

Western Power Distribution Local Investment Workshops West Midlands October 2019



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1 | INTRODUCTION

In October 2019, WPD's Distribution Managers hosted a series of three stakeholder workshops at depots in the West Midlands of England. Stakeholders in attendance included councillors, council officers, developers and others involved in the growth agenda. The feedback from all three workshops has been collated and summarised in this report.

Each depot covered a different geographic area within the West Midlands region, as follows:

Hereford, Gloucester & Worcester	Gloucester Depot	12 September 2019
Greater Birmingham	Birmingham Depot	19 September 2019
Staffordshire and Shropshire	Stoke-on-Trent Depot	10 October 2019

These workshops had a number of objectives: to provide local stakeholders with an update on the investment being made in their local network over the next 12 months; to collect feedback on where stakeholders see capacity challenges, particularly as a result of residential and commercial developments; to get feedback on how the local WPD teams can work more effectively with stakeholders; and to strengthen working relationships between the Distribution Managers and local stakeholders.

While the agenda at each workshop was bespoke, the following items were covered at all three workshops:

- Introduction to WPD;
- The role of Ofgem and the RIIO framework;
- The transition to Distribution System Operator;
- Investment on the network;
- Network constraints;
- Working with stakeholders (including the provision of information);
- The electric vehicle charging network.

The workshops comprised PowerPoint presentations from the Distribution Manager(s), followed by three round-table discussion sessions. These sessions gave stakeholders an opportunity to feed back on the following areas: working with WPD and stakeholder priorities for the electricity network; supporting the growth agenda; and the electric vehicle charging network. At the end of the first and third sessions, stakeholders were asked to complete written feedback forms to provide some quantitative feedback. Due to rounding, some figures may not add up to 100%.

WPD instructed EQ Communications, a specialist stakeholder engagement consultancy, to independently facilitate the workshops and to take notes of the comments made by stakeholders. Comments have not been attributed to individuals to ensure that all stakeholders were able to speak as candidly as possible.



2 | EXECUTIVE SUMMARY

The workshops were aimed at gathering feedback from stakeholders on three main areas: stakeholder priorities; supporting the growth agenda; and the electric vehicle charging (EV) network. At each workshop, the relevant Distribution Manager gave a presentation on these topics, which was followed by a round-table discussion designed to collect stakeholder feedback. This report contains summaries of the findings from the round-table discussions, as well as verbatim comments and written feedback from stakeholders.

WORKSHOP ONE: STAKEHOLDER PRIORITIES

- Stakeholders in the West Midlands were mostly positive about their experiences of working with WPD, with many describing them as the best Distribution Network Operator (DNO) to work with. Criticism focused on capacity and constraint, with frustration expressed at the lack of clarity on timescales and reinforcement in the region, which was seen as hindering both sustainability and growth.
- 'Network reliability', 'electric vehicles' and 'network resilience' were nominated as the top three priorities for WPD to focus on, scoring 8.23, 8.17 and 8.04 out of 10, respectively.
- Delegates wanted to see the environment category expanded, and a vocal majority felt that 'carbon zero' was a missing priority. Other priorities stakeholders felt were missing included strategic forward planning (investing ahead of need), and creating realistic provision for electric vehicles, battery storage and increased demand.

WORKSHOP TWO: SUPPORTING THE GROWTH AGENDA

- Sustainability was seen as an inextricable part of the growth agenda in the West Midlands, although many expressed concerns about the capability of the network to sustain the increased demand that smarter technologies and systems would bring.
- Delegates wanted WPD to have a greater role in their planning and consultation phases, as they felt this could offer developers and investors greater certainty as to whether projects were likely to be viable and successful.
- Stakeholders reported that they were planning to install and implement a number of renewable technologies, such as community heat pumps, community-vehicle infrastructure, autonomous structures, 5G capability, all-electric systems, battery storage, solar generation, and EV chargers. However, many raised concerns over the costs, reliability and long-term viability of these projects and products.
- There was consensus that concrete actions and incentives to enable sustainable growth could only be achieved through support from central government.
- Many councils, particularly from the larger, more populated towns and cities of the West Midlands, had declared climate emergencies. Help and support from WPD was sought in infrastructure improvements, and on collaborating on a combined authority approach to help reach their ambitious Net Zero targets.
- Delegates suggested improvements in the connections application process, including greater transparency around pay outs for lost capacity, clearer milestones, and for WPD to win the ability to prioritise renewable connections.

WORKSHOP THREE: THE ELECTRIC VEHICLE CHARGING NETWORK

- 59% of stakeholders at the West Midlands workshop were at the early planning stages of rolling out the EV charging network, and 14% were at the implementation phase.
- Car parks were felt to be the preferred locations for EV charge points. There was consensus that charging from street furniture such as lampposts was impractical and dangerous for pedestrians.
- Stakeholders felt that continued dialogue, guidance documents and more clarity over capacity from WPD would help them with their plans to install a charging network.
- Over two thirds of stakeholders (67%) described the level of service they had experienced when applying for an EV connection with WPD as 'very good', and 33% felt it was 'good'.
- When it comes to rolling out the EV charging network, the biggest challenges identified by stakeholders included identifying suitable locations, cost, network capacity and a lack of clarity about what future demand will be. A range of other challenges were also identified.
- 92% of delegates felt that the information from WPD on EV charging was 'very good' or 'good'.

EVENT FEEDBACK

After the event, stakeholders were asked to complete written feedback forms. In terms of the event, the feedback was as follows:

- The average stakeholder satisfaction score for the workshop was 8.96 out of 10, with 37% of stakeholders giving the highest possible score of 10 out of 10.
- All stakeholders reported that they found the event interesting, with 83% opting for 'very interesting' and 17% for 'interesting'.
- 98% 'strongly agreed' or 'agreed' that they had the opportunity to make their points and ask questions.
- 91% 'strongly agreed' or 'agreed' that WPD covered the right topics on the day, and no stakeholders disagreed with this statement.
- 78% thought that their table facilitators were 'very good', with 22% opting for 'good'.



