



Western Power Distribution Connections Stakeholder Workshop Villa Park, Birmingham November 2019

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1 | INTRODUCTION

On 6 November 2019, Western Power Distribution (WPD) hosted a connections stakeholder workshop to seek feedback from stakeholders on the following topics: the connections process and WPD's Business Plan priorities (2023–2028); facilitating electric vehicles and other low-carbon technologies; how the electricity network can support the growth in housing, infrastructure and commercial developments; and how different sectors can work better together.

Importantly, one of the objectives of the event was to encourage attendees to network with each other and with WPD personnel. In order to do this, stakeholders were grouped according to their roles and encouraged to mix with other sector representatives during breaks in the day.

The workshop took place at Villa Park, Aston Villa Football Club, in Birmingham. The event consisted of three short presentations given by WPD representatives, each followed by round-table discussions. In addition, there was a plenary session before lunch, the purpose of which was to identify how different stakeholder types can work together more effectively to address some of the challenges facing the electricity network.

WPD instructed EQ Communications, a specialist stakeholder engagement consultancy, to independently facilitate the workshops 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 at <https://www.westernpower.co.uk/downloads-view/83764>, with the agenda for the day on slide 3.



2 | EXECUTIVE SUMMARY

WORKSHOP ONE: THE CONNECTIONS PROCESS AND OUR BUSINESS PLAN PRIORITIES (2023–2028)

Alex Wilkes, External Affairs Manager at WPD, gave stakeholders a brief overview of the role of a distribution network operator (DNO) and outlined Ofgem's Incentive on Connections Engagement (ICE), which sets out the actions that the company proposes to deliver each year to improve the connections process in line with stakeholders' priorities. Stakeholders were given an overview of WPD's plans to enhance the connections process and asked to provide feedback on the different stages of the connections process.

- Stakeholders agreed that the connections landscape was changing and that its future was uncertain. One of the main drivers of this change was the rising demand for electric vehicle (EV) charging, with local authority representatives giving examples of charge points and hubs that have already been installed and discussing possible solutions to installing the charge points needed to meet future demand.
- Housing developers and local government representatives felt that providing connections for new housing developments would be a challenge, as would incorporating new technologies into existing housing stock.
- Flexibility services were seen as the primary way to mitigate the impact of greater demand without needing to resort to increasing the capacity of the network.
- It was felt that WPD should work to improve consistency in terms of its connections processes as there is a perception that different depots have different ways of working.

WORKSHOP TWO: FACILITATING ELECTRIC VEHICLES AND OTHER LOW CARBON TECHNOLOGIES

Peter White, DSO Development Engineer, introduced the next session of the morning. Peter explained WPD's forecasts for EV adoption in the company's network area, along with the effect of the government's Carbon Plan, which will increase low carbon technology demand beyond the current single-phase standard.

- Stakeholders praised WPD's forward-looking approach to delivering the EV charging network, although there were calls for a more joined-up approach that involved developers, local authorities and the DNO.
- There was widespread agreement that WPD's approach of focusing on three charging locations – home, en route and destination – was appropriate and reflective of EV users' needs.
- The installation of heat pumps was not seen as a practical solution at this point in time, as the technology was seen as expensive and relatively new.

WORKSHOP THREE: HOW OUR NETWORK CAN SUPPORT THE GROWTH IN HOUSING, INFRASTRUCTURE AND COMMERCIAL DEVELOPMENTS

Tim Hughes, Connections Policy Manager, presented the next session of the morning. He explained that WPD had recently seen an increase in demand connection enquiries characterised by relatively significant capacity requirements and long build out timescales. He went on to explain that the company is currently limited by its regulator from reinforcing the network ahead of need. Tim then outlined WPD's new approach, which involves simplified information requirements, modified infrastructure offers and the introduction of flexible milestones to monitor scheme progression.

- Stakeholders were of the view that WPD's new approach is well suited to addressing the demands placed on the network by the rise in demand connection enquiries and could have a positive impact on growth.
- There were calls for greater flexibility in the connections process and standardisation across WPD's licence areas to make the process easier to navigate.
- Stakeholders felt that digitalisation and simplification of the application process would provide much needed support to the fair allocation of capacity.

