electronic Voting: Local Plans





Workshop 1: Introducing WPD

The events began with an introduction from each respective location's Distribution Manager. They gave an overview of WPD's role on a national and regional level, and talked through WPD's response to Covid-19, including the formation of the Community Matters Fund. To conclude, they introduced WPD's new Business Plan for Ofgem's next Business Plan period (RIIO-ED2), explaining some of its key headlines.

- The majority (60%) of stakeholders represented local authorities, including officers and elected members. The remainder included developers, energy consultants, community energy groups, academics, LEPs and chambers of commerce, as well as a small number of consumer advocacy groups, charities, and housing associations.
- Reasons for attending combined the twin imperatives of planning, growth and development with decarbonisation, Net Zero, and the electrification of heat and transport.
- Delegates were focused on greater alignment with WPD's plans and ambitions, indicating a desire for greater collaboration and partnership to achieve sustainable, effective growth and reaching Net Zero.

Workshop 2: Supporting growth, the Green Recovery, and the transition to Net Zero

Distribution Managers from each area introduced the second session. They outlined WPD's current investment programme, highlighting some key local examples, and demonstrated how WPD was supporting the growth agenda by connecting customers and reinforcing the network where necessary. They showed WPD's commitment to unlocking capacity in chosen areas to aid a Green Recovery, enabling more low carbon technologies (LCTs) to connect to the network, giving examples from their relevant local regions. Finally, they walked delegates through how WPD were using Energy Scenarios to plan for the expected uptake in LCTs, in a concerted effort to accelerate Net Zero.

- Across all workshops, of those who felt qualified to answer, 91% of local authorities said they had a Local Plan in place, compared to 92% in the East Midlands and 89% in South Wales.
- Although all regions had made LCTs central to their Local Plans, challenges and setbacks lay in the incorporation of these technologies, due to network constraint, lack of capacity and the cost of reinforcement.
- Excluding those who were not sure, 87% of local authorities had set a target date for Net Zero, 80% had an action plan in place to reach Net Zero, with a further 93% saying they had started to deliver on their action plan.
- Wales had the most positive statistics on decarbonisation: all respondents had a target date for Net Zero. 89% had an action plan, and of those who had, all had started to deliver on it. However, the West Midlands had the lowest figures: 60% had a target date for Net Zero, 63% had an action plan, and 83% had started to deliver on it, suggesting that more support was perhaps needed in this region.
- When asked to what extent stakeholders agreed with the following statement: "I support WPD's actions as part of the Green Recovery Programme", the result was four out of a possible five (where five was 'strongly agree').



Workshop 3: Planning your future network

The Distribution Managers also introduced the final session of the day. Giving an overview of WPD's investment planning process, they showed how WPD used Distribution Future Energy Scenarios (DFES) to assess the growth projections of different customers and technologies connected to the network. They explained that stakeholder engagement was a critical component of the forecasting process, with DFES webinars, surgeries, engagement hubs, and continual dialogue all utilised to build an accurate growth picture.

- Across all four regions, approval of WPD's approach to investment planning received an average score of 3.87 / 5.
- The common thread across all four regions under investment planning was the vital need for greater communication and engagement, and it was felt that earlier, proactive engagement would enable local authorities and developers to shape Local Plans and business and housing projects more effectively.
- The electronic voting demonstrated that more visibility was needed for DFES engagement: across all regions; 60% did not know if their organisation had been involved in DFES planning. However, there was a clear appetite for involvement. Excluding those that were not sure, all other stakeholders said they would like more engagement from WPD in general.
- When asked how stakeholders would rate the DFES engagement they had undertaken, it received an average score of 3.74 / 5, although a significant proportion (70%) could not answer the question, as they hadn't experienced any engagement.
- There was consensus that greater sharing and accessibility of data was critical to effective local energy plans, with specific calls for data that identifies areas of constraint, numeric data in terms of capacity, heat maps, Network Impact Assessments, cable maps, maps that detail where network reinforcement will take place, and wider access to DFES reports and the Green Investment Fund.



Workshop 1: Introducing WPD

Distribution Managers from each WPD region gave an overview of WPD's role on a national and regional level, and introduced WPD's new Business Plan for Ofgem's next Business Plan period (RIIO-ED2), explaining some of its key commitments.

The Distribution Managers who presented were as follows: Edith Kanyoka in Telford; Andy Barton in Hereford and Ludlow; Kester Jones in Birmingham; Simon Havill in Derby; Mark Hutchinson in North Lincolnshire; Colin Randle in Leicester and Kettering; Neil Patten in Mendip; Jon Nesbitt in West Cornwall; Paul Elsen in Plymouth; Paul Llewellyn in Swansea; and Huw Thomas in Cardiff.

Summary

Reasons for attending

Stakeholders from local authorities, the Welsh Government, developers and energy consultants were particularly well represented; more specific roles within these organisations included infrastructure leads, climate and biodiversity champions, utilities and technical coordinators, electricity managers, transport managers, energy advisors and solar farm developers.

Reasons for attending, therefore, tended to combine the two imperatives of planning, growth and development, with considerations for Net Zero, greater electrification of heat and transport, and the phasing out of gas and other fossil fuels. Many came to share their commercial, housing and transport plans in their local area, aware of the challenges ahead in securing supply and capacity. Stakeholders wanted to hear more about the new building regulations planned for 2025; some had already started to build to the New Home Standards in their area, and wanted to know how WPD planned to support them.

Solar and storage projects were widely discussed, and many wanted to hear more about how WPD was planning to support both large and domestic customers to become Net Zero by 2030, in line with many local authorities' goals. Some cited that their own regions were 'not going fast enough' to embed LCTs into their Local Plans, looking for expert guidance from WPD, and others were interested in three-phase cabling to new developments, the challenges of rolling out EV charging points, and the resilience of the network with greater electrification. In most cases, the impetus was to learn more in order to more effectively align with WPD's plans and ambitions, signalling an appetite for greater collaboration and partnership in both sustainable, effective growth and reaching Net Zero.

Verbatim comments

1. What has brought you here today?

West Midlands

- "I'm interested in WPD's plans to support us with our climate change plans." **Local authority**
- "I'm a planning officer and I'm working to prepare a climate change declaration for the council. This will mean more low carbon technology needed on the grid, including EV chargers in particular."
Local authority



- “I’m a Principal Planning Policy Officer. I’m interested in resilience, EV charging points and big strategic network infrastructure required in the years ahead so that we can include it in our Local Plan.”
Local authority
- “I’m interested in the solar-panel projects that people are trying to set up in Wychavon. As a Local Councillor, I want to learn as much information as I can to support these projects.” **Local authority**
- “I’m from a community energy group, so I would like to hear more about local energy plans, with a specific focus on heat pumps, EV charging schemes and community solar schemes. I would like to know more about potential grid constraints that could hold these types of projects up.”
Community energy group
- “I’m an Energy Manager at a university. I want to hear about reinforcement plans and how you will accommodate electric heat pumps to replace gas central heating. The projects on our site have not been delayed due to Covid, but tweaks have had to be made. We haven’t had much to do with WPD in the last 18 months, but it has provided a good opportunity to bust some myths around grid capabilities.”
Academic institution

East Midlands

- “I’m an Infrastructure Lead at the council. My role covers all aspects of infrastructure, ranging from growth to town planning. We have had conversations with WPD about our plans.” **Local authority**
- “I’m the Utilities and Technical Coordination Manager for a housing builder. I’m here to learn more about how the network is going to evolve without gas and how it will cope with all of the EV charging points being installed. I want to see whether the new building regulations are going to be introduced in 2025, as planned.” **Developer**
- “We’re particularly interested in domestic supply to new properties and found discussions about phased supplies to homes interesting last year. Ahead of the new building regulations in 2025, we have already started building to the New Home Standards in our local area. We would like to hear more about how WPD is planning to support this.” **Local authority**
- “I work for a storage and solar development. We were with WPD on battery storage programmes, and we are interested in WPD’s Green Recovery plans.” **Developer**
- “I’m here because I’m part of the team that’s delivering the £24m Clay Cross town deal and we expect to see a significant amount of development and we’re concerned that there may be issues with supply of electricity so wanted to flag that. We need to start raising awareness of our plans so we can deliver that. One of our key commitments to the funders is being low-carbon, and we want to make sure we can deliver on that.” **Local authority**



- I'm a Climate Champion so I was very interested to hear about the low carbon and decarbonisation. I'm interested to know how you're supporting people to become low carbon by 2030. I don't feel we've got that happening in Derby at the moment. If Western Power can share the types of directions that we should be taking, what does zero-carbon look like and what we should be doing, because we're not going fast enough. We're going to be writing our Local Plan soon and we need to know how to embed the low carbon stuff into that." **Local authority**
- "I do lots of consulting work for SMEs. My work covers a wide range of areas in WPD's licence areas. I'm interested in WPD's network plans, as I want to be able to see how some of my clients can move forward with their innovative projects. For example, we're involved in building a test facility in Somerset for building vertical farm apparatus for growing strawberries, which could potentially be used for storing energy." **Energy consultant**
- "We have a very stretched target for carbon neutrality in the city by 2030, so we are very interested in how to integrate renewables into the local network, and smart grids in particular because we are looking at a large number of local generators and interested in how that will work locally, especially domestic to grid." **Local authority**
- "I'm a Ward Councillor. I'm here to learn more about WPD's plans. Knowledge is power!" **Local authority**

South West

- "I'm on an early fact-finding mission around an energy project for villages in the vicinity." **Local Authority**
- "I've got the portfolio for climate change and biodiversity and want to hear more about how we can align with your plans." **Local Authority**
- "We are trying to work together on a housing project and want to learn more about how we can align our plans with your energy network." **Local Authority**
- "I'm a Strategic Lead on strategic planning around the climate and energy. I'm keen to continue our consultation with WPD about electric vehicle chargers and air-source heat pumps in housing." **Local authority**
- "I've been participating in these workshops for several years as part of a community energy group. We're particularly interested in the transition to Net Zero. We're working with WPD on Project Venice, looking at how a community can move to renewable energy without leaving people behind." **Community energy group**
- "My role is as Programme Coordinator, so it's a bit about seeing the different enquiries that come into the hub around energy. We are currently working with Helston Town Council trying to get renewable energy projects going, and there have been some curtailment issues for them. I'm interested from that point of view but also for rural groups, what are the options for Net Zero that don't involve a huge upgrade of the grid? What are the options for Net Zero that a local network can use to export to the grid?" **Community energy group**



- “I’m from a community energy group and we have been working on the Glastonbury Town Investment Project, which will feature new renewable energy schemes such as ground-mounted solar arrays, rooftop PV panels, battery storage and EV charge points in park and ride facilities. We’re also looking at solar car ports in our public car parks. Generally speaking, we want these schemes to have real social value for the community.” **Community energy group**
- “I’m in the Climate Change Team at the council and my role is currently focusing on ramping up the number of heat pumps that we install and, therefore, working out how many connections we need to make to the heat network.” **Local authority**
- “I work for a local enterprise partnership in. We’ve published a blueprint for clean growth so that our area can achieve Net Zero, preferably before 2050. We’ve also been working on a ‘build back better’ plan so that we can become a leader and exporter in green energy.” **Local Enterprise Partnership**

South Wales

- “I’m an Electrical Manager for the Council. We have lots of plans to roll out EV chargers, firstly on the staff car park for next March and then potentially on public car parks as a potential revenue generator. Net Zero is also a hot topic at the council at the moment, so I want to hear more about how we can support the decarbonisation agenda.” **Local authority**
- “We are a solar farm Asset Manager and Developer, and we tend to have a lot of outages in West Wales. So, we want to know more about the reinforcement that can be put in place on the network. We don’t have a close working relationship with WPD but do have a lot of correspondence.” **Developer**
- “I work for a housing association in South Wales, and we are retrofitting 12,000 homes as part of the retrofitting agenda, implementing sustainable measures to improve the carbon footprint of homes. I’m on the new-build homes team within the organisation. The future is electric, and all homes will be built without gas, incorporating EV chargers, air source heat pumps and the like. As all of these systems will be running off electricity, this will have massive implications on the grid. I’m here to learn about how these all-electric new builds will work on the grid.” **Developer**
- “I’m an Energy Advisor. My role is to try to look forward to see where the energy system should be at in the future, so I’m interested in hearing about WPD’s developments.” **Government**
- “I’m a Transport Manager responsible for delivering the rapid charging along the strategic road network. Grid capacity is a huge issue and the amount of time taken to reinforce the grid.” **Government**
- “I work for a charity that was originally set up to tackle climate change, but it now majorly focuses on fuel poverty. We need to ensure that the network can take the increased load on it arising from heat pumps and EV chargers and that everyone, particularly vulnerable people, can partake in this smart future.” **Charity**



- “I’m a Storage Developer. I’m just here as I’m interested to see what you are doing for the future.”
Developer
- “I’m Vice Chair of the Sustainability and Housing Scrutiny Committee at the Council. Housing is very much at the forefront of what we plan to be doing in the future. Now we have the ability to build them again, we’re looking to see how those new houses are going to offer much better solutions. So, the real emphasis is on what WPD can offer in a way that brings us forward.” **Local authority**



Workshop Two:

Supporting growth, the Green Recovery, and the transition to Net Zero

Distribution Managers from each region introduced stakeholders to WPD's current investment programme and articulated how WPD was supporting the growth agenda by connecting customers and reinforcing the network. They demonstrated WPD's commitment to unlocking capacity in chosen areas to aid a Green Recovery, enabling more low carbon technologies (LCTs) to connect to the network, and accelerating the push to Net Zero.

The Distribution Managers who presented were: Matt Griffiths in Stoke; John Kendrick in Tipton; Neil James in Gloucester; David Hewitt in Nottingham; Justin Hargate in Northampton and Milton Keynes; Ian Brookes in South Lincolnshire; Matthew O'Dowd in Devon; Chris Garnsway in Somerset; Mike Rogers in Bodmin; David Roberts in West Wales; and Paul Thomas in East Wales.