3 | <u>ATTENDEES</u>

54 stakeholders attended across the three workshops, representing 34 organisations. The organisations represented were as follows:

- Birmingham Airport
- Bromsgrove District Council
- Cannock Chase District Council
- Cotswold District Council
- Dudley Council
- Forest of Dean District Council
- Gloucester City Council
- Gloucestershire County Council
- Herefordshire Council
- Impetus
- J. Murphy & Sons Ltd
- Malvern Hills District Council
- Midlands Energy Hub
- Newcastle-under-Lyme Borough Council
- Office of Ellie Chowns MEP
- Richborough Estates
- Robert Hitchins Ltd
- Sandwell Metropolitan Borough Council

- Schumacher Institute
- Sedgeberrow Sustainable and Manageable Energy Group
- Solihull Metropolitan Borough Council
- St Modwen Properties plc
- Stafford Borough Council
- Staffordshire County Council
- Staffordshire Moorlands District Council
- Stoke-on-Trent City Council
- Stroud District Council
- Telec Solutions Ltd
- Tewkesbury Borough Council
- Walsall Council
- Warwick District Council
- Worcester City Council
- WSE Operational Ltd
- Wychavon District Council



4 | WORKSHOP ONE: STAKEHOLDER PRIORITIES

The first presentation of the day outlined WPD's role as a Distribution Network Operator (DNO) and its approach to working on a regional level. The presenters then explained that WPD is looking to understand its stakeholders' priorities as the company moves towards its next Business Plan (2023-2028).

During the discussion session, stakeholders were asked what their priorities were for the electricity network from 2023 onwards. They were then given a written feedback form and asked to rank WPD's 14 existing priorities, as well as identify any priorities they felt were missing.

SUMMARY:

Stakeholders in the West Midlands attended the workshops keen to discuss sustainability, with a particular focus on greening the planning process, electric vehicles, low-carbon heating, the reduction of energy consumption, and the practical and economic ramifications of declaring climate emergencies. Many felt that a greater focus on sustainability would inevitably increase the number of new connections sought, and wanted to hear about WPD's strategy to cope with this. Other delegates wanted to talk about growth in their region, with concerns expressed over capacity and reinforcement, and the ways in which these issues were hindering progress.

Reports of working with WPD were mainly positive, with many citing them as the best DNO to work with, achieving generally good response times and helpful interactions at the grass-roots level with small energy cooperatives and local energy groups. However, some delegates expressed frustration at a lack of capacity in their areas to support growth in both housing and sustainability. Others criticised the design teams and the lack of information provided about future network capacities. They wanted more clarity and speed on network upgrades and reinforcement works to be able to offer developers, infrastructure and planners greater certainty. Some stakeholders were worried about WPD's function in the roll out of the EV charging network, bemoaning a lack of consistency across departments, particularly as local authorities tried to ascertain what, precisely, was possible and necessary in this area.

When stakeholders were asked to vote on WPD's priorities, 'network reliability' scored the highest, with 8.23 out of a possible 10. This was followed by 'electric vehicles' with 8.17 out of 10, and 'network resilience' with 8.04 out of 10. For many, the focus on reliability and resilience came down to a real concern over increased demand and generation, and the capability of the network to sustain the increased load. Although the general feeling that a transition to Distribution System Operator, or DSO, ('build a smart network' scored fourth on the list of priorities, with 8) was the critical thing needed to address the changes coming onto the network, 'reliability' was held as the top priority as customers needed the confidence of a reliable supply. Stakeholders suggested areas for WPD to focus on to increase its reliability while it transitioned to a smart network, such as enabling micro-generators in satellite towns of larger towns and cities, where more energy was consumed, and doing more work with battery storage innovators and suppliers, to balance the load.

Despite not placing it in the top three, delegates were most vocal on the environment priority, which many wanted expanded to include a piece on community energy groups, smart networks, and a better technical planning and consultation process on supporting sustainable growth and innovation. Some wanted the list of priorities turned on its head so that the entire focus was on achieving carbon zero. Many felt that there was a missing priority around this. Other priorities stakeholders felt should be added to the list, included educating customers to reduce demand, delivering the required network capacity, strategic forward planning with councils and supporting microgeneration. A range of other suggestions were also proposed.

1. WHAT, IF ANYTHING, HAS BEEN YOUR EXPERIENCE OF WORKING WITH US TO DATE?

"I work for the council and also for an MEP. I am also a councillor. I want to hear about the initiatives being put forward to combat the climate emergency and want to find out how the grid is being reinforced for the new-build developments in my local area." **Stakeholder, Greater Birmingham**

"I'm learning about the planning system and I'm shocked by the disconnect between green issues and planning authorities. There is no impetus for putting in planning regulations."

Stakeholder Hereford, Gloucester & Worcester

"I work for the council and we have just announced a climate emergency, so I'm working on measures in that area. We're reviewing our local plan and what the scope is for new renewable developments." **Stakeholder, Staffordshire & Shropshire**

"I'm here to see how environmental changes will affect connection needs and want to gain an understanding of how changes to planning legislation will impact how you can roll out electric-vehicle chargers." **Stakeholder, Greater Birmingham**

"You've been very active in our village, with our mooted Green Deal, insulating houses off the gas grid. We would like to be a little village energy co-op." **Stakeholder Hereford, Gloucester & Worcester**

"I deal with WPD on a fairly regular basis and, in general, everything runs smoothly. It's one of the best DSOs to deal with. However, I do feel that things can be quicker and more transparent when it comes to network developments and that the current timescales for capacity upgrades are too long." **Stakeholder, Greater Birmingham** "I've worked with you on new connections and infrastructure, and the process was generally good." Stakeholder Hereford, Gloucester & Worcester

"We've had challenges with growth and not enough power supply."

Stakeholder Hereford, Gloucester & Worcester

"I work for Dudley Metropolitan Borough Council. We are experiencing electricity shortages in the West Midlands and want to get this onto your agenda." **Stakeholder, Greater Birmingham**

"I work on the client side of things for the local council. Our design team complains a lot about WPD, due to how it operates. From my personal view, in terms of operations, WPD has caused me problems with the new industrial parks that I'm developing. It's difficult to look forward into the future, as I don't know how much capacity WPD will be able to provide, meaning I don't know how big I can make the industrial parks. There needs to be more clarity."

Stakeholder, Staffordshire & Shropshire

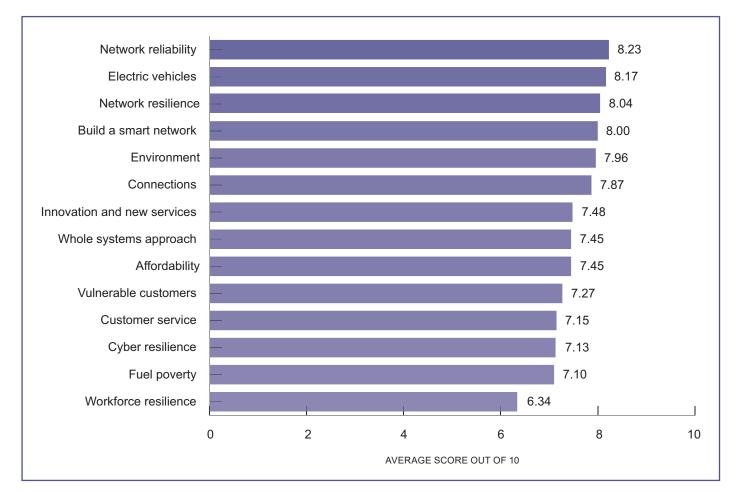
"I work for a property developer and I deal with a lot of land in the local area. WPD are one of the better teams that we deal with and its responses are quick. However, it does also cause problems by not giving a big enough picture about future capacity and reinforcement."