WORKSHOP FOUR: HELPING STAKEHOLDER GROUPS TO WORK TOGETHER BETTER

The final session of the morning involved an exercise designed to collect feedback on how different stakeholder groups can work together more effectively. Stakeholders were split into nine groups which reflected their sectors, and each group was asked to name other organisations or groups they would like to engage with more regularly, outline the topics they would like this engagement to cover and specify what form this engagement should take.

- There was a clear appetite for more collaboration between stakeholder groups. Stakeholders seemed keen to work more closely with DNOs and local authorities, in particular.
- Several stakeholder groups agreed that WPD could support inter-sector engagement by taking on a facilitator role and giving different stakeholder groups the opportunity to share information.
- Stakeholders generally wanted WPD to engage with more with them by hosting more workshops, by attending more events and conferences and by participating in relevant consultations.
- Stakeholders welcomed the opportunity to engage more with each other over coffee and lunch and it was thought that the exercise leading up to this made it easier to identify those representing other sectors and to understand the challenges they were facing.

EVENT FEEDBACK

After the workshop, stakeholders were asked to complete a short feedback form. Some of the key findings are shown below:

- 55% of attendees who filled out a feedback form told us that they found the workshop 'very interesting'. 45% opted for 'interesting'. None felt the workshop was 'not interesting'.
- 57% of stakeholders strongly agreed that they had had an opportunity to make points and ask questions, while 41% agreed.
- 93% agreed or strongly agreed that the right topics were discussed on the day.
- 65% thought EQ Communications' facilitation was 'very good', with 35% opting for 'good'.

3 | ATTENDEES

A total of 63 stakeholders attended the workshop, representing 48 organisations. The organisations represented on the day are shown below:

- Barratt Homes
- Birmingham City Council
- Birmingham Energy Advisory Services
- BP Chargemaster
- British Solar Renewables
- BRUSH Group
- Carbon Legacy
- Cardiff Capital Region City Deal
- Cenex
- Charnwood Borough Council
- Coventry University
- Crowd Charge
- Daventry District Council
- David Wilson Homes South Midlands
- Dudley Metropolitan Borough Council
- Electric Blue UK
- Energy Assets Networks
- Engie
- Engineering Services Consultancy Ltd
- Floh Consulting Engineers
- Gemserv Ltd
- Green Frog Power
- GTC
- Kaluza
- Northampton Borough Council
- Open Energi
- Persimmon Homes
- Piclo
- Pomona Solar Co-Operative
- Power Jointing & Distribution Services
- Power On Connections
- PS Renewables
- Redrow Homes
- S&C Electric
- Sedgemoor District Council
- Severn Trent Water
- Siemens
- Solihull Metropolitan Borough Council
- Taylor Wimpey
- TDS (Northern) Ltd
- Transport for West Midlands
- UK Power Solutions
- Unique Utility Solutions Ltd
- University of Warwick
- Utilities Connections Management Ltd
- West Midlands Combined Authority
- Wilson Power Solutions



4 | WORKSHOP ONE: THE CONNECTIONS PROCESS AND OUR BUSINESS PLAN PRIORITIES (2023–2028)

Alex Wilkes, External Affairs Manager at WPD, outlined the company’s stakeholder engagement strategy for the upcoming price control period (RIIO-ED2), which runs from 2023 to 2028, setting out how the company intends to enhance the connections process to give consumers a stronger voice. Stakeholders were then asked to consider the overarching RIIO-ED2 outcomes that WPD is looking to deliver at the different stages of the connections process and comment on how these could be improved.

Stakeholders from a range of backgrounds felt that the future of connections was uncertain, pointing to a complex connections landscape that many were finding difficult to navigate. This change is driven by a number of factors relating to the need to reduce carbon emissions, such as the roll out of EV charging points and heat pumps, and the increase in flexibility services. It was noted that all of this needs to be done while keeping costs down for consumers. Because of this shifting landscape, stakeholders felt that greater collaboration between relevant parties was necessary. There were calls for better partnership working between connections customers and local authorities, as well as with other utilities, including broadband providers. One innovative project was cited where a broadband provider was making its assets available to assist in the roll out of EV charging in a project funded by a Government grant. It was felt that there should be more projects of this nature in the future and WPD was seen as an important actor in facilitating this.