Summary

Industrial, commercial and domestic growth plans

In many cases, stakeholders cited specific regional growth plans, detailed in the table below. Questions were raised over WPD's plans to proactively make electricity storage part of the future network, with many citing the critical importance of working with WPD to realistically factor storage into their development plans. In the South West, the major concern was over capacity, reinforcement costs, and the rurality of the prospective growth, which has historically hindered greater electrification. Although the concern was not with rurality in the East and West Midlands, similar worries were expressed in terms of capacity, and a difficulty in getting LCTs such as solar PV onto new developments, as a result of local constraints. South Wales, in particular, was seeing a huge increase in housing growth, with renewables, LCTs, and insulation retrofitting featuring as key components of the plans.

Region	Location	Growth Plan
West Midlands	Cannock Chase	<ul style="list-style-type: none">Plans for wind and solar generation parks.
West Midlands	Worcester	<ul style="list-style-type: none">Plans for 14,000 homes by 2040, which will go on top of the 18,000 in the pipeline.'Worcester Six' business park in development.
West Midlands	Hereford	<ul style="list-style-type: none">Adopting a passive-plus approach to housebuilding: 2000 new council houses at this standard within local plans.Looking to introduce this Passive Plus approach into the core strategy moving forward.
East Midlands	Mansfield	<ul style="list-style-type: none">1700-home plot in Lyndhurst.1400 houses in Ashfield.Commercial developments in the pipeline.Social housing developments intend to pre-empt the government's announcement around the Future Homes Standard, with plans to build 100 council houses to this standard.Passive Homes Standard pilot project.
East Midlands	Newark	<ul style="list-style-type: none">One domestic site in Fernwood.One domestic site in Middlebeck, awaiting the development of a link road.Plans for a plot in Eastwood, hoped to deliver 1000 additional homes.



Region	Location	Growth Plan
East Midlands	Derby	<ul style="list-style-type: none"> Several areas allocated for housing, in the city centre, on the edges of the city, and a main industrial area on the south side of Derby.
East Midlands	Leicester	<ul style="list-style-type: none"> Two big areas of housing development: one near the M1 and one on the outskirts of Leicester, which will lead to lots of new homes. There is also the Magna Park commercial area, where there are lots of logistics firms. We are trying to encourage them to install low carbon technology within their premises (solar panels on the roofs, in particular), but that will affect the grid.
East Midlands	Lutterworth	<ul style="list-style-type: none"> Plans for the Magna Park commercial area to install low carbon technology within business premises, particularly solar PV.
East Midlands	North Northamptonshire	<ul style="list-style-type: none"> Plans along the A14 corridor for distribution warehouses in addition to new housing developments.
East Midlands	Sleaford	<ul style="list-style-type: none"> Two major areas of growth planned for the town of Sleaford: 18,000 homes to be built on the outskirts of the town, with EV charging capabilities; and a new business park, with an emphasis on LCTs.
East Midlands	Holbeach	<ul style="list-style-type: none"> Plans for 3,000 homes with LCTs capability.
East Midlands	Milton Keynes	<ul style="list-style-type: none"> Large areas of land with potential for 25,000 dwellings. Regeneration in Milton Keynes, as well as upgrades to existing buildings.
East Midlands	Banbury and Bicester	<ul style="list-style-type: none"> 1300 new houses a year. Plans for EVs and retrofitting still in the proposal stage.
South West	Cranbrook	<ul style="list-style-type: none"> Plans to build 850 houses per year, with EV charging capacity and three-phase cabling.
South West	Westwood	<ul style="list-style-type: none"> 1000 houses to be developed in the next two years.
South West	Derriford	<ul style="list-style-type: none"> Plans for houses and hospitals in Derriford and the surrounding area.
South West	Bristol	<ul style="list-style-type: none"> Heat Delivery Plan to create a procured energy partner for Bristol, which will bring in £1 billion in investment for energy projects, including heat pumps, EV chargers.
South Wales	Cardiff	<ul style="list-style-type: none"> 100-house project on the former Ty Glas site and another 200-house site at the former steel works nearby.
South Wales	Cardiff	<ul style="list-style-type: none"> Large-scale housing project at Plasdwr, which will incorporate generation and EV pumps
South Wales	Newport	<ul style="list-style-type: none"> Pobl plan to build 1000 homes a year for the next decade.
South Wales	Swansea	<ul style="list-style-type: none"> Pilot project in partnership with Swansea University: home insulation rollout programme, including retrofitting of council houses.
South Wales	Swansea	<ul style="list-style-type: none"> Housing and commercial projects planned for central Swansea involving renewable technologies.
South Wales	Tenby	<ul style="list-style-type: none"> Pilot project: Net Zero-focused renovations on Penybryn School.

Local Plans

Among those who felt qualified to answer, 60% represented local authorities. Of those, 91% said they had a Local Plan in place, rising to 92% in the East Midlands and 91% in the South West of England. Discussing the status, viability, and challenges of their local plans, those in the South West cited challenges over incorporating low carbon technologies, with some examples given of heat pumps having to be removed from development plans due to a lack of capacity. Another concern in this region was over limited power, and a challenge with the timescale between applying for capacity and securing investment from developers with planning proposals. This was echoed in the feedback from the West Midlands, where the high costs of fitting EV charge points, retrofitting older buildings for EV charging, and capacity on the grid to cater for so much increased demand were all raised as concerns. In South Wales, the overwhelming message on their Local Plans was that they were going ‘full-out on the decarbonisation agenda’. Challenges were visible in the cost of reinforcement for new connections, with some delegates citing renewable projects having to be stripped back due to constraint issues. Delegates from the West Midlands cited ‘significant’ delays to their plans as a result of Covid and Brexit, which were leading to supply-chain issues and prohibitively increasing costs on the manufacturing and procurement side.



Electric vehicle charge points, heat pump and other low carbon technology plans

Delegates from across all WPD's regions were making LCTs a central part of their future planning. Stakeholders from the East and West Midlands focused on their LCT plans for domestic infrastructure, with particular emphasis on the Passive House Standard, which would include EV charge points and solar PV. Although these stakeholders foresaw some pushback from national housebuilders, they cited that "we will fight for it, as we think that it's the right thing to do." A wider EV charger strategy was seen as a challenge, with many schemes remaining piecemeal: it was felt buildings regulations would need to drive holistic change.

Those from the South West discussed plans underway to install EV charge points into car parks, but representatives from more rural areas identified a problem in the relative dearth of multi-storey car parks and metered on-street parking in places with lower population density, with high footfall needing to be evidenced to qualify for funding for these schemes. There was a concern here that without investment, more rural areas would be left behind in the wider uptake of LCTs. A key comment here was: "I'm hearing lots of good tactics from everyone here, but no clear strategy." Another concern was that housebuilders were going ahead with plans to install gas boilers in new builds, with stakeholders feeling WPD could do more to educate on the necessary shift to electric heat pumps. Representatives from South Wales shared their plans for a concerted drive to electrifying transport, with buses, private vehicles, the rail network and waste fleets all earmarked for transition to electric power. Although constraint and capacity were again raised as key challenges, WPD's engineers and planning teams were singled out for praise for generating solutions that avoid the need for massive reinforcement. Developers from this region also signalled their commitment to installing new houses with heat pumps and EV charge points ahead of changes to building regulations.

Targets for Net Zero

Across all workshops, 87% of local authorities had set a target date for Net Zero, excluding those that were not sure. 80% had an action plan in place to reach Net Zero, with a further 93% saying they had started to deliver on their action plan. Wales had the most positive statistics in this area: All had a target date for Net Zero and 89% had an action plan, all of which were in the delivery stage. However, the West Midlands had the lowest figures: 60% had a target date for Net Zero, 63% had an action plan, and 83% had started to deliver on it, suggesting that more support was perhaps needed in this region. Most stakeholders whose organisations had a Net Zero target cited 2030 as their goal, with some differentiating between a 2030 target for 'in house' and a 2050 target for residents, business and industry.

The connections process

Delegates expressed a clear desire to establish close working relationships with WPD on identifying suitable sites for connections, with many seeing that the expertise could work both ways: local authorities, developers and strategic planners have good long-term visibility of the direction of travel and growth, while WPD have the knowledge and data of the network and its geographical constraints. There was a call for better, fresher data from WPD's side to enable more successful applications, and more proactive communications, through engagement, surgeries and online tools. Some raised the question of often prohibitive cost, and asked how there could be more collaborative working to identify connections that deliver community benefit.

The Green Recovery

When asked to what extent stakeholders agreed with the following statement: "I support WPD's actions as part of the Green Recovery Programme", across all workshops the result was four out of a possible five (where five was strongly agree). In Wales this increased slightly to 4.10, and in the West Midlands it fell to 3.82. Looking more widely at the data from all workshops, 71% said they had experienced delays to the volume of developments as a result of Covid-19, and in Wales this figure was much higher, at 82%. Across all regions, when asked if Covid-19 would result in future delays, a majority (65%), replied 'no', whereas in Wales, a majority (56%) responded with 'yes'.

Given the responses from the electronic voting, it was perhaps not surprising that the Green Recovery was most widely discussed during the South Wales workshops, and the overwhelming response here was that it was the



right approach. Local authorities and Welsh Government had made it a central part of their future planning, with increased investment in decarbonisation, the circular economy, and the creation of skilled, local jobs that serviced the Green agenda. Challenges were identified in the community ownership of assets, community use of assets and local employment; it was felt developers were often reluctant to enact these, seeing a potential decrease in their profit. However, the line on this in South Wales was firm: 'shifting in this direction is paramount as the network changes... these projects need to be including as much indigenous content and incorporate localised generation, with community energy and local skills at their heart.'

Verbatim quotes and voting

1. What are your growth plans (industrial, commercial, domestic)?

West Midlands

- "We have some plans in Cannock Chase for wind and solar generation parks." **Local authority**
- "We have plans to roll out urban extensions into neighbouring villages and smaller rural settlements, but we are not sure about whether your grid will be able to support them at the end of the line." **Local authority**
- "We are working through the South Worcestershire Development Plan, which will add 14,000 homes to our patch by 2040, which will go on top of the 18,000 in the pipeline. Wychavon is a huge potential area for development, due to our proximity to Worcester and our good transport links. In terms of business, we have a business park being built called Worcester Six. We would like to incorporate solar panels into the buildings being built there, but that hasn't been possible, which has been a shame." **Local authority**
- "Our aim is to push all housing developers to be as green as possible when constructing houses. There is no Energy Performance Certificate for new builds, meaning that you get less information about its energy performance than if you were buying a standard kitchen appliance, which is frustrating. However, where we do have more control with developers, they do provide a good standard of home." **Local authority**
- "Hereford has produced its own document for housing and is adopting a passive-plus approach. We are going to include 2000 new council houses at this standard within our plans. In addition, we are looking to introduce this Passive Plus approach into the core strategy moving forward. We may get some push-back from national house builders, but we will fight for it, as we think that it's the right thing to do." **Local authority**
- "We are looking at decarbonisation plans for Coventry University as part of our growth plans. We need to ensure that we grow, but do so sustainably. We currently buy a lot of electricity and gas, but need to move away from the latter and instead embrace air-source heat pumps." **Academic institution**



East Midlands

- “We have major housing growth plans for the Mansfield area. There is a 1700-home plot in Lyndhurst in the south of the patch, where Persimmon is building homes. There are also 1400 houses being built in Ashfield. There are also commercial developments in the pipeline. Within our social housing developments, we are pre-empting the government’s announcement around the Future Homes Standard, with plans to build 100 council houses to this standard. We also have a Passive Homes Standard pilot project.” **Local authority**
- “A lot of our growth plans are urban extensions to Newark. Two of them are underway. One is Fernwood, where Persimmon and Barratt Homes have a site. There is also the Middlebeck site to the south, which is awaiting the development of a link road. In addition, there are plans for a plot in Eastwood, which is hoped will deliver 1000 additional homes. However, no developer has been attached to it yet.” **Local authority**
- “We have a bid in the pipeline for the Levelling Up fund and transport will be a major component in that. The county council are also preparing their own bid for the Levelling Up fund, which will be putting in some more capacity into the local railway line. However, I don’t know how this will impact on the power requirements for the train lines. It’s quite a wide-ranging plan.” **Local authority**
- “We’ve got a number of areas allocated for housing, in the city centre and on the edges of the city, then a main industrial area on the south side of Derby. The local plan process will be starting again next year. Someone was doing work on the storage and that needs to be something we’re factoring in to make our network more resilient because we need that power at different times. Is that something that you’re going to be pushing onto your network? Are you not proactively looking at making electricity storage part of the route to Net Zero? If for every 500 houses you should have such and such a capacity of battery storage, we need to incorporate that into our new developments, and find spaces for storage capacity in existing developments, such as when buildings are destroyed.” **Local authority**
- “We’re in the Oxfordshire-Buckinghamshire arc, so there are huge numbers of houses planned across this swathe of land, and there will be additional growth on top of that. We’re tuned into the Net Zero agenda but need to work out how ambitious we can be.” **Local authority**
- “We’ve got two big areas of housing development: one is near the M1 and one is in the outskirts of Leicester, which will lead to lots of new homes. There is also the Magna Park commercial area, where there are lots of logistics firms. We are trying to encourage them to install low carbon technology within their premises (solar panels on the roofs, in particular), but that will affect the grid.” **Local authority**
- “We have the A14 corridor running through North Northamptonshire, where distribution warehouses are flying up, in addition to new housing developments. I’m not seeing a lot of growth in the parishes at the moment, but I’m sure that there will be. We have a lot of excess power around here, so it could be a place to build data centres.” **Government**



- “Our plans can be characterised as ‘go for growth’. In terms of housing, there are a number of large areas of land that will probably have 25,000 new dwellings. There are also substantial plans for regeneration of three areas in Milton Keynes which will be a mixture of demolition and rebuild and upgrading existing buildings.” **Local authority**
- “Currently we’ve got a plan that was adopted in 2015, and we’ve got a lot of major development around Banbury and Bicester. We currently see around 1300 new houses a year. We’re currently at the proposal aggregating stage, and we’re drawing up some policies around EVs, retrofitting, things like that.” **Local authority**