Stakeholder, Staffordshire & Shropshire

"The potential future roll out of EVs is also causing havoc. There's not enough consistency in the responses from WPD's different departments and there's not enough information about the general direction of travel. We're trying to develop a site with a percentage of car charging, but we don't know what is expected in terms of infrastructure and whether we can deliver it."

Stakeholder, Staffordshire & Shropshire

2. WHAT ARE THE KEY PRIORITIES FOR YOU WHEN IT COMES TO YOUR ELECTRICITY NETWORK?



"Keeping the lights on is the most important thing you do. Don't be distracted from ensuring this." **Stakeholder, Staffordshire & Shropshire**

"Electric vehicles are very high up my agenda." **Stakeholder, Greater Birmingham**

"You can't have a future without a smart network." **Stakeholder, Staffordshire & Shropshire**

"In general, I feel that the greatest priority lies with demand increases in the network. Are the demand increases that WPD has recognised based on population growth, increased business or an increased number of assets on the network? This could maybe come under building a smarter network (DSO)." **Stakeholder, Greater Birmingham**

"WPD should reconsider its model and could find a way to incentivise domestic properties with solar panels on their roofs to feed their excess power back into the network." **Stakeholder, Greater Birmingham** "I'm concerned about the combined effect of the huge numbers of new developments being built and the widespread roll out of EV chargers. This spike will create an incredible strain for the network." **Stakeholder, Greater Birmingham**

"WPD should look to create links with third parties to roll out battery storage initiatives if it cannot own storage assets itself." Stakeholder, Staffordshire & Shropshire

"Could there not be a higher-level advice service for battery storage?" **Stakeholder, Staffordshire & Shropshire**

"When you think about electricity use from a regional point of view, due to the sheer amount of power gobbled up by Birmingham, maybe satellite towns like Kidderminster should consider have local micro generators?" **Stakeholder, Greater Birmingham**

"Where is 'achieving zero carbon' on your list of priorities, or does it just fall under 'environment'? That doesn't seem to go far enough." **Stakeholder Hereford, Gloucester & Worcester** "It's really important that WPD sees that local development plans provide a low-carbon trajectory." **Stakeholder, Staffordshire & Shropshire**

"Everyone says they want to get to zero carbon, but when you pull up the list of things that you are doing, that isn't on there. It is the same with everyone." **Stakeholder Hereford, Gloucester & Worcester**

"Zero carbon is missing, yet it could have a huge impact. WPD should help enable future low carbon growth."

Stakeholder Hereford, Gloucester & Worcester

"Turn the priorities on their head. The current list is almost expected, but all of it should be focusing on climate change and how to achieve it." **Stakeholder Hereford, Gloucester & Worcester**

"WPD need to be more proactive. Ofgem should be lobbied to change WPD's role to help zero carbon targets in ED2."

Stakeholder Hereford, Gloucester & Worcester

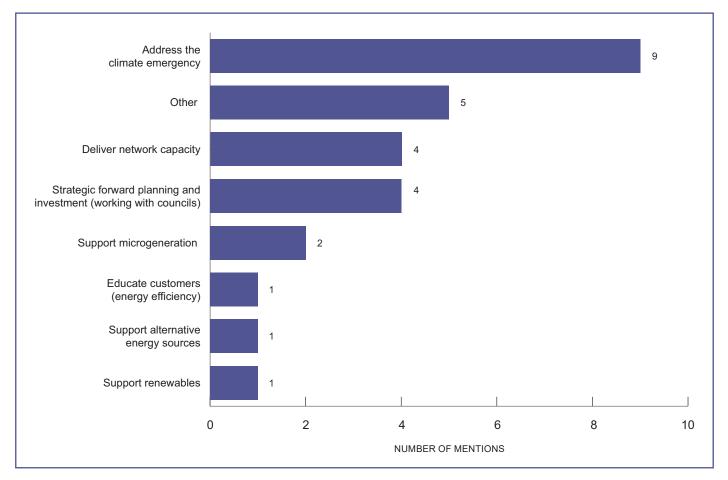
"Smart networks are the fundamental thing going forward; we will be generating more of our energy." Stakeholder Hereford, Gloucester & Worcester

"Houses are going in that don't face the right way (south) and are being installed with solar PV. Whose responsibility is it to consult with developers and advise them correctly? That needs to be made a priority, going forward, otherwise the zero-carbon agenda is simply a farce." **Stakeholder Hereford, Gloucester & Worcester**

"I'm wondering whether WPD was planning to change its assumptions for the housing estate developments. Is it planning on responding to the changes in the new regulations?" **Stakeholder, Greater Birmingham**

"I hope that WPD is proposing to include EV chargers and smart-charging in the new regulations?" **Stakeholder, Greater Birmingham**

"How do you feel you can influence fuel poverty? We need to rely on you to collaborate with the developer. We have a huge problem with increased rural poverty: people can't afford sustainable solutions to heating and electricity, and when they come to repair or replace their gas boiler, they won't be able to afford it." **Stakeholder, Gloucester**



3. ARE THERE ANY PRIORITIES MISSING FROM THE LIST ABOVE?

NB. This graph has been produced based on the written answers to an open question in the feedback form. Where possible, the written responses have been analysed and grouped into themes. To do so, some assumptions have been made. This graph should therefore be treated as purely indicative of people's views.

Where new priorities were only mentioned once they have been included as 'other', unless they were suggested as new priorities at other workshops in which case they have been included as separate items in the graph.

'Other' suggestions included: concern about rural networks; working with broadband providers to coordinate broadband and electricity infrastructure; undergrounding; ensuring the affordability of network developments; and power quality (surges, spikes and dips).

"Undergrounding of overhead cables in residential rural areas." **Stakeholder, Greater Birmingham**

"Educating customers to reduce demand." Stakeholder Hereford, Gloucester & Worcester

"Forward planning: connection serving infrastructure and reinforcements." Stakeholder Hereford, Gloucester & Worcester "Prioritise the ability for independent generation within the network or incentivise new connections applications to generate or store electricity within the new infrastructure."

Stakeholder, Greater Birmingham

"Strategic partnerships, e.g. have an identified key contact with the strategic tier at a local authority." **Stakeholder, Staffordshire & Shropshire**

5 | WORKSHOP TWO: SUPPORTING THE GROWTH AGENDA

The presenters gave examples of WPD's investment programme, which included activities such as asset replacement, undergrounding and network reinforcement. The company's approach to capacity allocation was also explained. Stakeholders were then asked to give details of their own local growth plans, the technologies they were planning to include and how WPD should take these into consideration when investing in the network.