Housing developers, in particular, expressed concern about local authority targets for EV charging points in planned new homes. It was noted that providing EV chargers to existing housing stock also presented a huge challenge, particularly as 40% of car owners only have access to on-street parking. It was suggested that using street furniture such as lampposts could provide a solution in these cases, but it was acknowledged that there were a number of drawbacks to this, not least the amount of disruption it would cause to provide the additional capacity required.

It was felt that WPD should adopt a role facilitating better communication between housebuilders, EV charge point manufacturers, suppliers and local authorities, including those who were adjacent to each other, in order to provide a more strategic approach to connections. However, challenges such as a lack of clarity about who should pay for new connections resulted in a certain degree of uncertainty, particularly in rural areas where there is a reliance on government funding. This uncertainty is was seen as being exacerbated by a lack of knowledge of network capacity – an area where it was thought WPD should provide more guidance.

All local authorities in attendance at the workshop were working on plans to roll out EV charging. As well as providing charge points in planned new homes and in large infrastructure projects, some had their own plans to roll out fleets of EV taxis which would require charging hubs on local authority land. In addition, a number of businesses in attendance talked of their plans for electrifying their own fleets of company cars.

Whilst there was some discussion on heat pumps, it was clear that most councils had no plans to include this technology in their existing housing stock and many had recently approved developments which would still be reliant on gas.

Battery storage was seen as being part of the solution to the challenge posed by the roll out of EV charging and the growth in housing numbers, but it was felt that the technology was not yet ready for this to be a viable answer to the problem. Instead, most felt that the transition to DSO was the way in which new energy supply and demand could be accommodated on the network, without the need for significant reinforcement. Flexibility services were seen as key but it was acknowledged that this would require customers giving some control, for example over EV charging, to the DNO / DSO, which would require a change in mindset on their part. Making consumers aware of the benefits that making use of these flexibility services could bring for them was seen as vitally important.

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Stakeholders were very much of the view that WPD could improve its information provision. There were calls for greater consistency within the company and a clearer overview of staff roles and team structure. In addition, it was felt that the company's website could be improved to allow stakeholders to access information more easily and it was felt that a centralised CRM with all relevant information stored in one place would be beneficial.

It was commented that more information on capacity, including up-to-date heatmaps, should be provided and disseminated to relevant parties, including local authorities and developers. It was noted that WPD ought to attend more meetings and facilitate more forums in order to better engage with its stakeholders and to explain why certain decisions had been made. The perceived lack of standardisation and consistency was cited as a problem for stakeholders during the application process, particularly as most rely on up-to-date, accurate information in order to plan their budgets.

WPD were seen by many to be approachable and professional in terms of how they process applications, provide offers and work with designers. It was commented that those with the best experiences tended to be the ones who engaged at the earliest opportunity, as well as those who had been given a key account manager to help them navigate the connections process.

Those who had worked with WPD during the construction and connection phase of a project also reported positive experiences. This was put down to the company's staff members being open and easy to work with. Where there were criticisms, these tended to relate to a lack of transparency in terms of the cost of upgrades to the network and on the locations of, and capacity at, points of connection.



1. WHAT DOES THE FUTURE OF CONNECTIONS LOOK LIKE FOR YOUR ORGANISATION?

“As an installer of renewable technologies, we are always looking for ways that we can add to the distributing market. Now that is getting more and more challenging. Providing new connections and having knowledge of capacity availability are both obstacles that we face.” **IDNO / DNO / ICP / Utility**

“Something that is new to us is knowing the process of deciding locations for EV points, in particular, knowing when facilities are available for people to connect.” **Local / regional government**

“I’m a project manager. I’m new to managing electric vehicles. We’ve recently got funding from Innovate UK in partnership with Virgin Media. We’re rolling out electric vehicle charging points to residential areas. Virgin Media’s role is to use their existing assets on streets for charging points, as they have a very wide network already there.” **Local / regional government**

“The finances we have at the council are being directed towards EV taxis. Then, when the EV taxi system is developed, we can put in more charging points for the public demand.”
Local / regional government

“I work within community energy as part of cooperation that has put three installations on churches. We’re also doing a hydro project on a lake in a park in Birmingham. They’re building an eco-centre and we’re also going to heat the community centre from the lake, by taking the heat out of the lake and using it to heat the building, which is a first.”
Aggregators / Suppliers / Vulnerable customer representative