South West

- “We’ve been told by the government that we have to build 850 houses per year. A lot of that has been in Cranbrook, with a central heating system throughout the estate. The houses are powered by this central heating, the houses are all electricity. We’re hoping to get EV charging. There were talks about vehicle charging and one of the suggestions was about three-phase electricity. Didn’t see how WPD could come up with that for every house. At the moment we are wondering whether you can continue to supply us with 850 houses per year. We want to change over our fleet, how are we going to charge all of those in one go?” **Local authority**
- “In Westwood homes, we’re expecting another 1000 houses to be developed in the next two years. The concern is about capacity for connections, the lack of design features in these properties. Torridge is very rural, narrow roads etc. A lot of properties are built without the capacity to charge. You would have to have more general-based charging points. What are we doing about working with quick, rapid charging points in our stations? It seems like a very workable solution.” **Local authority**
- “We have plans around houses and hospitals in Derriford and the surrounding area in Devon, but we need to find a way to ensure that the capacity is there. We need to work together more to find new smart ways of working, such as working behind the meter and using batteries and storage systems. This would reduce the likelihood of costly reinforcement. WPD is happy with this, so I would like to find a way to make this a key part of the planning process.” **Local Authority**
- “We want to push forward the Heat Delivery Plan and create a procured energy partner for Bristol, which will bring in £1 billion in investment for energy projects, including heat pumps, EV chargers.” **Local authority**
- “For my industry, people are chasing grid and are going up north to look for more capacity, as there is little in rural Somerset. It’s really frustrating that people are moving away from an area of such high radiance. As a result, we are looking to find other solutions. We have investment to put in place Green Recovery schemes, but we never make enough progress to get the reinforcement in place. It just feels like a wash cycle, and we never get to where we want.” **Developer**



- “We have made improvements to our Climate Emergency Plan, which is going to the secretary of state for scrutiny. This plan contains a lot of ambitious content within it, particularly with a target for residential Net Zero and caps on domestic heating carbon outputs, which means that lots of heat pumps will be installed in homes. If it is booted out by national government, we will need to review these plans.”

Local authority

- “We are doing some mapping around potential wind farms on the central corridor of Cornwall. There has been a significant uptick in WPD’s aspirations to push forward with renewables and decarbonisation, and we want to go further, but it is out of both of our hands, due to network constraints and Ofgem’s financial investment constraints.” **Local authority**

South Wales

- “For the first time in 25 years, we’re seeing large housing developments in our area. There is going to be a 100-house housing project on the former Ty Glas site and another 200-house site at the former steel works nearby.” **Local authority**
- “The main project that I’m working on is the Plasdwr housing project, which will incorporate generation and EV pumps when it is completed.” **Energy consultant**
- “At Pobl, we have plans to build 1000 homes a year for the next decade, which is very ambitious. However, we want to go further and ensure that these houses are nice, safe places to live, are well connected to local amenities and are equipped with low carbon technologies. We want that to be the norm in time. Therefore, I have been scoping out what a Zero Carbon home is, what technology it features and how much it costs to build. We are going to adopt this standard at the end of the month and then we are going to need to find partners to help to build them.” **Developer**
- “Swansea has been doing a home insulation rollout programme over the last four years, which has involved wrapping an insulation layer around houses to stop heat from escaping. We have retrofitted council houses, with 11 flats and two houses being fitted with solar panels, batteries, and heat pumps. We did this in partnership with Swansea University to assess how they perform.” **Local authority**
- “There are other housing and commercial projects being implemented in central Swansea, involving renewable technologies. We are looking to forward our renewable and Net Zero carbon ambitions through our current BAMBY projects in collaboration with the Welsh Government. Renovations on Penybryn School in the Tenby area is a key upcoming project encapsulating all of this.” **Local authority**



West Midlands

- “We adopted the most recent version of our Local Plan a year ago and it contains a policy that says that we will support the rollout of EV chargers, with no specifics about where, how and how many. It’s more of a stated intention at the moment.” **Local authority**
- “We have declared a climate emergency, but we need to review it within five years and then look to see whether we need to change anything, so we’re not saying very much at the moment around concrete plans. Our Local Plan started in 2014 and will take us into the 2030s. The timings are awkward with us needing to review the needs of our area.” **Local authority**
- “We have an old Local Plan currently in place and a new one is being put together at the moment. Following the announcement about gas central heating being phased out, we’re talking about area schemes for heat pumps. We want this to be an efficient process so that we’re not always digging up the roads.” **Local authority**

East Midlands

- “We’re in a process of reviewing our Local Plan with a view to mapping things out to 2050.” **Local authority**
- “We’re updating our Local Plan and it should be out next year for consultation.” **Local authority**
- “Actually we’re just about to start a process of looking at some more housing allocations, whether we’re going to have a new larger settlement or increase the size of some of our smaller more sustainable settlements. We’re looking at whether we need to allocate employment land as well, and we’re really interested in how we can make sure there’s EV charging facilities there and how feasible that is from the supply side.” **Local authority**

South West

- “Our council was formed in 2019 and our Local Plan is just out from consultation and we’re currently looking at feedback. So, this event is good timing for us. Our main concern is around the limited power available in our area, and we have been trying to engage with the distributors in our local area to move forward on this.” **Local Authority**
- “We have a local plan that outlines future development sites, and we want to be able to support them whenever they come forward. We’re a little on edge about the timescales for accepting an offer though. We have lots of developments in the pipeline with housing projects, but they won’t be ready to come forward in six months.” **Local Authority**

South Wales



- “We’ve had our management plan in place since 2007-8. We’re going full-out at the decarbonisation agenda. We’ve had some grant funding for the EV charging infrastructure. Some of that needs to be spent by the end of the financial year, so we’re right at the start of that process.” **Local Authority**

How realistic are these plans / are you currently experiencing any delays?

West Midlands

- “We are experiencing more demand around getting EV charging points installed. However, the main issue is the cost around installing new ones and retrofitting older buildings so that the chargers can be installed on them too. We’re also not sure about whether the current grid capacity can support all of the EV chargers that will be needed. It’s leaving us concerned, so if we could have some clarity on WPD’s plans, that would be great.” **Local authority**
- “We want to support the EV rollout, but it feels like WPD are a bit late to the party and are only reacting to what stakeholders are doing. It would be good to know how WPD plans to deliver the extra 2000 connections per day.” **Local authority**

East Midlands

- “Rugby is growing at a much greater scale than in previous years, for example the annual rate of housing delivery has doubled compared to previous years. Developers have said that there have been delays with getting connected to the grid which can cause us problems.” **Local authority**
- “We have seen delays on the manufacturing side and in the supply chain. In addition, costs have been going up due to Covid or Brexit, and it has been a problem for many manufacturers.” **Major energy user**
- “There have been major delays and components have a 35% premium and a six-eight-week lead-time. That is having a knock-on effect on projects.” **Energy consultant**
- “One of the potential concerns we’ve got is that if there’s a delay in supplying developments it can lead to a delay in them being built, which can lead to more speculative developments on countryside rather than on our preferred sites. Just trying to find out if there are ways of guaranteeing that supply moving forwards. It’s all about a single message, if there is some kind of guarantee that can be made that when these houses are built there’ll be supply for them. We’re also looking at EV charging points for every new house built.” **Local authority**



- “Local plan is up for review next year, and there are some big housing developments on the outskirts of the city. Where I work, when we’re trying to attract business to our big sites, they often come in and get so far down the process and find that the power isn’t there. Another question is how we move into the bordering areas between yourselves and the other DNO.” **Local authority**

South West

- “We have a joint Local Plan, and we are expecting to deliver 20,000 new homes within this, covering urban and rural areas. We’ve been experiencing difficulties in ensuring that our houses at the end of the line can incorporate low carbon technology, such as heat pumps, but they have had to be stripped out due to capacity issues. So, it would be good to find out the constraints in specific areas in your network, so that we can plan better.” **Local authority**
- “I think one of the things that’s an elephant in the room is that we’re moving to a unitary authority, so all our districts will be joining together to form one authority, so there’s a bit of uncertainty there. That is an issue, as we all have our own local plans at different stages of progress. We’re doing some evidence-based work, but we’ve not made a lot of progress with our local plans because the future is a bit uncertain. We still have to deliver the existing local plan, and there’s the issue with phosphate and what that’s doing to local growth, as this impacts some places more than others – Sedgemoor not so much. What I’m keen to understand is who I would provide a trajectory of growth to, and what impact that’s having on our existing plan. Also, what energy is available that we can draw upon at the moment.” **Local authority**
- “In terms of planning policy, we’re at a strange point in time, because things are on hold with our Local Plan until we can be sure what geography we would be covering.” **Local authority**

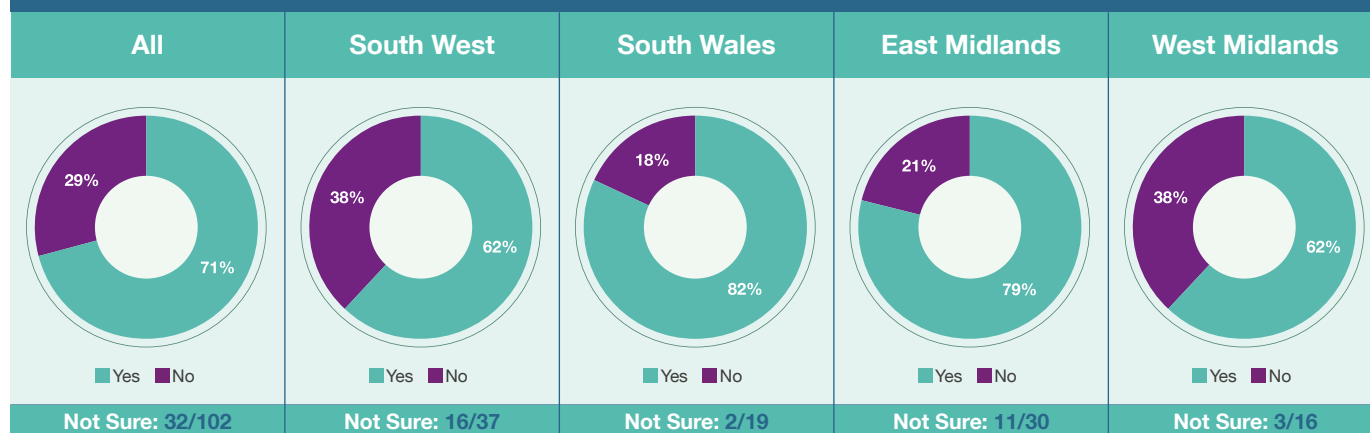
South Wales

- A lot of the renewable schemes that we’ve had in the pipeline have fallen foul of the grid constraints issue. So, we’ve had to tone those down significantly. We had a grid connection estimate for a 20-megawatt solar farm, which was £63m, so as you can imagine that didn’t go anywhere. We’ve got lots of plans for renewables, EV charging, we’ve started putting heat pumps in. The grid element has got a large part to play with the local authorities and their decarbonisation ambitions.” **Local authority**
- “I sit on the Monmouthshire Climate Emergency Board, and they are looking into electrified transportation. They are having problems with electrified bin lorries, as the depots are in rural areas and don’t have a great deal of range.” **Charity**

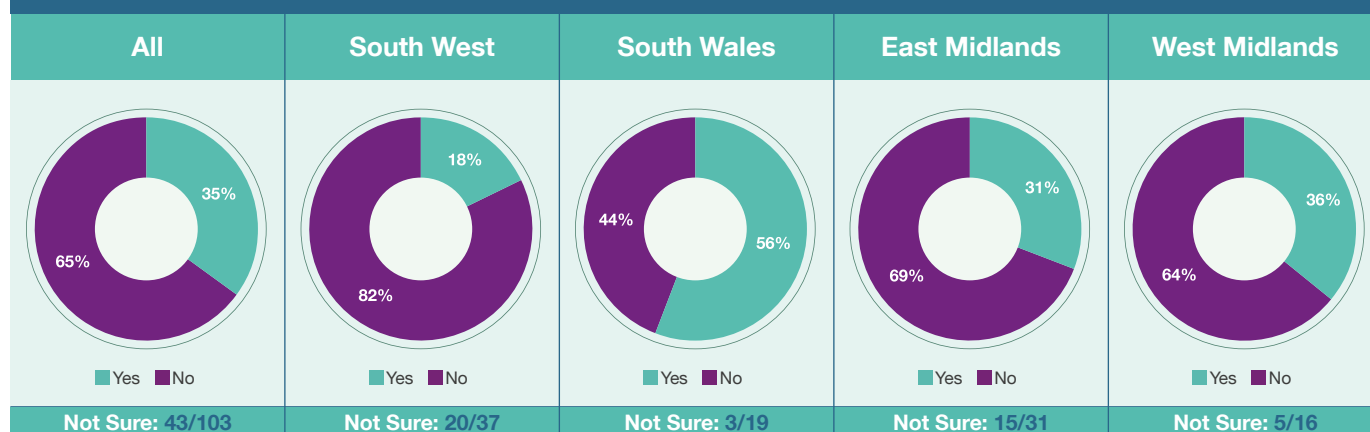


Electronic Voting: Growth Plans

Have you experienced delays to the volumes of developments you are bringing forward as a result of Covid-19?



Do you anticipate future delays to the volumes of developments you are bringing forward as a result of Covid-19?





What are your plans for electric vehicle charge points, heat pumps and other low carbon technologies (e.g. generation)?