SUMMARY:

Stakeholders discussed their growth plans, with the majority citing a sustainability agenda as the key concern with new development. Some expressed frustration that WPD's investment timescales within their business plan were disjointed from local authorities' local plans, making it harder to provide certainty. Other factors at play included capacity, reinforcement works, and the ability of the network to cope with developments using a great deal of smart technology, such as EV chargers, heat pumps and PV. Delegates representing areas affected by HS2 also expressed concern about the anticipated increased load.

Reporting on their specific growth plans, stakeholders confirmed a large number of new housing developments. In Gloucester, there were plans for a new garden town at Ashchurch with 10,000 new homes, and a further imperative to provide 4,000 new homes by 2024, and 8,000 beyond 2024. In South Gloucester, plans were underway for 14,000 new homes, but nothing was planned for the city of Gloucester itself, as it is already highly constrained. Warwick District Council cited ambitious plans for 17,500 homes in the green belt around Kenilworth, and in the Staffordshire Moorlands Area, local authorities described the building of 6,000 new homes, plus several plans for large commercial developments, including distribution warehouses. In all these cases, delegates were concerned about lack of capacity, particularly where the developments were anticipated to be installing smart technologies that would significantly increase demand. To this end, it was seen as vital that WPD have an influence on the consultation and planning process.

The reported growth plans were all at differing stages, with the majority in the planning and consultation phase. As with earlier discussions, delegates wanted to involve WPD at the planning stage, as they felt this would offer local authorities and developers greater certainty that their plans were viable and achievable.

Delegates confirmed that they were planning to implement various ambitious sustainable initiatives and technologies, such as generating 10% of energy from renewables, implementing a sustainable design criteria, community heat pumps, community-vehicle infrastructure, autonomous structures, 5G capability, all-electric systems, battery storage, solar generation, and EV chargers. However, stakeholders raised a number of concerns that had arisen as a result of the move towards sustainable growth. Some were concerned about the cost and viability of battery storage, even though they could see its enormous potential. Other cost issues were raised around PV and heat pumps, as well as an acknowledgement that the general public were anxious about replacing the perceived reliability of gas boilers for electric heating systems. Fundamentally, there was consensus that any and all concrete actions to ensure sustainable growth needed to be supported by central government.

Many of the authorities present had declared climate emergencies, with the larger towns and cities, such as Worcester, Warwick, Stroud, Stoke and Birmingham leading the way, with smaller, more rural constituencies adopting a more cautious approach. Malvern Hills, for example, were tentatively "investigating a climate reduction pledge", while in Wychavon, smaller, piecemeal activities were taking place to enable carbon reduction, with an app purchased to measure domestic heat loss in order to apply for government funding for insulation works. Some delegates were concerned that ambitious carbon-zero targets were doomed to fail, and that a more concerted, long-term approach was needed if there was to be a genuinely effective response to the declaration of a climate emergency. Stakeholders felt that WPD could assist with infrastructure improvements, and in participating in a combined authority approach that fully integrates climate-emergency initiatives across districts and industries.

Discussing new connections, the prevailing feeling was that the application process was expensive but workable, with some citing disappointment from large users that business connections were taking too long. Others wanted more transparency about the costs and pay outs for lost capacity, while also appreciating that WPD had to strike a difficult balance between ensuring applicants did not sit on unused capacity and making the system fair. Some felt the milestones were still a little opaque. Many delegates wanted WPD to be able to prioritise lower-carbon projects, with suggestions to lobby Ofgem to achieve this.

1. WHAT GROWTH PLANS DO YOU HAVE THAT WE SHOULD CONSIDER WHEN PLANNING THE INVESTMENT IN YOUR LOCAL NETWORK?

"We're taking allocation from Cheltenham, Gloucester and Tewkesbury for sites in Bishop's Cleeve, Tewkesbury, as well as Ashchurch garden town which is a 10,000-home development."

Stakeholder Hereford, Gloucester & Worcester

"We've got 4,000 houses to provide between now and 2024, then another 8,000 beyond 2024. Locations are yet to be decided."

Stakeholder Hereford, Gloucester & Worcester

"We're planning for 14,000 new houses across South Gloucester. I can't say more because the plan is not in the public domain... yet."

Stakeholder Hereford, Gloucester & Worcester

"Worcester city is full, constrained, and the likelihood of new developments there is small." **Stakeholder Hereford, Gloucester & Worcester**

"Warwick District Council's local plan is ambitious for 17,500 houses in green belt [areas] in Kenilworth, attached to existing development with HS2 going through the middle."

Stakeholder, Greater Birmingham

"In the Staffordshire Moorlands area, there are 6,000 new houses being built, but I'm not sure about whether there will there be enough capacity for all the smart technology being installed in them." **Stakeholder, Staffordshire & Shropshire**

"Staffordshire have several plans for large commercial developments, particularly warehousing, that may have an impact on capacity."

Stakeholder, Staffordshire & Shropshire

"There are 500 new homes planned at Bridgnorth, which could rise ultimately to 1,400." **Stakeholder, Staffordshire & Shropshire**

"I have a housing site being built in Derby, which had an initial connection, but now it requires reinforcement. The issues relating to that are causing me a headache. There's a huge conundrum about getting things underway, as there are viability issues on a wider scale."

Stakeholder, Staffordshire & Shropshire

"I think you need to change the way that you deal with customers when they ask you questions. You say 'we don't get involved in that' but actually you should be advising customers about these sorts of things. It should be a proactive [form of] engagement." **Stakeholder Hereford, Gloucester & Worcester**

"WPD engages in our forward plan process and you are aware of it, but there is a discrepancy between your Business Plan periods and our Local Plans. If we want to look at a particular site and it isn't in your Business Plan, you can't invest until the next plan. The way that you can spend money doesn't respond to the way our Local Plans work."

Stakeholder Hereford, Gloucester & Worcester

"There's a desire to understand the stage at which a developer consults with WPD to understand the capacity of the network. We have had houses coming in that could have been orientated the right way for solar panels, and they haven't been." **Stakeholder Hereford, Gloucester & Worcester**

"In Wychavon, we will have design criteria that enable sustainable development, including positioning, insulation, electrification of heat, etc." **Stakeholder Hereford, Gloucester & Worcester**

"We want WPD to be involved in the consultation process in November 2019." Stakeholder Hereford, Gloucester & Worcester

"Influencing the policies within the plans is crucial. We need to have those discussions with you in order to implement renewables and provide incentives and directives."

Stakeholder Hereford, Gloucester & Worcester

"In terms of housing stock, more and more people are moving out of Birmingham to the rural areas nearby. The population being more widely spread could cause WPD a problem in the future if it does not act now." **Stakeholder, Greater Birmingham**

"Have WPD thought about the effects on their network of the new rail lines, particularly HS2?" **Stakeholder, Staffordshire & Shropshire**

2. WHAT STAGE ARE THESE PLANS AT – HOW LIKELY ARE THEY TO PROGRESS?

"Our garden town project is in the consultation phase." **Stakeholder Hereford, Gloucester & Worcester**

"We're having a consultation in November 2019. The plans are likely to progress and will take us to 2030." **Stakeholder Hereford, Gloucester & Worcester**

3. WHAT TECHNOLOGIES ARE YOU PLANNING TO USE?

"We are geared to generating 10% of energy from renewable sources. It's not prescriptive, only a suggestion, and I've been told by planners that they want it increased to 20%."

Stakeholder Hereford, Gloucester & Worcester

"At Warwick District Council, we are looking at heat pumps and mini-battery storage." **Stakeholder, Greater Birmingham**

"As part of our design code, it states that energysaving measures must be incorporated where appropriate."

Stakeholder Hereford, Gloucester & Worcester

"You can see lots of combined approaches for solar generation coming through in the West Midlands. It's taken a while for it to become established, but factories and offices in Birmingham are finally installing these photovoltaic cells." **Stakeholder, Greater Birmingham**

"From a modern point of view, we're looking at futureproofing our housing stock on a large scale. This agenda includes all-electric systems, communityvehicle infrastructure, autonomous structures and 5G." **Stakeholder, Staffordshire & Shropshire**

"Behavioural change is key; developers should be made to put solar panels on roofs. This would motivate the developer to get the panels working efficiently."

Stakeholder Hereford, Gloucester & Worcester

"We want to use batteries for storage but they need to come down in price. I feel that if they were installed in new homes in commuter towns around Birmingham, those homes could become virtually carbon neutral." **Stakeholder, Greater Birmingham** "Stoke and Newcastle-under-Lyme are at the draft plan stage. We would welcome WPD's comments on the Plan." **Stakeholder, Staffordshire & Shropshire**

"We've placed 4,000 houses for our 2024 plan, but there's still more to do." **Stakeholder Hereford, Gloucester & Worcester**

"There is increasing interest in placing solar panels on homes. However, they are very expensive. If WPD could offer some kind of subsidy to people who own them, then maybe there would be more interest. You could get more uptake that way." **Stakeholder, Greater Birmingham**

"As a housing developer and builder, people are starting to ask us about whether we will be providing EV charging points in our garages. It's something that we intend to do, but if everyone asks for that, we don't know whether we can guarantee that. In addition, this could cause an overload on the network, which will be a problem for WPD."

Stakeholder, Staffordshire & Shropshire

"Everyone prefers gas central heating and customers don't seem to understand how heat pumps work, so they are resistant to them." **Stakeholder, Greater Birmingham**

"The problem with all these new technologies is that it's all crystal ball stuff. In 10 years' time, electric cars could be dying a death and hydrogen power could be the norm." **Stakeholder, Staffordshire & Shropshire**

"Central government doesn't push heat pumps and other sustainable technologies, so it doesn't happen. It's incredibly disappointing."

Stakeholder Hereford, Gloucester & Worcester

"It is abundantly clear that central government needs to get involved to make sure new and renewable technologies and solutions are adopted." **Stakeholder Hereford, Gloucester & Worcester**

"Battery storage can be fantastic in the future, but currently they simply aren't viable." **Stakeholder Hereford, Gloucester & Worcester**

4. ARE YOU AWARE OF ANY LOCAL AUTHORITIES THAT HAVE DECLARED CLIMATE EMERGENCIES – AND HOW SHOULD WPD RESPOND?

"Worcester City Council has declared a climate emergency. They've appointed a climate and sustainability officer to enact the zero-carbon target. Worcester is now in an Air Quality Management Area, according to Defra, as we have so many cars in the city centre."

Stakeholder Hereford, Gloucester & Worcester

"Stroud were one of the first to declare. [Its] own estates already run as carbon neutral." Stakeholder Hereford, Gloucester & Worcester

"Stoke have, but this means that what we actually have to do is still being developed." Stakeholder, Staffordshire & Shropshire

"We are being a bit more hesitant: the language in Malvern Hills is around 'investigating a climate reduction pledge', which I realise is a bit woolly. But we are on the way there."

Stakeholder Hereford, Gloucester & Worcester

"We are doing piecemeal activities in Wychavon. For instance, we're planning to buy an app that identifies and measures domestic heat loss, which will provide us with the evidence to then apply for funding to improve insulation."

Stakeholder Hereford, Gloucester & Worcester

"Our Council is the only one in the area not to have declared a climate emergency. It's incredibly frustrating."

Stakeholder Hereford, Gloucester & Worcester

"The plans are rapidly evolving and being written. There's a danger nationally that councils that have declared an emergency may fail in their ambitious targets. We hope to take plans to the full council in November."

Stakeholder Hereford, Gloucester & Worcester

"More widely, the issue is finding a way to fully integrate climate-emergency initiatives across the board. There can't be a piecemeal approach." **Stakeholder, Greater Birmingham**

"I feel that there has been a lot of bandwagon-jumping with councils declaring climate emergencies. You can't fault this desire, but they haven't thought about how they will be able to achieve everything that they are setting out to do. We don't know how much reinforcement might be required and how quickly things need to get off the ground." **Stakeholder, Staffordshire & Shropshire**

"Everything that councils procure is highly controlled, particularly in relation to public transport. WPD can really help us with infrastructure improvements. Everything's going electric and there will be more and more vehicles coming off the road. Suitable infrastructure can facilitate this change of approach." **Stakeholder, Greater Birmingham**

"I think that it's great that councils have declared wider approaches to dealing with these issues, as they are statements of intent." Stakeholder, Greater Birmingham

"We need to think of every suggestion that comes out of today as part of a bigger vision. For example, there may not be enough capacity on the grid to roll out electric buses on time, so we can switch towards hydrogen buses instead. This combined authority approach really could work." **Stakeholder, Greater Birmingham**

"I really like the idea of a combined authority approach too, as it would help hone the planning strategy for rolling out EV charging points. For example, they may well end up needing to be placed in the suburbs rather than in the centre because anti-car legislation will force them out." **Stakeholder, Greater Birmingham**

"I would go further and would say that there needs to be a combined approach across different industries. Why can't electric-vehicle chargers be installed on every home currently being built?" **Stakeholder, Greater Birmingham**

5. HAVE YOU GOT ANY FEEDBACK ABOUT THE APPLICATIONS PROCESS?

"It was okay: expensive, but easier the second time around."