West Midlands

- “I also work for High Peak Council and they are also considering rolling out EV chargers in public car parks.” **Local authority**
- “We are putting EV charging points in most new housing units and are trying to install them in new flat blocks. We’ve had lots of planning permissions granted for the EV chargers recently, so there should be a major uptake in that in the near future. More widely, in terms of a wider EV strategic plan, we’re trying to gather more specific data for consultation before building a plan.” **Local authority**
- “We are planning to roll out EV chargers across our area, but we need to build out our plan more widely. One major issue that we have is around retrofitting, particularly in Uttoxeter and Burton-on-Trent, which are the main council towns. Lots of the houses there are terraces and don’t have driveways, so we’re going to have to think about on-street charging from lamp-posts and the challenges linked to that.” **Local authority**
- “We are getting enquiries from council tenants and private leaseholders who want to install EV chargers in their houses and I’m working with WPD on unlooping the network to facilitate this.” **Local authority**
- “At Coventry University, we want to connect to the waste-to-energy plan and want to install solar panels on the roofs of a number of buildings.” **Academic institution**
- “There is a myth that it’s difficult to connect a solar panel to the grid, due to stories about a lack of capacity, which has held back progress in that area. It would be good to know whether there is a fault issue or an embargo issue.” **Academic institution**
- “Coventry has lots of EV chargers, more per person than anywhere else in the country outside of London, in fact, which is great. We are looking to move our fleet over to electric vehicles and encourage our staff to source EVs for their private use. We would like to hear more about WPD’s plans about EV charging schemes and have some myths busted about problems faced by WPD in rolling it out. It would be good to get a clear picture here.” **Academic institution**
- “On the estate where I live, I haven’t seen an EV charger on any properties, so I don’t know where everyone will charge their vehicles. We’re creating a battery storage network, which is intended to support garages and local amenities. We need to see how that will evolve.” **Consumer body**
- “All of the new builds are getting EVs installed, but I don’t think that we currently have any plans to install them in our own car parks.” **Local authority**



- “We’re looking at electrifying all of our council fleet vehicles, including waste vehicles and school buses, and are looking to set up charging parks in the outskirts to help deal with the major challenges posed by many houses not having driveways for potential charging points.” **Local authority**
- “We’ve taken a decision to adopt a sustainability policy from a moral standpoint. We have two developments underway using air-source heat pumps rather than gas boilers, as well as EV chargers and solar arrays. Customers also have the option of having battery storage included in their new-build homes.” **Developer**
- “We already have EV chargers in our council car parks and are on track to electrify our fleet vehicles. We have also got solar panels on our council offices.” **Local authority**

East Midlands

- “The Passive House Standard homes will include EV charging points and solar panels, but I’m not sure about the Future Homes Standard. People are putting in EV charging points, but if people have self-charging cars, this will make these new charging points obsolete. Has WPD explored all of the potential avenues here?” **Local authority**
- “We don’t have an EV charger strategy yet, but we have just put in place a residential parking space standard, which caused a bit of a kerfuffle. This is a largely unresolved issue for newbuilds and retrofitting. It’s good that people are trying to find solutions, but this needs to be driven by building regulations.” **Local authority**
- “EVs are a complex issue and decisions around where to place EV chargers need to be taken carefully. With that in mind, and having read your EV strategy, I would stress that you should be looking at how hydrogen could play a role to reduce the potential need to connect the network up to a potential EV charging point on every home. Have there been any conversations around this? I feel that hydrogen could play a really useful supplementary role in rural areas and even in urban areas, where many people don’t have driveways where they could install an EV charger.” **Local authority**
- “We are keen for developers to start installing heat pumps in newbuilds and they have been very receptive. We have also installed seven chargers at council premises and a number of industrial sites have already put them in place. In addition, we have put them in our public car parks, so that people can leave their vehicles to charge there overnight. This is because many people either don’t have a charger in the first place or don’t have a driveway to install one. Leicestershire Council doesn’t have an on-street parking strategy yet, so we’re doing interim things.” **Local authority**
- “We installed EV charging systems in our fifth public car park last week and there is another to go. However, in order to achieve our desired level of take-up, we collectively need to find solutions to counter charge time and range anxiety.” **Local authority**



- “We are planning to install more heat pumps in our council housing stock and want to find ways to make the transition smoother for tenants.” **Local authority**
- “We are installing heat pumps in our council properties and are making our van and car fleets electric. As a result, we are installing EV charge points into our own buildings and staff members’ homes. However, our large fleets are not be electrified for now. We are also engaging with big commercial groups such as Amazon, who have a large presence in our area, about electrifying their fleets.” **Local authority**
- “In terms of EVs, we have the most charging points outside London, and presumably that will increase as the new developments go in. We are also going to become along with Oxford one of the first fully electric buses cities.” **Local authority**
- “In Coventry there is a huge variation in the building type that we have, which presents a challenge when coming up with a city-wide low carbon plan. For a lot of buildings, we’ve found heat pumps to be the most effective way of reducing carbon and so our strategy has been focused on that.” **Local authority**

South West

- “The EVs can’t cope with hills and long distances, so we won’t be looking at that route. For our bigger vehicles we will be investing in hydrogen. We are looking at EV for smaller jobs.” **Local authority**
- “Currently we have a big estate being built, WPD are putting underground cabling there. We have been looking into putting EV charging in our car parks. We are looking at putting in chargers in six car parks. In terms of capacity, the progress of EV chargers is moving very rapidly. What would you do to support that? We would probably need power supply and storage at the charger that would help boost the output but not drain the electricity.” **Local authority**
- “There’s quite a lot of work on EV chargers, there are various schemes on both the car park charging points and also at on-street charging points. An area that is very active. We’ve got the Devon carbon plan, which really sets out what we will need from the grid to facilitate the electrification of heat etc. Covid recovery sets out that we want more EVs but also some funding for renewable generation. I think we’re really keen to see the skills required in Devon and support this.” **Local authority**
- “In Torridge we don’t have any multi-storey car parks. A concern to be expressed is to qualify for EV charging you have to demonstrate a footfall of people. I am worried that rural communities would be left behind.” **Local authority**
- “We want to put in more electric vehicle chargers but are worried about how it will all work in rural areas at the end of the line and in smaller towns, where there is less on-street parking for meters.” **Local Authority**



- “We have worked with Devon Country Council on electric vehicle charging in car parks and have just obtained On-Street Residential Chargepoint Scheme (ORCS) funding for rolling out more chargers across Devon. We want to be able to expand the range and number of charging points available, particularly as the demand increases. However, these are big pieces of infrastructure, and the connection cost is huge, so the grants are important.” **Local authority**
- “It’s a bit of a chicken-and-egg situation: WPD will have physical limitations, but it is an issue of upgrading and beefing up existing supplies. I do have an air-source heat pump, but I don’t have an electric vehicle charger. Some kind of idiots’ guide to whether we have enough voltage for these systems would be great.” **Local authority**
- “Smaller developments are much more likely to receive heat pumps in the immediate term. A couple of small developments in the Mendips have been built with heat pumps in recent years. However, we’re a number of years away from the large housebuilders adopting these new technologies en masse. Big developers won’t build them unless they are legally required to do so.” **Local authority**
- “We are now installing thermal insulation, air-source heat pumps and solar panels on the homes that we are building and we have noted increased interest in these technologies. We are also including the spokes for fitting EV chargers, but we will not be installing them ourselves yet. Admittedly, we are appealing to a more discerning customer, but the numbers do seem to stack up from a commercial standpoint.” **Developer**
- “At the moment, we are stipulating that any big developments need to provide on-street charging and that scheme is in its early days. We are also looking at having massive transformers and similar infrastructure put in to use the streetlight columns for on-street charging facilities. We’ve also had issues around earthing for these columns that we need to resolve.” **Local authority**
- “We’re working on our council car parks for EV charging to begin with, and we’ve got about 20 council-owned car parks that we’re looking at. We have done a budget capacity request and an estimate from yourselves, so it’s just looking at that right now.” **Local authority**
- “Housebuilders are still expecting to put in gas in their new projects throughout Devon and Cornwall. Therefore, WPD should be looking at educational campaigns to instil a desire around installing electricity instead. We need to build in expectations that a change will happen here.” **Major connections customer**
- “I’m hearing lots of good tactics from everyone here, but no clear strategy. Zero Homes have an excellent strategy based around the energy hierarchy, by focusing on using the energy system more efficiently, time-shifting system use and increased generation. They are coming up with really innovative solutions



that could help us hit our collective goals. As part of our work in Glastonbury, we have been thinking about how to make the town grow equitably and sustainably. It has made us come up with the right solutions to capture local value to deliver local value, and that has to be at the heart of all of this. We need to test these potential options set out in the energy hierarchy and ascertain how they can deliver benefits. For example, flexibility services can really save money.” **Community energy group**

- “How might a co-ordinated community understanding of interest in LCTs help WPD gauge the opportunity for a network enhancement for the existing building stock?” **Academic institution**

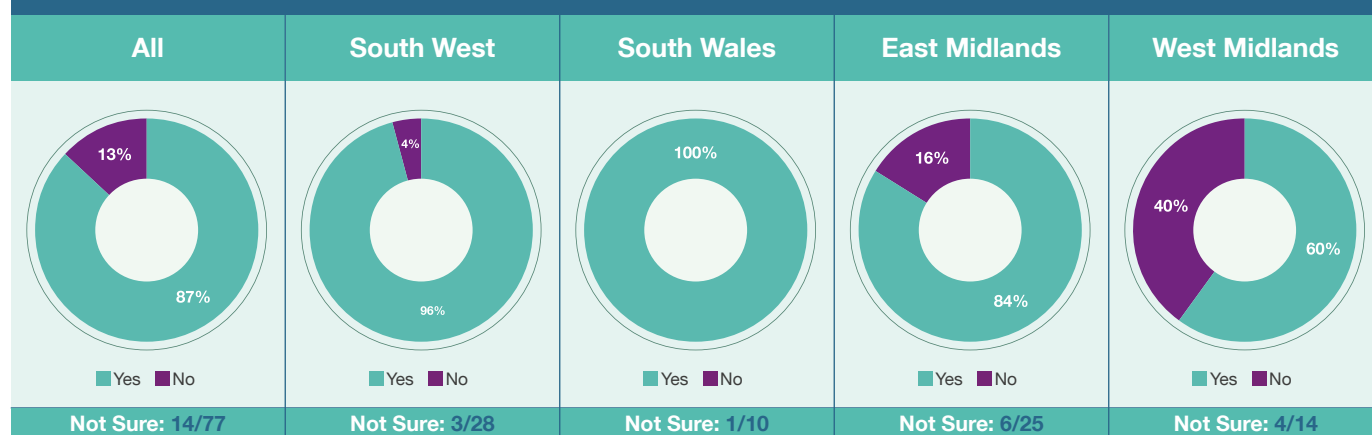
South Wales

- “We are looking at EV technology but also at how we can address our non-domestic buildings and street lighting, and how we can create renewable energy generation and carbon offsetting within the county. We’ve got some quite large schemes coming off in future years in terms of trying to provide EV charging for a bus network and looking to transition our waste fleet to be almost 60% EVs by 2025.” **Local authority**
- “We’re developing the strategic road network, we’ve also got rail that we’re looking at deploying, putting fast charging points in all our stations. Process-wise we had to put together procurement and understand the budget. The process is pretty simple, and I think the information and your engineers are very helpful. That’s what’s needed for putting in schemes that are taking a lot of capacity, it’s about a two-way conversation. If we put in an application for 100kpa and we could get 90, then tell us we could get 90 and that’s really useful, rather than us just getting a quote back for £100,000 when it could have been £10,000. I think WPD engineers are very good at that, coming up with solutions so we can deliver some schemes, not all of which need huge reinforcement.” **Government**
- “We’re working with the Welsh government to make sure we’ve got enough infrastructure in the right places. In Wales it’s not motorways, it’s A-roads and B-roads. It’s not about asking the government to put their hands in their pockets every time, it’s about encouraging private businesses to get involved. A lot of places are very rural and it’s making sure those communities aren’t left behind in the early stages as they’ll rely on vehicles more than public transport.” **Government**
- “At the council itself, we’re looking to introduce wind turbines for power purposes and a new decarbonised heating system. We are also looking to set up EV charging points, but there may not be enough capacity on the network for that.” **Local authority**
- “We’re including EV charging points and heat pumps in our housing plans due to the upcoming changes in building regulations. We’re piloting heat pump projects and looking to introduce electrified heating at an earlier point than the regulations expect. There is also more interest among customers in getting EV chargers installed on their newbuilds. At the moment, they’re an optional extra, but we know that it will soon become the norm as we change how we use electricity and transportation.” **Developer**

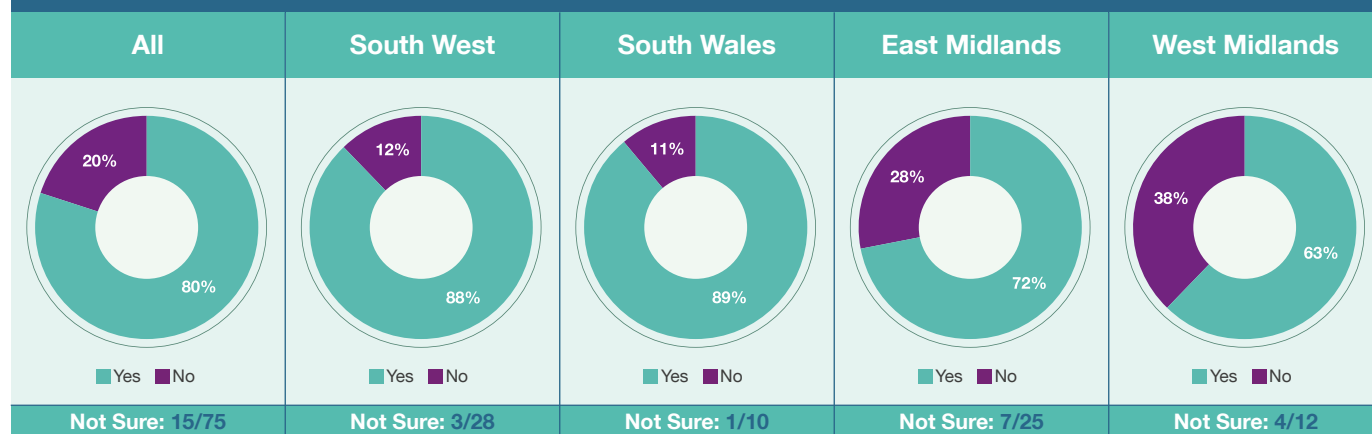


Electronic Voting: Net Zero Plans

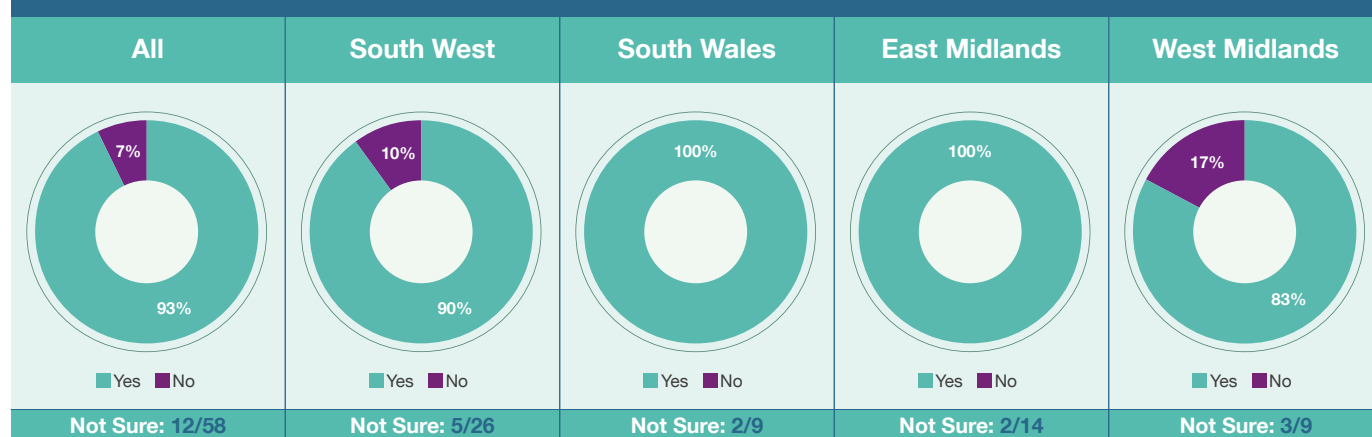
If you are a local authority, have you set a target date for reaching Net Zero?



If you are a local authority, have you got an action plan in place for reaching Net Zero?



If yes, have you started delivering on your action plan for reaching Net Zero?





East Midlands

- “2030 in-house, 2050 for residents, business and industry.” **Local authority**

South West

- “In terms of the planning side, we work with Torridge council, so this has already been covered. We have declared a climate emergency, and both have plans to meet our target by 2030.” **Local authority**
- “In Bristol, we’ve put together a One City Climate Strategy, which sets out to make the city carbon neutral by 2030. We have done some work with the Centre for Sustainable Energy (CSE) that says that we will need 65,000 connections to the heat network and 200,000 heat pumps in order to hit that Net Zero target. We don’t know how many there are in Bristol at present, but the CSE says that there are only 200, so we have a lot of work to do.” **Local authority**

South Wales

- “We have got an action plan for the 2030 target. It does focus mainly on our operational emissions. We are in the process of calculating our baseline and that plan will include our wider emissions as that develops.” **Local authority**
- “We have as an authority got the local Net Zero by 2030 plan, which has baselined our current carbon emissions and has set us on a way forward to achieving Net Zero carbon.” **Local authority**
- “Generally, we will be looking to bring forward the targets set by Welsh Government. We won’t make a huge difference globally, but we can start to show an example.” **Local authority**



Do you have any comments or questions on our connection process?

West Midlands

- “When trying to roll out on-street charging schemes, we have had major issues with the connections process, which can act as a barrier. It feels like there is a bit too much of a ‘computer says no’ approach to pricing, with little wriggle room. It would be much better to have a human from a depot working on this, as they would know their particular area better.” **Local authority**
- “There seems to be a default position to saying no to things in the connection process, particularly during the pre-application process. It normally doesn’t seem to know what the project is and doesn’t seem to take into account the area specificities. As a result, it normally rejects your project and tells you that you will have to pay for reinforcement. We’re going to be doing 100s of projects over the next few years and would prefer to avoid going through the same motions. I’m concerned that our recent experiences run counter to your stated intentions of upping the number of connections achieved.” **Local authority**

East Midlands

- “We’re constantly listening to how WPD is planning to push forward around LCTs and connections, particularly with the likely big push towards air-source heat pumps and solar panels from 2025. With the changes to building regulations, I want to know if you are ready for all of our properties to double their electricity use.” **Developer**
- “Many clients are finding it hard to get their heads around connection costs. Some clients have flexibility within their energy use, so is there any way that WPD could help us with finding a suitable location where there is more capacity? I think that it would be good to hear more information about the connection agreement, as it may be worth me deferring things.” **Energy consultant**
- “We can never do a connection ahead of need, which I understand, but the bit that I was trying to work on previously was asking if we can work more collaboratively to bring people together. If somehow the local authority could bring people together to say ‘you all want a connection, let’s look at how we can do it together?’” **Local authority**

South West

- “I want to try and establish a working relationship with WPD about finding an approach to identifying potential connection sites moving forwards, but also try to work within our local authority to proactively find sites that can be brought forward within the connections process.” **Local authority**
- “As a strategic planner, we have a better overview of the direction of travel and the visibility of when each should be approved in the next 20 years. We need to have conversations about enabling our current connections and facilitating future growth.” **Local authority**



- “We have got funding for five sites across the district, but the connections cost will be £10,000, which is potentially prohibitive. It’s good that there is funding available, but the faster and higher-capacity chargers are very expensive. How can local authorities have an awareness of the situation within the connection process? And how can connections that deliver community benefit be identified more effectively? It would be good to publish data about the network and engage in proactive communications with local authority representatives about increased capacity, so that people will be able to achieve the connections that they need.” **Local authority**
- “When you make a request for a generation connection, we want to have it shovel ready, but on the other hand, it’s a bit chicken and egg on the distributor end. I’m working on a local community energy plan, and we want to find out about how to get low carbon technology into play, through solar panels for consumption, EV charging and opportunities to feed generated energy back into the grid. With the higher authorities, there is lots of talk around here, but we just want to see what we can do on the ground.” **Local authority**
- “If connections costs are socialised in ED2, we will be able to fulfil the increased ambitions around renewable schemes that both we and WPD share.” **Local authority**
- “We are happy with the connections process, as we share the same ambitions as WPD. It’s just about finding the approach to ensure that we can both lobby central Government effectively in order to get the investment delivered now to ensure that the infrastructure is in place to deliver the changes required to the energy system.” **Local authority**
- “In terms of the connection process, what happens is that the commercial developers approach the landowner and sit on it until they need it, which makes things harder for community groups, but that’s a universal problem and you guys are doing a lot more to aid with this than other DNOs.” **Energy aggregator**
- “We understand that a lot of places are under constraint at the moment, and I think that’s because of the process you use where the first bidder gets hit with the full whack. Your planning process isn’t set by you, but it’s relatively short-term based on what we’re trying to achieve. We’re now aiming towards 2037 and so I wondered if there were any plans to move to a more long-term view in the planning process?” **Local Enterprise Partnership**

South Wales

- “The connections process itself is fine and we’ve never had issues on that front. The main issue that we experience is that there’s a bit of a bottleneck with all the generation customers trying to get energy out into the main national grid, as they can only get to it through Swansea if they are going from South West Wales. We rarely have full outages, but we’re somewhat constrained.” **Developer**



- “A lot of our members in the Wye and Ysk areas have wanted to set up generation projects, but are banned from doing so, due to these projects potentially emitting phosphate levels above the statutory permitted amounts. How will WPD be looking to facilitate connections in these areas?” **Consumer body**

Do you have any feedback on our Green Recovery programme?

West Midlands

- “The Green Recovery will be important for us. Sandrow is splitting into six individual towns and is going for green supplies. We’re thinking of placing little green oases in the middle of the town for walking and we’re rolling out cycle lanes. We’re also installing EV charging points, so we’re really looking at going green.” **Consumer body**
- “A lot of money has been invested and it’s good to see Dudley at the forefront. The Green Recovery seems quite reasonable at the moment and I think that our plans should be fine for the network.” **Local authority**

East Midlands

- “It was good to hear about all of this.” **Local authority**
- “It’s good that you highlighted smaller schemes. It shows how effectively we can combine our efforts and make a contribution.” **Local authority**

South West

- Are WPD planning to provide resourcing and financial support for local authorities to develop Local Area Energy Plans? The Energy Systems Catapult methodology appears very expensive from conversations with the Energy Hub and others. We as a group of five local authorities in Somerset have got some shared objectives around understanding which technologies bring forward our plans for 100% renewable energy in the county. When looking at it, there’s quite a lot of cost and resource needed, and in a previous session there was talk of creating resources for councils. At the moment the costs are at £500,000 for a Local Area Energy Plan which is difficult for us as a local authority, and I was wondering if there were any plans to help us resource this? There are four district Local Plans at the moment and at some point there will be one, so we thought this Local Area Energy Plan would be very important for that. We’ve done some soft market testing to find out if businesses can help with that, but the costs were prohibitively high, so we just want some help to fund this plan.” **Local authority**



- “If considering continuing using fossil-fuelled energy generation, how will you be able to ensure that we all meet zero carbon? Surely we should be phasing out fossil fuels and setting a date at which no fossil-fuelled energy generation is supported?” **Local authority**

South Wales

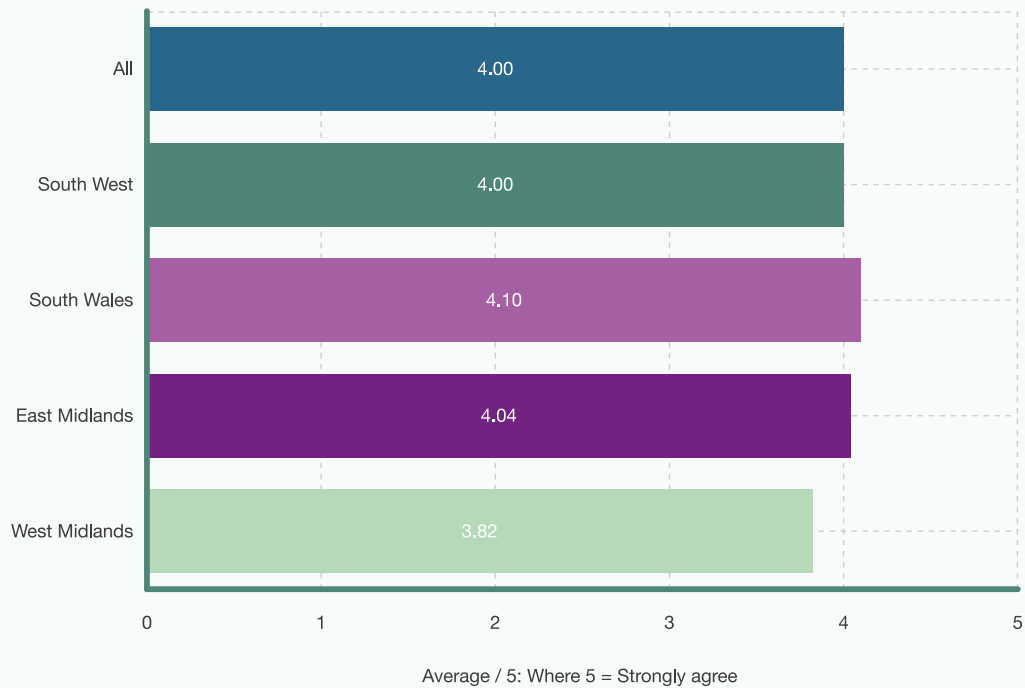
- “It’s a big question. Boris Johnson didn’t mention it in his speech yesterday, which was a shame. When we talk to new developers, there will be questions about community ownership of assets, community use of assets and local employment. Developers are not keen on all of this, as they see it as an increase to their costs. However, shifting in this direction is paramount as the network changes. These projects need to be including as much indigenous content as possible and incorporate localised generation, community energy and local skills at their heart.” **Government**
- “We’re committed to a large number of houses, which will stimulate growth in the supply chain, and we’re trying to work within the supply chain in Wales on this. This activity is being supported by the Welsh Government through grant funding and there is clearly a massive commitment to green housing. The Welsh Government is increasing its funding for non-carbon housing, so there is clearly a push towards electrification there. So WPD’s plans here are welcome.” **Developer**
- “It’s forming a large part of our future strategy at Carmarthen County Council. Investing in decarbonisation and the circular economy. Looking at local job growth in rural economies is where we’re focusing a lot of our attention at the moment. A lot of the projects need to be underpinned by green infrastructure as well. It’s linking Carmarthen Council and WPD together in terms of what our aspirations are and what’s deliverable over a period of time.” **Local authority**
- “Some of the projects the Welsh Government were looking at had some Green Recovery funding allocated, which is great. We’re dealing with the other DNO that deals with Wales, and there are some concerns over how quickly they’ll be able to deliver the Green Recovery project. It’s about ensuring WPD prioritise the right projects that are ready to go with the Green Recovery funding so they can get off the ground much quicker.” **Government**



Electronic Voting: Green Recovery

To what extent do you agree with the following statement?

"I support WPD's actions as part of the Green Recovery programme."



Don't know / can't say: 12/108



Workshops Three: Planning your future network

Distribution Managers from each region introduced WPD's investment planning process, explaining how Distribution Future Energy Scenarios (DFES) were used to assess the growth projections of different customers and technologies connected to the network.

The Distribution Managers who presented were: Edith Kanyoka, Distribution Manager at Telford; Mike Wigmore, Distribution Manager at Worcester; Kester Jones, Distribution Manager at Birmingham; Trevor Richards, Distribution Manager at Coventry and Warwick; Ian Brooks, Distribution Manager at South Lincolnshire; Oliver Spink, Forecasting and Capacity Manager for the East Midlands; Chris Garnsworthy, Distribution Manager at Somerset; Jon Nesbitt, Distribution Manager at West Cornwall; Andy Manning, Distribution Manager at North Devon; Paul Llewellyn, Distribution Manager at Swansea; and Huw Thomas, Distribution Manager at Cardiff.