Stakeholder Hereford, Gloucester & Worcester

"I've heard that business connections are taking too long; I've got disgruntled large users in my patch." Stakeholder Hereford, Gloucester & Worcester

"We will be changing our applications processes to include heat pumps, but they won't be mainstream yet. They cost a lot and will only be found everywhere once developers are legally required to install them." **Stakeholder, Greater Birmingham**

"There needs to be more transparency about the costs and pay outs for lost capacity." **Stakeholder, Staffordshire & Shropshire**

"You have to commit early on in the applications process in order to start getting something. However, it's quite gutting to think that you will lose the extra capacity that you have paid for if you get to the end of the five-year period."

Stakeholder, Staffordshire & Shropshire

"Is there an argument to prioritise projects with the smallest carbon footprints? WPD should consider lobbying Ofgem about making this change to project prioritisation."

Stakeholder, Staffordshire & Shropshire

"It's difficult for WPD, but a balance needs to be found in getting a fair deal for all stakeholders that apply and ensuring that people are not sitting on unused capacity." **Stakeholder, Staffordshire & Shropshire**

"The speculative aspect is a problem. The milestones are still a bit foggy." **Stakeholder, Staffordshire & Shropshire**



6 | <u>WORKSHOP THREE:</u> <u>THE ELECTRIC VEHICLE CHARGING NETWORK</u>

The third presentation addressed the complex and wide-ranging issue of EV charging, touching upon capacity, connection cost and time and the application process.

During the discussions, stakeholders were asked about their plans for the roll out of the EV charging network and how WPD can support these plans. At the end, stakeholders were given a written feedback form to complete to give WPD a better understanding of the status of the rollout of EV charging at local councils across their network.

SUMMARY:

Over half of the delegates at the West Midlands workshop (59%) were at the early planning stages of rolling out the EV charging network in their regions. 18% had not really started, and 14% were at the implementation phase. Many local authorities had plans for electric buses and refuse vehicles, and charging hubs for taxis. Car parks were the favoured location for installing chargers, with many already in place, and planning permissions for more underway. Councils wanted to see a combined authority approach to kerb-side charging, and discussed the merits and drawbacks of induction charging.

Delegates discussed the ways in which WPD could support their plans for the EV charging network. Most said that dialogue with WPD and other aids, such as guidance documents, had helped with the process, and that more interaction and conversations with WPD would be welcomed. Others wanted a tool that would outline the business proposition for electrifying a company's fleet. The issue of capacity was also raised. Some felt that WPD had a role in injecting confidence into the market, with education and charging reliability cited as ways to influence consumers. The majority of those present confirmed that councils had a strong political motivation to be seen to be doing the 'right' thing by investing in the EV network.

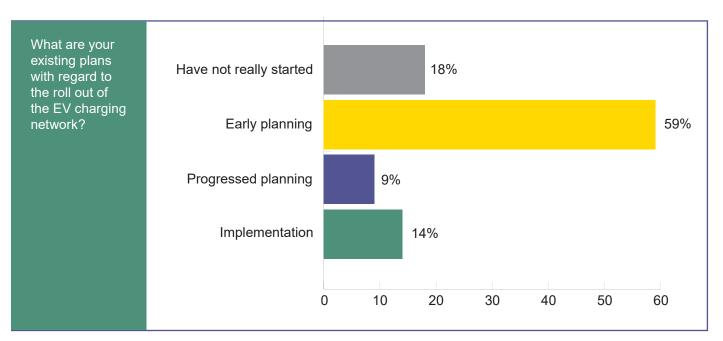
Most stakeholders felt that charging hubs in car parks and reserved parking spaces for EVs were the most sensible way to assist EV customers without access to a driveway. It was felt that charging points in streetlights would negatively impact pedestrians, and the only on-street charging that councils would contemplate installing involved sockets built directly into the kerb. Delegates urged WPD to work closely with the Highways Authority and urban planners to make sure that plans were tightly coordinated and designed to achieve the same goals.

In terms of the biggest challenges to the roll out of the EV charging network, stakeholders overwhelmingly felt that identifying suitable locations for charge points was a significant factor – particularly terraced housing and the lack of driveways. This was closely followed by the cost of installing charge points, the capacity of the electricity network to support the demand from EVs and a lack of certainty about what the future looks like for EVs – including what the demand will be and what technologies will be used.

Delegates felt that more work needed to be done before their own fleets went electric, with issues such as range and cost cited as reasons for hesitancy about making the switch. Some had a number of electric cars, and many were investigating electric refuse trucks and buses, but none had electric vans. More esoteric examples included an electric boat for residents of care homes (charged via PV) and an electric bike at Worcester City Council. In most cases, it was felt that the reality of sustainable transport had some catching up to do with the public-facing image broadcast by the councils themselves.

When stakeholders were asked to rate the level of service they had experienced when applying for an EV connection with WPD, 67% described it as 'very good', and 33% said it was 'good'. Although many delegates were keen to conduct more conversations with WPD on the capabilities and possibilities of the EV charging network, 92% felt that the information provided by WPD on EV charging was either 'very good' or 'good'. Stakeholders felt that the workshop had been very useful in terms of helping them to understand more about the EV charging network, and many welcomed the workshop format, where they had the time and space to ask questions and could have issues clarified and discussed at length.

1. WHAT ARE YOUR EXISTING PLANS WITH REGARD TO THE ROLL OUT OF THE EV CHARGING NETWORK?



"There is a desire to see electric buses being rolled out."

Stakeholder Hereford, Gloucester & Worcester

"We've been granted planning permission for commissioned EV charging points in parking areas." **Stakeholder Hereford, Gloucester & Worcester**

"We have 6 EV chargers already, and we're about to upgrade to 20. They're at car park / hubs: the leisure centre, Waitrose, [and] other car parks. We will roll out to the whole district after this current plan is enacted." **Stakeholder Hereford, Gloucester & Worcester**

"We want to install charging hubs for taxis." **Stakeholder Hereford, Gloucester & Worcester**

"Malvern Hills have 4. We're waiting to see how demand goes before installing more, but we anticipate putting in more."

Stakeholder Hereford, Gloucester & Worcester

"The county use same waste contractor for all 7 towns / districts and the contractor is in discussion with them to move towards electric."

Stakeholder Hereford, Gloucester & Worcester

"We are collating existing EV-related activities in Gloucestershire LAs (local authorities) and designing an LEP / LA communications programme to accelerate EV deployment in collaboration with businesses."

Stakeholder Hereford, Gloucester & Worcester

"We're looking at car-park chargers. We have just won a grant from central government for new charging infrastructure, particularly for taxis. It's not great to lose parking spaces in the city centre, but these new assets are essential."

Stakeholder, Greater Birmingham

"We should take a combined authority approach for kerb-side chargers. There are already some of them in central Birmingham and there are plans for more. We need to see what other councils' plans are." **Stakeholder, Greater Birmingham**

"I've heard discussions about induction charging in the city. That would be unsuitable for the vehicles that we have at present. A huge infrastructure investment would be required for this and there's no guaranteeing that it would be a success."

Stakeholder, Greater Birmingham

"The induction-plate charging could be a good alternative to using chargers in street lamps." **Stakeholder, Greater Birmingham**

"We're looking at banks of chargers, which will charge as many cars that are plugged into them. If one unplugs, the charge to the others increases. We're looking to roll this idea out on a larger scale if it succeeds." **Stakeholder, Greater Birmingham** "20 extra charging points about to be installed." **Stakeholder Hereford, Gloucester & Worcester**

"[We have] 4 EV chargers in Malvern car park and [are] considering EV points in car parks in Tenbury Wells and Upton upon Severn." **Stakeholder Hereford, Gloucester & Worcester** "We want to impose conditions requiring EV points on employment / commercial development when advised by local highway authorities."

Stakeholder Hereford, Gloucester & Worcester

"We're investigating charge points for car pars and retail parks, charge points for electric taxis, and are planning an event to promote EV usage. We will want charge points suppliers and maybe WPD to present with us." **Stakeholder, Greater Birmingham**

2. WHAT DO YOU NEED FROM US TO HELP SUPPORT YOUR PLANS FOR YOUR LOCAL EV CHARGING NETWORK?

"We need a tool that outlines the business proposition, assesses a business's transport profile and informs you what you should do with your transport fleet." **Stakeholder Hereford, Gloucester & Worcester**

"You have a lot of knowledge and information, which will help us really understand what we can come up with. So, getting in touch with the local Distribution Managers to ask them to talk to the Chair of our Local Development Plan, for example, would be really helpful."

Stakeholder Hereford, Gloucester & Worcester

"A lot of dialogue with WPD has helped. The council has a political will to be seen to be doing the right thing."

Stakeholder Hereford, Gloucester & Worcester

"I would agree with the idea of WPD helping to speed up strengthening the network. As a council, if you want to electrify your fleet, you need to feel sure that you'll be able to complete all of your journeys." **Stakeholder, Greater Birmingham** "WPD needs to roll out an education campaign to allay people's fears about EVs and make them feel more comfortable about using them. This will stop people from charging all the time and reduce their load on the network."

Stakeholder, Greater Birmingham

"The development of technology and slow build in confidence will be helpful going forward." **Stakeholder, Greater Birmingham**

"When we sell a piece of land, builders are quite often restricted on the amount of power that they can be given. It's frustrating as they are asking for more due to EV charging. It would be good to get some guidance, as developers don't know whether they are working towards a current figure or a potential future figure relating to load needs."

Stakeholder, Staffordshire & Shropshire

"Talk more to council officers about what capacity requirements are and the restrictions." **Stakeholder, Staffordshire & Shropshire**

"Guidance documents have helped." Stakeholder Hereford, Gloucester & Worcester

3. DO YOU HAVE ANY SPECIFIC PLANS WHICH WILL ASSIST EV CUSTOMERS WHO DO NOT HAVE ACCESS TO DRIVEWAYS AND HOME CHARGING?

"On-street charging is a county council issue. We think car parks and hubs are the way to go forward, and that's what we're enacting." **Stakeholder Hereford, Gloucester & Worcester**

"We wouldn't use on-street charging. It's not convenient for pedestrians." **Stakeholder, Greater Birmingham**

"I'm not convinced by on-street charging, as there would be a lot more street furniture and trailing wires." **Stakeholder, Greater Birmingham** "There's technology which involves lots of sockets built into the kerb, providing a connection right next to the car. We would be keen for this to take off if we were ever seriously going for on-street parking." **Stakeholder, Greater Birmingham**

"WPD needs to work closely together with urban planners and Highways Authorities to ensure that everyone is working in the same direction." **Stakeholder, Staffordshire & Shropshire**

"Specific parking spaces for EV users with chargers would be good." Stakeholder Hereford, Gloucester & Worcester

4. WHEN DO YOU EXPECT YOUR ORGANISATION'S FLEET TO GO ELECTRIC?

"Our contractors (Balfour Beatty) have looked at electric vehicles and they don't work for them, as they need to be travelling more miles than EVs currently provide. Some of the fleet is going across but not all of it can be at the moment given the technology." **Stakeholder Hereford, Gloucester & Worcester**

"We don't have any cars but we have a community electric boat for residents of care homes and charities – which is actually not using that much electricity – mainly charging from PV panels."

Stakeholder Hereford, Gloucester & Worcester

"At Worcester City, we're quite behind: I think we have one electric bike. We're really shouting about how sustainable we are but I'm not sure how much that is true."

Stakeholder Hereford, Gloucester & Worcester

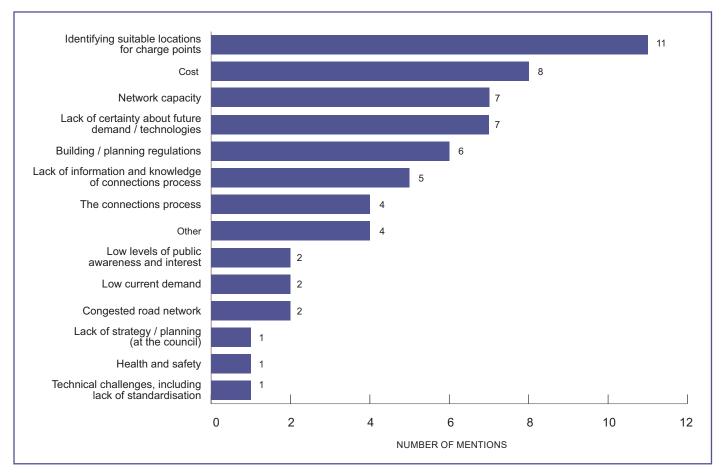
"We're looking at electrifying buses and bin lorries operating in the council." **Stakeholder, Greater Birmingham** "We would to go electric in the near future, but need to feel confident that there are enough charging points to do so." **Stakeholder, Greater Birmingham**

"There are discussions about having an electric fleet, such as electric refuse wagons, but I don't know how far along they are." **Stakeholder, Greater Birmingham**

"The tax incentive on electric fleets may encourage more businesses to start using them." **Stakeholder, Staffordshire & Shropshire**

"A lot of logistics companies are looking to move towards electric vans. This will eventually stimulate a second-hand market, which will bring down the costs of these vehicles for us. This will then enable us to adopt them widely across the council." **Stakeholder, Staffordshire & Shropshire**

6. WHAT ARE THE BIGGEST CHALLENGES YOU FACE IN ROLLING OUT YOUR EV CHARGING NETWORK?

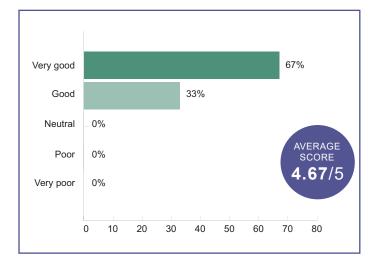


NB. This graph has been produced based on the written answers to an open question in the feedback form. Where possible, the written responses have been analysed and grouped into themes. To do so, some assumptions have been made. This graph should therefore be treated as purely indicative of people's views. Where a certain challenge was only mentioned once it has been included as 'other', unless it was suggested as a challenge at other workshops in which case it has been included as a separate item in the graph.