Summary

WPD's process and approach to investment planning

Across all four regions, approval of WPD's approach to investment planning received an average score of 3.87 / 5. The major connecting theme when discussing investment planning was the critical need for greater communication and engagement. Some cited that it was difficult to connect what WPD were planning in terms of investment with what was needed from stakeholders in terms of planning and development; it was felt that greater engagement earlier on would enable local authorities and developers to shape Local Plans and business and housing projects more effectively. Others saw a disconnect in the process, where, collectively, large-scale targets that everyone is trying to drive forward towards are in place, but within solar, for example, there is little progress and the investment scenarios are 'a bit chicken and egg'.

Those in more rural areas wanted to know the method through which WPD prioritised certain schemes, with the point being made again that less densely populated areas should not be left behind in terms of investment. Retrofitting also emerged as a key theme, with more exchanging of data and expertise advocated in order to make realistic decisions with regards to retrofitting older housing stock. Developers felt that they would benefit from more certainty in the strategic planning process, with some examples given of extra reinforcement costs emerging at the late stages of connections application, hindering development. Those representing community energy shared concerns that planning in partnership with communities was marginalised, when, in their view, it should be enacted as a central core of investment planning. Some stakeholders saw that, given the regulatory framework, WPD was doing its best with its processes and approach, but felt that until they could invest ahead of need, 'nothing will change or improve'.

WPD's approach to Distribution Future Energy Scenarios (DFES) engagement

The electronic voting evidenced that more work needed to be done in Distribution Future Energy Scenarios (DFES) engagement: across all regions, 60% did not know if their organisation had been involved in DFES planning. However, there was a clear appetite for involvement. Excluding those that were not sure, all stakeholders across all regions saying they would like more engagement with WPD in general. When asked how stakeholders would rate the DFES engagement they had undertaken, it received an average score of 3.74 / 5, although 70% could not answer the question, as they hadn't experienced any engagement.

Many felt that developers needed to be more involved in DFES engagement, as they have a high level of insight into strategic planning, in partnership with local authorities. Representatives from the development sector themselves urged more engagement with Independent Distribution Network Operators (IDNOs) of all sizes, citing that they tend to work more with IDNOs than with larger DNOs such as WPD. Engagement with all sizes of storage providers and housing associations was also advocated, in order to build up an accurate forecast. Local authorities felt that guidance from WPD on which low carbon schemes were genuinely effective, and not simply 'green washing', would be very helpful. Stakeholders also saw that DFES engagement tended to be piecemeal, with some delegates stating that they were only finding out during the workshop that others in neighbouring areas were facing issues that they did not know about. Cross-border and combined local authority DFES engagement was therefore advocated, along with a commitment to more granular engagement with LEPs, community energy groups, and domestic customers.



Supporting stakeholders to use WPD data for Local Area Energy Plans

The majority of stakeholders welcomed greater sharing and accessibility of data in support of effective Local Area Energy Plans, with a key point raised that the data needed to be understandable, digestible, and actionable. Furthermore, support from WPD to analyse and interpret the data was advocated. The overriding feedback was 'the more data the better', with specific calls for data that identifies areas of constraint, numeric data in terms of capacity, heat maps, Network Impact Assessments, cable maps, maps that detail where network reinforcement will take place, and wider access to DFES reports and the Green Investment Fund. Another interesting idea was for more data on 'opportunities as well as constraints'. Northern Power Grid's portal for open access to energy data was praised as an example of a true 'presumed open' approach to data sharing. It was felt that more could be done to support stakeholders who straddled two DNOs, in terms of capacity data. Having access to WPD's Data Portal 2 was cited as a huge improvement, although some felt that a piece missing from the data here was an indication that an area was under review. For many, greater access to data on network capacity and constraints would sit alongside considerations of local development plans, flood risk areas, sewage systems and the road network, forming a vital part of a total, cohesive planning strategy.

Verbatim quotes and voting

1. Do you agree with the WPD process and approach to strategic investment planning? Can it be improved?

West Midlands

- "The process is good in trying to put together forecasts that we can use as local officers. However, there are still issues in the datasets. EV charge points will potentially need a lot of power, but we still can't be sure about the demand at such an early point in the uptake. The time lags between forecasting and allocation/investment can also cause problems due to this as well." **Local authority**
- "I have nothing but good things to say about this. I like the proactivity and the forecasting models. The Net Zero sessions are a really positive thing and are a great example of this proactive engagement." **Local authority**
- "I have a concern that you view planning in partnership with communities as something small tucked away in the corner. You need to invert that view and shift your way of thinking. Communities are at the heart of all of this and will help to make everything bigger. The vision of the Carbon Hub is to turn community energy projects into mini power stations. Coupled with this, we need to think about using the grid where the supplies and capacities are at their lowest. Therefore, you need to engage actively with communities and not make this process feel transactional." **Community energy group**

East Midlands

- "It's quite difficult to marry our understanding of what you're doing and planning, and what you need from us to help you. Are there any particular thresholds that we should know about? And are there any constraints that we should know about to stop us developing in certain areas? I would just like some more details teased out through greater engagement with WPD earlier on. This could help to shape our local plans to a certain extent. I think that this is all built around informing each other of our approaches and creating a big picture about the wider potential constraints." **Local authority**



- “The thing that is missing from the planning process is proactive engagement. Derby is talking about 2035 zero carbon, but to deliver that it’s got no idea if that’s what’s going to be required. If members are going to do this, then it’s going to take stronger leadership.” **Local authority**
- “The Net Zero surgery offer would be really useful for us. I came here today wanting to get a feel for how you engage around decarbonisation and the engagement channels set out here feel like the next step. It feels like there is an open door for us to collaborate more through this. However, I would suggest that you could do more in getting a wider range of people to these types of events.” **Local authority**
- “I’m very impressed with this and you seem to be doing a lot more than other DNOs with engaging with customers.” **Major energy user**
- “What often happens is that businesses get so far down the line with planning a relocation, and then at some point they realise that the capacity isn’t there for what they need to do. I know for a fact that we’ve lost investment in Coventry for this reason, so could we get some more proactivity into the process?” **Local authority**
- “In the process at the moment there is a lot of engagement, but the challenge is that things move on quite quickly, and so is there a way of making things more live? For example, the Net Zero strategy has just started including the idea of heat pumps, and it needs to be updated now with many changes. So overall, how can we make the engagement more live and more able to be adapted to changes? Maybe it’s regularly chatting to see if there’s anything to put on the table, and if yes it means that we can get in there early.” **Local authority**
- “If we wanted to discuss any issues or timescales about potential sites, can we contact people directly to discuss these sites?” **Local authority**

South West

- “I’m interested in what algorithms you use for prioritising schemes. Is there a rural adjustment for investment made by WPD? It might not be too extreme but how do you address it? We are an extremely rural part of the country; we want to make sure your investment is targeted on helping and supporting our needs.” **Local authority**
- “We have realised how important WPD’s network is in our decarbonisation agenda, so we want more dialogue so that we can plan more effectively and learn where there are opportunities and learn where there are constraints. It would be great to have this more proactively built into plans.” **Local authority**
- “Retrofit will potentially have an even bigger impact than new developments, as it will hugely affect the grid. We have had dialogue about the local assumptions in Plymouth, but we can’t really comment on whether the approach is good without knowing how you reached your assumptions.” **Local authority**



- “I assume that the Future Homes Standard and the Future Building Standard will be considered in the investment planning process? I want to know how the regulations will feed into how you plan future demand.” **Local authority**
- “Exchanging more data and understanding local and retrofit plans would be good here. I would advocate finding a mechanism to work more closely together, as that will become particularly important. We had an NIA project with WPD using data from heat pumps to get some good granular data and then performed some scenario testing on buildings. We need to understand the implications of these projects in future.” **Local authority**
- “I feel that there is a bit of a disconnect in the process here sadly. Collectively, we have a large-scale target that we’re all trying to drive forward towards, but within solar, we’re not making progress and the investment scenarios are a bit chicken and egg. It’s great to see the local authorities’ plans, but I worry about whether they’re achievable. We just need to be able to find a way to be efficient and move forward collectively.” **Developer**
- “The time to be proactive is gone, we just need to do something. If we don’t act now, we won’t achieve our collective decarbonisation goals. WPD’s approach to planning is frustrating, as the right infrastructure often doesn’t seem to be in the right place for our needs. It’s great that everyone is now accepting the need for renewable energy sources, but more needs to be done to empower people. That starts with the connection infrastructure on the networks.” **Developer**
- “The development plan cycle means that we look 15 years ahead, meaning that we have to think about infrastructure and putting money in place. We are a relatively small authority with a small team, and compared to Bristol, our neighbour, which is well resourced and sets exacting targets, meaning there are likely going to be significant differences between our energy plans. WPD needs to be ready for these different kinds of needs.” **Local authority**
- “We speak to WPD about our heat network and policies on an annual basis to review how heat pump deployment is being rolled out in the city. It looks like there will be an uncertainty mechanism, which will be flexed if needs be. You need an ambitious target, but this target needs to translate into reality, so having this annual review is quite useful. It’s good to know that that annual process is there and feeds into what WPD is doing. I feel confident about progress with heat pumps but may end up at a point where we are hitting the same barriers as solar panels in the years ahead.” **Local authority**

South Wales

- “You can always improve communications and how we work together. I would say that everything is certainly in the right place, however. We are looking at working with wind and solar farms, and your strategic investment plans should help our work for that. I agree with the comment in the chat about incorporating storage. That could really help to free up constraints on the network.” **Local authority**



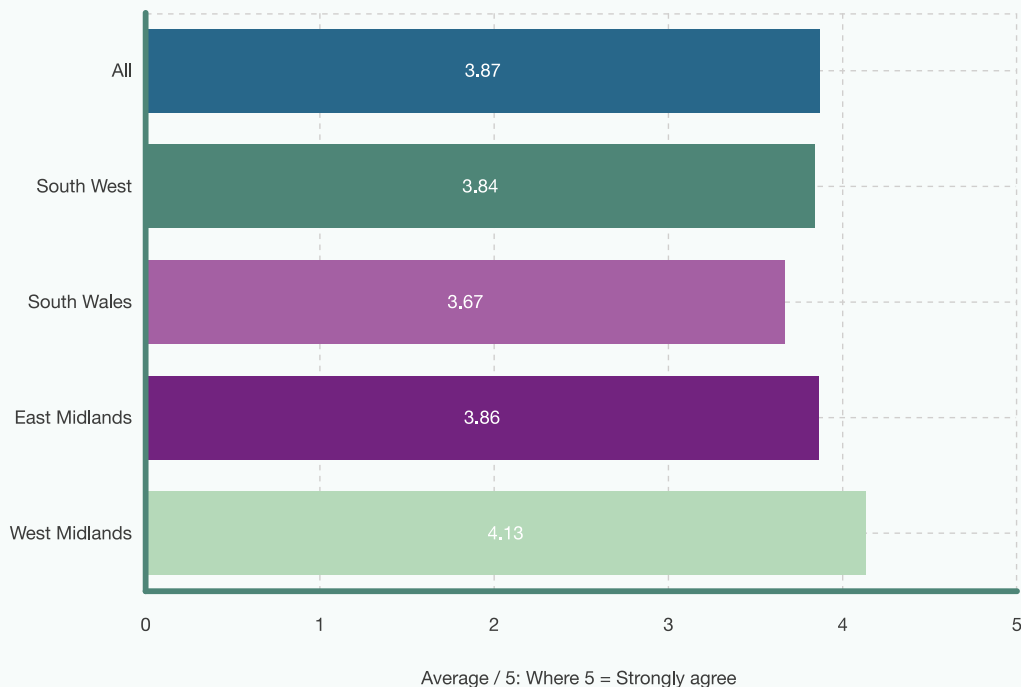
- “I think that WPD are doing all that they can under the constraints that they find themselves, particularly with Ofgem’s regulatory framework. As things stand, WPD cannot invest ahead of need to ready the networks to approach about connecting housing developments. Only at that point is when the reinforcement process begins. Until we break out of this cycle, nothing will change or improve.”
Energy consultant
- “From a development perspective, if a piece of land is adopted as part of a local plan, then it would be good to speed things up within the planning process and the early stages of the investment process. This will also give us developers certainty that things will happen.” **Developer**
- “There needs to be more coordinated planning and joint work with the ENA work around queues and offers for grid connections. This would help. In addition, Local Area Energy Planning will be key to all of this, so make sure that you engage with local authorities and the Welsh Government on their regional energy plans.” **Government**
- “I think that everything can be improved. There is clearly a plan, but there needs to be more joined-up thinking. I may be tackling Swansea myself, but it’s a nationwide and worldwide problem that requires greater coordination if we are to overcome it.” **Local authority**
- “We have 105 homes in Burry Port near Llanelli. Before we started, we went through the pre-application process and there was no requirement for a new substation to connect it. Then, a year and a half later, we’re applying for planning permission, and I was told that a substation would actually be required. When I queried these contractor stances, I was told that I didn’t ask the right questions. This kind of issue really upsets planners. So, on this basis, I would say that more guidance at the beginning would have really helped. This would mean that developments can go through more seamlessly. Please engage with us as part of your strategic development planning so that there are no nasty surprises.” **Developer**



Strategic Investment Planning

To what extent do you agree with the following statement?

"I agree with WPD's process and approach to strategic investment planning."



Don't know / can't say: 9/93

2. Do you agree with our approach to DFES engagement? Is there more we should be doing with stakeholders?

West Midlands

- “From my perspective, the more help that we can get the better. We're all in the same boat on this. It would be great to see WPD become more public-facing and take the lead on this to inspire greater confidence.” **Local authority**
- “One of the major challenges for officers is ascertaining which measures are effective and which are just being introduced for greenwashing purposes. I'd like help and guidance from WPD on this. If WPD could tell us which measures were effective, we would then have evidence that would help us to back up any proposed schemes that we intend to put in place during consultation processes. We don't necessarily need flashy schemes; we just need them to work.” **Local authority**
- “It would be good to have a known contact within WPD with whom we could discuss our local housing plans. That way, we could find out where the potential constraints or opportunities might be early on.” **Local authority**



- “I think that the first point of contact for engagement must be local authorities, as they will have an overview of all generation and housing projects in the pipeline. In addition, local enterprise projects, housing associations, business groups and Chambers of Commerce could be good targets for engagement, as they cover large numbers of people.” **Academic institution**
- “What are the assumptions around these DFES? In order to really achieve this and build a fully-fledged smart network, you need to go further than engaging with just business. You should also be engaging with domestic users and energy bodies or community groups too.” **Community energy group**
- “WPD has engaged with us about DFES and should be given credit for it. We need to reassure people that generation projects will all pan out ok. If people hear stories about hurdles to solar panels being installed and electricity pumped back in the ground, they will be less likely to buy in. On that basis, we need to find ways to connect generation schemes and, if not, explain why not. This situation has been labelled as a crisis, but we need to show that we can fix it.” **Local authority**
- “At a general level, we want engagement with relevant stakeholders, local planning authorities and DNOs to be a smooth process. In addition, we want the planning application process for our homes to be quick and easy. WPD has been really useful here, as it has engaged with us in order to help us to overcome technical challenges as we shift to a decarbonised approach. WPD should be congratulated on this.” **Developer**
- “It’s fine in theory, but I’d like to see it put into working practice because I don’t think it’s working through. It’s fine having a theory of doing it, but then you come into issues where things haven’t been taken into account, so you need more communication between various organisations. I think you are having a problem getting people to communicate to Western Power. I will be going to the offices at Whitehaven and telling them that this needs to be a two-way process.” **Local authority**
- “We do have a council members’ forum on a regular basis, and it seems to me that this would be ideal for that. We also have a green panel that would be a good source for getting this message across. A complete members’ forum exercise would be a good idea.” **Local authority**

East Midlands

- “It would be nice to get a developer onboard with the strategic views of things, as we’re looking at things in a different way to local authorities. However, I don’t know how you would get these people onto the panels. In addition, you have an issue of one developer having different views to another, and then there are different needs between large and small developers. It would be nice to have engagement, but our hands are tied by what local developers want in the end.” **Developer**



- “Here in Mansfield, we’ve had a developers’ forum and we bring in different speakers to discuss different topics. WPD could get involved in that and speak to local authorities more directly. This means that you can hear the views of other stakeholders and inform your planning.” **Local authority**
- “Do you get invited to IDNO forums? Developers tend to deal with them rather than DNOs like WPD, so this could be a good avenue for pushing forward DFES engagement. Do you only really deal with the big IDNOs or do you work with the small ones too? Although we use the big ones, we also work with the smaller ones too, so a range of engagement there could be useful.” **Developer**
- “Our Planning Policy team has engaged with WPD on this and it has given us a good route forward. One of my colleagues from a different team is here at this event too in the other room and it has given us scope to think about how we can work forward with you. Your agenda is our agenda, so we need to find a way to talk when appropriate and find shared solutions.” **Local authority**
- “Different teams with local authorities need to talk to WPD at different times. Another problem is that WPD’s operating areas don’t line up spatially with local authorities’ operating areas, which makes things trickier. As a result, it would be really good to talk to the LEPS, as they will have a connection with the big energy users at a local planning stage.” **Local authority**
- “You need to capture both the planning side and the Net Zero side in this planning. The conversations are not always joined up sadly.” **Local authority**

South West

- “I think the planning stages of these workshops are positive, going ahead. For me I think exploring group purchasing for linking smaller communities would be good. I’d like to see that on our workshop agenda.” **Local authority**
- “It would be good to get a greater idea about how local characteristics underpin the assumptions for the DFES in local areas.” **Local authority**
- “I think that we have had a few DFES meetings with WPD and Regen. We are involved in a project called Energy Planning Integrated with Councils (EPIC), which is trying to find a new way of engaging with stakeholders and local authorities.” **Local authority**
- “From my experience of the Glastonbury programme, applying project points with key stakeholders is really important, as this engagement work focuses the strategy. WPD’s initial engagement work is great and provides great building blocks for furthering our strategy.” **Community energy group**



- “I think these sorts of forums are useful, but it’s not the same as collaborative working, which I think is the thing that’s missing at the moment. It probably is about a dedicated person on specific projects, but also about the local authority themselves having the right resources and expertise. The government strategy suggests that they do recognise this, but it doesn’t come with any new burdens funding. At the moment we’re coming from quite different backgrounds and skillsets.” **Local authority**

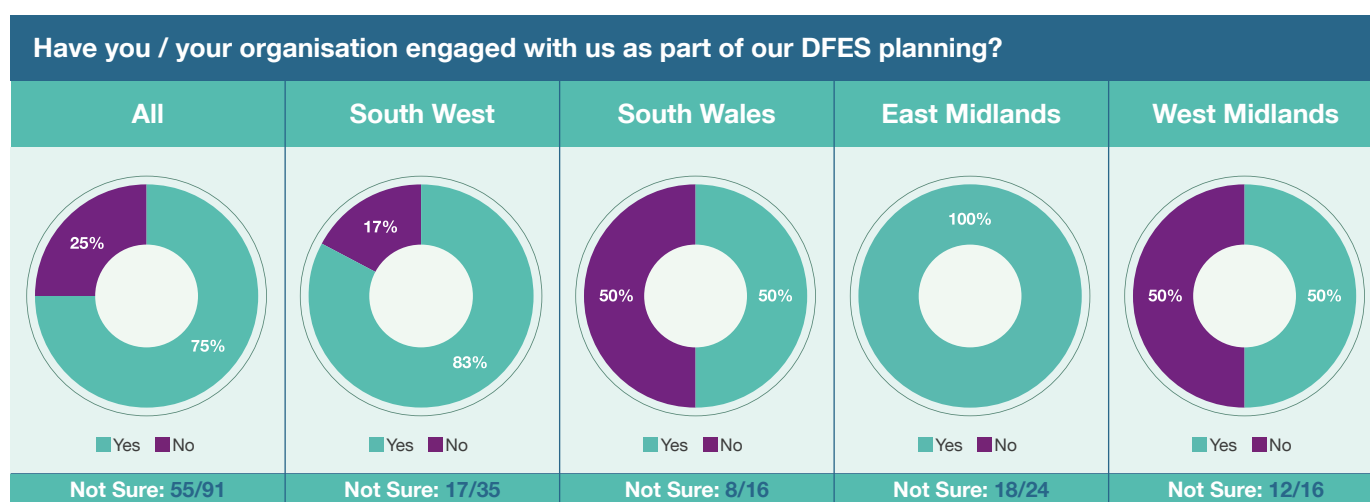
South Wales

- “More involvement would be good here. We really need to be engaged more, as there cannot be a piecemeal solution to DFES work. As we have heard this morning, there are neighbouring areas who are facing issues that we didn’t know about. This cross-border working is key, and we’ll go nowhere without it. In addition, we have an LEP and have regional city deals, so there is definitely scope for granular engagement too.” **Local authority**
- “There are some big storage providers around, but we’re losing sight of a lot of smaller/medium battery storage providers that could be useful for WPD. These people could come up with a good package for South Wales. If you engaged with them, they could provide you with support here.” **Energy consultant**
- “Some of the bigger DFES schemes are cross-border and involve a number of local authorities, so combined meetings involving each of the local authorities would be very useful.” **Charity**
- “Developers have a part to play, and I was surprised that so few are attending here today. We play a huge role and know about parcels of land that we will not be developing on until 15-20 years’ time. This kind of information would be useful for you. We work with local authorities on the Local Plan and therefore will know where the strategic development will be, particularly in the more rural areas. Engagement with our sector could be really invaluable.” **Developer**
- “I think that there needs to be more of everything right now. Without the infrastructure that WPD provides in its regions, we will not hit Net Zero. You are establishing strong dialogue with local authorities that will take us forward, but you are constrained by Ofgem and the lack of resources within local authorities to make the desired level of progress.” **Government**
- “Housing associations need to come around the table for these discussions around DFES. I would also say that Cymorth Cymru, the housing association umbrella body, would be a good organisation to target, due to their large numbers of members.” **Developer**
- “With regards to future energy scenarios, I have a concern that the LV network within housing needs to be looked at. I probably see about 20 EVs just on my little estate now. I just want to make sure that WPD are looking at very low-level, this isn’t just about public charging and large, rapid... this is about households as well and it’s important that that’s factored in.” **Charity**

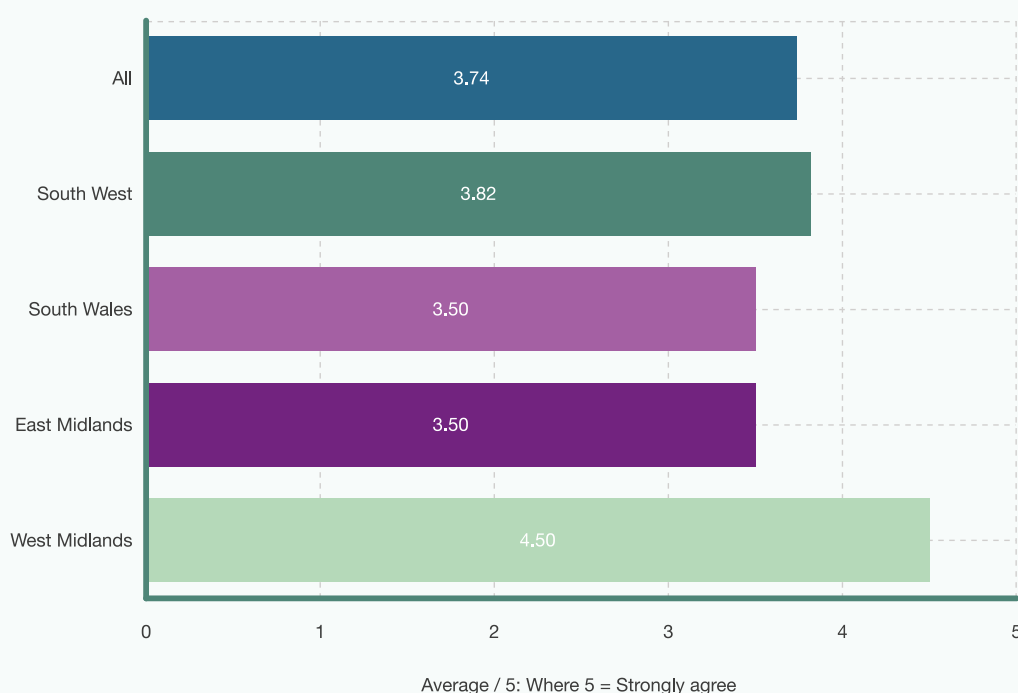


- “These sort of workshops are an excellent way of you understanding what our overall strategic objectives are and us understanding what restrictions on capacity you have, but this probably needs to be joined up a bit more. We need to have high-level meetings looking at what our Net Zero carbon strategy looks like and what that means for drawdown or renewable energy. I think it’s done on a piecemeal basis, with Carmarthen competing with Ceredigion and Pembrokeshire for grid capacity. It’s looking at a regional approach and how we develop this with 2030 as our end goal. There’s a lot of work to be done in each local area, and at the moment all of us competing for that finite grid capacity could impact on local regional goals.” **Local authority**

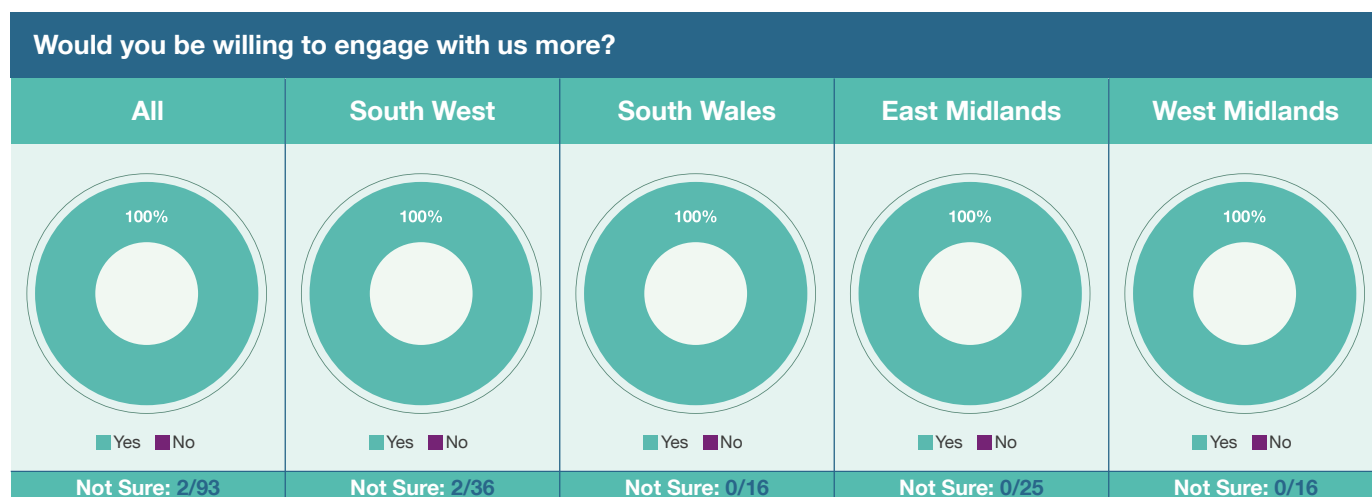
Electronic Voting: DFES Planning



If you have engaged with us as part of our DFES planning, how would you rate this engagement?