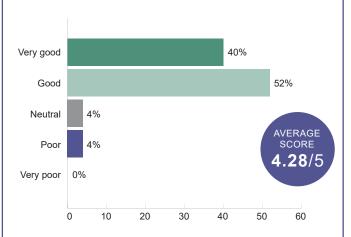
'Other' suggestions included: income levels; fuel poverty; engagement with WPD; and behavioural habits.

"Resistance of developers." Stakeholder Hereford, Gloucester & Worcester	"Location." Stakeholder Hereford, Gloucester & Worcester	
"Capacity." Stakeholder Hereford, Gloucester & Worcester	"Connections." Stakeholder, Greater Birmingham	
ublic opinion."	"Infrastructure." Stakeholder, Greater Birmingham	
Stakeholder Hereford, Gloucester & Worcester	"Understanding." Stakeholder Hereford, Gloucester & Worcester "Terraced housing / lack of driveways." Stakeholder, Staffordshire & Shropshire	
"Synchronising supply and demand." Stakeholder Hereford, Gloucester & Worcester		
Stakenolder Hereiord, Gloucester & Worcester		
"Constraint." Stakeholder, Staffordshire & Shropshire	"Cultural change / buy in." Stakeholder Hereford, Gloucester & Worcester	
"Planning requirements."		
Stakeholder Hereford, Gloucester & Worcester	"Cost of purchase and install." Stakeholder Hereford, Gloucester & Worcester 21	
"Layout of existing developments." Stakeholder Hereford, Gloucester & Worcester		

7. IF YOU HAVE APPLIED FOR AN EV CONNECTION WITH WPD, WHAT DID YOU THINK OF THE LEVEL OF SERVICE?



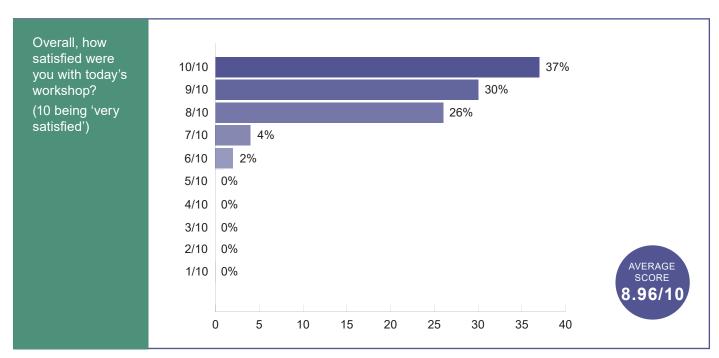
8. WHAT DO YOU THINK OF THE INFORMATION WPD HAS MADE AVAILABLE TO YOU ON EV CHARGING?

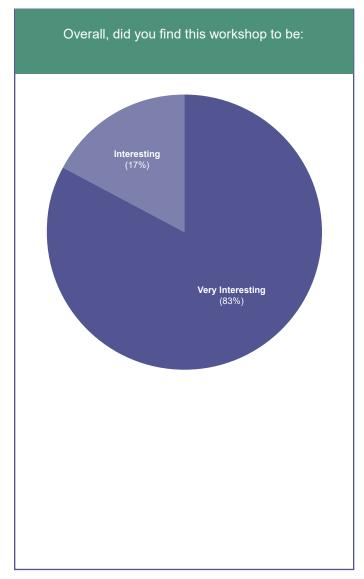




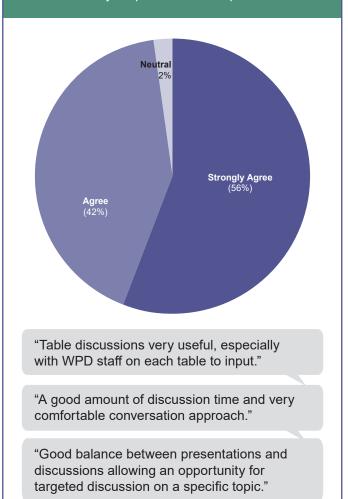
7 | <u>APPENDIX: WORKSHOP FEEDBACK</u>

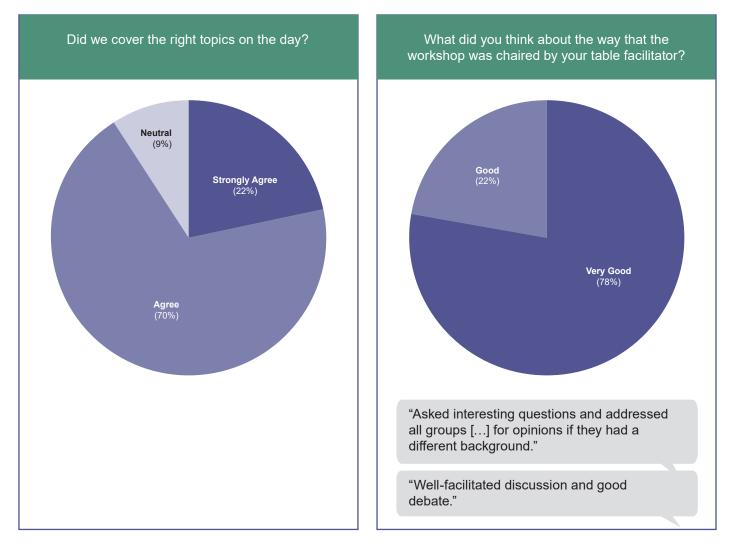
At the end of the workshop, stakeholders were asked to complete a written feedback form to provide WPD with feedback on the event itself. The results are summarised below.





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





ANY OTHER COMMENTS?

"Very informative event and [a] good networking opportunity."

"Was a very informative and interactive session. Well done, very useful to have contact details."

"[I] suggest arranging a developer / EV charging workshop."