Don't know / can't say: 53/76



3. How can we help support stakeholders wishing to use WPD data as part of a Local Area Energy Plan?

West Midlands

- “Capacity maps would really help me.” **Local authority**
- “I’d like information about where the constraints are on the network and where the potential extra capacity might be.” **Local authority**
- “Very recently we got access to Data Portal 2, after asking for it for a number of years. We have had access to the maps for years, but Data Portal 2 has given us a wider picture, particularly around potential capacities for areas where we intend to place projects.” **Local authority**
- “The only thing missing from the Data Portal 2 information is something that indicates that an area is under review at a high level. I realise that this could be commercially sensitive, so it wouldn’t need any details. I’m suggest this as our area is really built up and any number of projects could be going on in an area at the same time.” **Local authority**
- “I don’t have concerns around the data itself, it’s more about finding people to help me interpret this data. For example, we are building 400 new homes in Sandwell and would like some help from a planner to interpret the data.” **Consumer body**
- “We have talked about worst-served customers, which is great, as lots of companies look at average service levels. I would like more information about how we can connect traveller communities, who likely get a low level of service and are connected to incredibly expensive off-grid diesel generators.” **Local authority**
- “It will be great if we could have information from yourselves about what should appear in the National Housebuilding Policy Framework, so that we can nudge the Government. This should be a collective effort.” **Local authority**



- “It would be good to provide more data around the £16 million Green Investment Fund. I agree that you should build the value of natural capital into your Business Plan and strategies, and I think that it should be a given. It’s most important to show that no generated energy is being wasted, so that they can believe in community energy schemes and feel excited about them. By providing wider context, you could reframe the narrative and achieve greater community buy-in.” **Local authority**

East Midlands

- “More information on future energy scenarios and three-phase would help.” **Local authority**
- “I would like data about where three-phase is going and general heat maps. An online portal with specific numeric data about capacity would be very useful.” **Developer**
- “The heat maps are somewhat useful: they tell you about where the problems are. However, if I want to site a factory or a depot, I’d like to know where WPD would best want me to place it in order to benefit from the best connection or flexibility services.” **Energy consultant**
- “I know that there are some quite good sections on the WPD website to pick through the data, but it always takes me a while to re-familiarise myself, but I’m not always sure how to use it. So maybe a guide in telling people what’s available and giving some ideas of how to use it. We could do more to give people guidance for how to get the most out of the data.” **Local authority**
- “Forecasting is the main thing that we would like to hear more about. We would like to know which projects are on the horizon, so that we can adapt our services. It would make my day job easier. Often you don’t know what is coming up.” **Major energy user**
- “Data about opportunities as well as constraints would be great.” **Local authority**
- “I think that heat maps from a planning perspective would help somewhat. I would like greater insight on wider thinking around EV charging schemes, so that we know about how we can help local residents if there is nothing planned for an area. The EV Charging Strategy mentioned would help greatly.” **Local authority**
- “It’s around the network provision, the supply, but also the consumption. So understanding where the consumption is going on geographically. In RESO we got some figures around gas usage by household in real-time, which was really informative, so that gives us some really good pictures about heat demands and future electricity supply. Local authorities around the country are developing relationships with energy companies all over, so it’s about having the data to inform it.” **Local authority**
- “For us, the data sharing will be critical. It’s a major challenge to get data that gives us an accessible look at energy use within a local context.” **Local authority**



- “The direction is fantastic with opening up data. One of the regulatory challenges you face is that you can’t share it on a detailed level. There is work going on with the Open Energy Data Network so you could do something with that.” **Energy consultant**

South West

- “I think we would benefit from this. Especially putting it into the plans we have. It would be very useful. We should be looking about feeding back to you. I would like to see many more low carbon technologies being ready to adopt. It would be useful for you to see what’s in the pipeline.” **Local authority**
- “There isn’t a great deal of information available from the Government about grants, so it would be good if you were being proactive about how you are considering them in your planning process.” **Local authority**
- “I don’t know what data you have available. From a housing perspective, it would just be good to have a basic overview of constraints and hotspots, so that we can be proactive in how to deal with the issues.” **Local authority**
- “Heat maps would be the way to go for me. If parishes could take knowledge away from conversations, it would be great.” **Local authority**
- “Any infrastructure upgrades that we could be made aware of would be greatly appreciated. It would also be useful to have any relevant cable maps. We are working with the local teams down at Feeder Road [WPD’s Bristol depot], so we have a good relationship.” **Local authority**
- “Most of the challenges are that you use the heat maps to find out certain data, but you can’t rely on them. These maps take into account the physical data, but they don’t take into account the system constraints, so that creates extra design work.” **Developer**
- “Network Impact Assessments and maps will be good. I want a capacity map to show what needs to be done to deliver x number of heat pumps. That way, you will have an idea of the costs involved in installing infrastructure required.” **Local authority**
- “I think that maps are the key thing for me. By harnessing the information contained in them, we can grab a lot of low-hanging fruit.” **Local authority**
- “Is there going to be online mapping about where the planned reinforcements to the network are and are going to be? I think what we need to do is understand about the capacity issues, and because it’s split between WPD and SSSEN we need to understand how that split works, which is something I’ll have to come back to you about.” **Local authority**



- “We’re engaging supplier consultants to put together innovative solutions, such as modelling and digital twins. This could help all of us to understand the network capacity and pinch points. Generally speaking, it would be great to get people sharing as much information with each other as possible. We need to be smarter in our comms and use the technology at our disposal.” **Community energy group**
- “Will WPD support open data so can share energy profiles to help support us all delivering Net Zero energy? The Northern Power Grid have created a portal for open access to energy data, so that would be something good that WPD could do to share across the county to reduce barriers and speed up progress.” **Local authority**

South Wales

- “We’re in the process of rolling out EV charging points in depots in Swansea, so DFES data would be useful, as we don’t know about the capacities for the sites.” **Local authority**
- “Some of this already happens, there’s online interactive maps and things that are a useful starting point for schemes. There’s no point planning projects in detail if they fall as soon as the budget estimates come in. It needs to be understandable, and you need to know what you’re looking at. If WPD are willing to share that information it makes their and our lives easier.” **Local authority**
- “Heat capacity maps would be very useful. We need more dialogue and information about up-and-coming schemes, as it might have an impact on our planning.” **Local authority**
- “Where we develop in South Wales is determined by a number of factors, such as local development plans, flood risk areas, Welsh Water sewage systems and the road network. These all have a bearing on our decisions. It would really help us if WPD could provide us with a similar package of information about where it believes there is capacity and constraints within the network for housing developments.” **Developer**
- “Heat maps and the data lying beneath us would support us a lot, as you could identify potential space for investment where you could meet some of the demand on the network.” **Energy consultant**
- “Wider sharing of detailed information about site capacities and whether your project would require reinforcement would be rally welcome. It would help us to make decisions far more quickly.” **Developer**
- “I would like more information about network capacity for potential EV charger and heat pump projects. This is only really beginning to take off more widely in our area and capacity data would assist with our planning.” **Local authority**



Appendix 1

Participants

A total of 129 stakeholders attended the workshops, representing 88 organisations. The organisations represented across the 11 workshops are shown below:

All Wind (UK) Ltd	Milton Keynes Council
Amber Valley Borough Council	Neath Port Talbot County Borough Council
Avalon Community Energy	Newark & Sherwood District Council
Blaenau Gwent County Borough Council	Newland Homes
Boston Borough Council	North Devon Council
Bristol City Council	North East Derbyshire District Council
Brush Transformers Ltd	North Kesteven District Council
Caerphilly County Borough Council	North Northamptonshire Council
Cannock Chase Council	North Northants Unitary Authority
Cardiff Council	North West Leicestershire District Council
Cardemarthenshire County Council	Persimmon Homes
Ceredigion County Council	Plymouth Council
Cherwell District Council	Pobl Group
CLA Cymru	Pomona Solar Co-operative Ltd
Community Energy Plus	Redrow Homes
Cornwall Council	RES Group
Coventry City Council	Rugby Borough Council
Coventry University	Rutland County Council
CWM Environmental	Sandwell Metropolitan Borough Council
Derby City Council	Sedgemoor District Council
Dorset Council	SJM Partnership Ltd
Dudley Council	Somerset County Council
East Devon Council	Somerset West and Taunton Council
East Lindsey District Council	South East Wales Energy Agency
East Staffs Borough Council	South Gloucestershire Council
Gloucestershire County Council	South Hams District Council
Green Nation Energy	South Holland District Council
Harborough District Council	South Somerset District Council
Heart of South West LEP	South West Energy Hub
Herefordshire Council	Stafford Borough Council
High Peak Borough Council	Staffordshire Moorlands District Council
Hook Norton Low Carbon Ltd	Swansea Council
Housing England	Teal Hippo Ltd
J Murphy & Sons	The Schumacher institute
Kevin King	Torridge District Council
Lightrock Power Limited	Transport for Wales
Lincolnshire Council	University of Warwick
Loughborough University	Wadebridge Renewable Energy Network
Low Carbon Alliance	Wattify Ltd
Low Carbon Hub	Welsh Government
Mansfield District Council	West Devon Borough Council
Mendip District Council	Worcestershire County Council
Merthyr Tydfil County Borough Council	Wychavon District Council
Mid Devon District Council	Wyre Forest District Council



Appendix 2

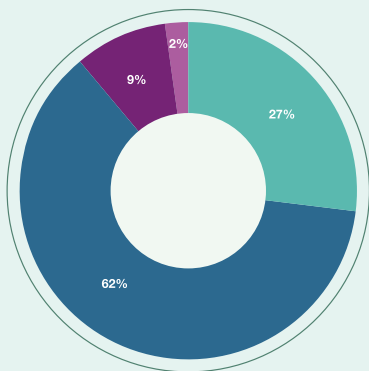
Workshop feedback

After the workshops, stakeholders were asked to complete a short feedback form. The feedback was as follows:

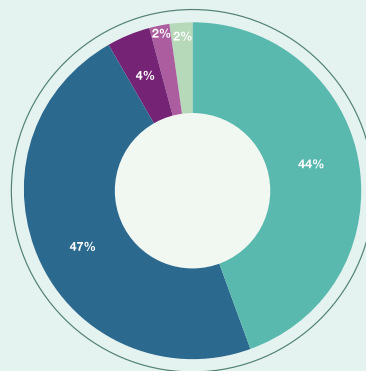
Overall, how satisfied were you with today's workshop?

On average, stakeholders rated their satisfaction 8.11 out of 10.

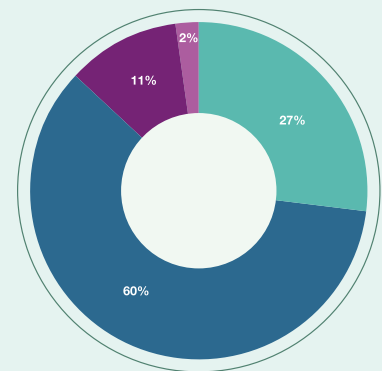
Overall, did you find this workshop to be:



Did you feel that you had the opportunity to make your points and ask questions?



Did we cover the right topics for you on the day?

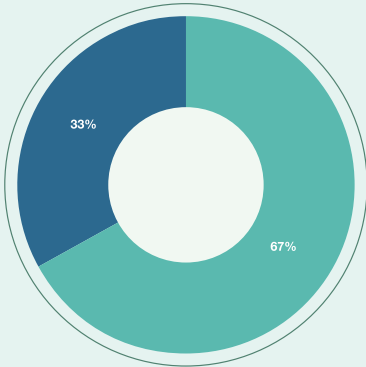


- "There is more I would have liked to ask and discuss, about how to collaborate together on DFES and ways WPD can invest ahead of need with local justification."
- "Too many people in the breakout rooms – did not always have time to put forward key points. Possibly more useful to meet with individual LPAs to discuss plans for growth and meeting Net Zero ambitions."
- "I really liked the breakout groups format because it was great to speak and get to know people. However, the groups were quite big and there wasn't loads of time so didn't manage to make all the points I wanted to or explore some of the topics in more depth."

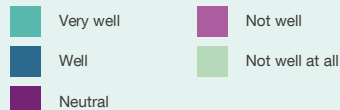
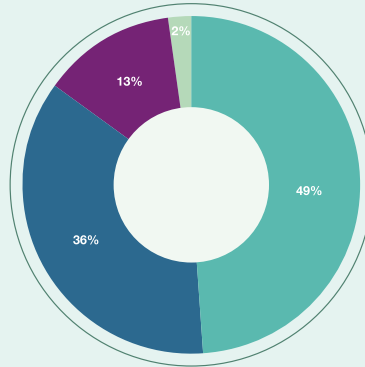
- "I'd like to understand more detail of the solutions being developed and technologies being proposed."
- "Really pleased on that. Not enough was said though, on what WPD cannot do around Best View and investing ahead of need."
- "Would have liked to know what WPD is doing in terms of making the network more energy-efficient as well as supporting more renewable energy connections and non-fossil fuelled energy storage. And how the company will be acting on the ecological emergency e.g. by supporting more tree planting than it is removing."
- "It was very local authority-focused."



What did you think of the way the workshop was chaired by your facilitator?



How well do you think the online format worked?



- “The facilitator was good – not sure we always had time to discuss as much as we would have liked.”
- “Well chaired by EQ.”
- “Very good at keeping to time and talking through the stages of the workshop as well as bringing in people to speak so that comments flowed on well from each other. Very impressed!”



Any other comments?

- “Always welcome dialogue and strategic discussions.”
- “Found the workshop useful, some issues may require more detailed discussion but have got contacts now.”
- “Working collaboratively with local areas on Local Best Views is going to be increasingly important – RESO WP6 is looking at models for DNOs to work with LAs and cities.”
- “Great approach, please keep going forward. Please can future sessions: 1. Look at distributed (programme approach) governance to match an increasing distributed energy system. 2. Start making connections between community visions, goals, strategies. 3. Provide further inspiration by showcasing best practice in the above with regard to Process, Organisation, Technology and Information?”
- “We need to move forward to collaboration on development of energy plans for our areas, rather than consultation and information.”
- “Well done, good use of time and pace about right. No need for lunch! Online is better.”
- “Found that a number of the presentations were at a high level that perhaps were aimed at people with far more knowledge than myself. However, overall happy and aware that I do have the contact details to enquire as necessary. Thank you.”
- “Good introduction to WPD and chance to meet useful contacts for the future.”



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