“I’m the Strategic Planning Manager for a local council and we have a major housing development project in the upcoming decade. We are looking into how connections relationships work between developers and suppliers and how they dovetail into business plans.” **Local / regional government**

“How we develop ways of storing energy, especially with the emergence of more and more EV points, and also taking into account days when there is less sunlight or wind is part of the answer. I just don’t think the technology is there yet.” **Distributed generator**

“Flexibility will be very important. You need to constantly monitor what’s going on and how flexibility is rewarded. It’s important to understand the signals in other markets as well as the benefits that flexibility will bring.”
Aggregators / Suppliers / Vulnerable customer representative

“We’re looking to provide EVs in a rural district, so locations are dictated to by the price of connections. 75% of funding is through the government, so we can’t afford to throw two thirds of that away on bringing supply in if there’s nothing local. If we were in a city, there would be lots of connections, but we are having to give up locations where we have identified demand.” **Local government**

“I want to know how we can get customers to adopt the technology faster.”
Aggregators / Suppliers / Vulnerable customer representative

“We’re possibly looking into domestic EV charging to move with the times. Repairs are our main priority because of the aging network. We won’t be installing heat pumps on existing stock, only on new developments.” **Local / regional government**

“We’re looking at smart charging and how the public respond to giving some of that control over their charging to someone else. I’m here to understand how to accelerate the process. I’m interested in solutions to connection costs, climate science, and looking at how the industry can cope with carbon reductions over the next decade, as you are going to need to be flexible to meet the government’s targets.”
EV / Charge point manufacturer

“The scale of change is complex, with EVs and new forms of network distribution. Systems for export provision are also a consideration. It’s a question of the DSO being able to utilise network flexibility and possibly pass savings on to customers.”
Supply chain / Consultant

“From a local authority point of view, the problem is not new builds but existing builds, such as terraces with on-street parking. 40% of cars in this country only have access to on-street parking. Some local authorities are using lampposts, etc., for charging points, so I wonder if there are any solutions for that. We have been getting lots of enquiries about that from the general public.” **Local / regional government**

“We’ve got issues with getting developers to commit to putting EV charging points into new builds. It’s not the lack of will, it’s the cost of substations and infrastructure. So, as a local authority, we need housing developers to put in charge points that are hard-wired in.” **Local / regional government**

“As another utility managing water, we’ve done an awful lot with energy over several years. We will aim to have a complete electric fleet and company cars by 2030. Our main aims are reliability and security with existing suppliers. We do provide our own energy from several sites, for example, CHP, solar, wind.”
IDNO / DNO / ICP / Utility

“Local authorities have requested charging points on all of our developments. This sets the panic button for us, because we don’t know the type of capacity needed or if it is accessible.” **Housing developer**

“In south east Wales, we’re looking at housing schemes, electric taxis and big infrastructure projects. WPD have a big role to facilitate coordination between local authorities and neighbouring authorities in talking to suppliers, sharing business plans and opportunities for generation.”
Local / regional government

2. WHAT ARE YOUR PRIORITIES FOR WPD TO DELIVER IN RIIO-ED2, WITH PARTICULAR RESPECT TO:

Information provision

“We often receive very basic information. It is hard to know what the next step is after gaining that information.” **Housing developer**

“The website could be better in terms of accessing information with simple searches.”
IDNO / DNO / ICP / Utility

“I’ve worked across a lot of the different DNOs, and the difference I find with WPD is that there are inconsistencies every time. It is down to your structure. At WPD, it’s a lot more difficult to contact the right person.” **IDNO / DNO / ICP / Utility**

“Not only do you have differences across the region, you have inconsistencies across individual sub-offices. Then there are differences within the teams as well.” **IDNO / DNO / ICP / Utility**

“Things like annual leave delay my quotation process. Notes that inform me on delays such as annual leave in WPD offices would be helpful.”
EV / Charge point manufacturer

“To add to what you said earlier about the standardisation of information and interpreting policy, we would like a clear escalation route. You need to be able to go to the person who is responsible for all of those teams we are working with.”
Aggregators / Suppliers / Vulnerable customer representative

“We want to know what is coming further down the line, especially with regard to capacity, so that we can advise our clients.” **Supply chain / Consultant**

“With your current guidelines in the WPD local office, you are supportive of community projects but the reality and theory don’t match. We’re using all online maps but when we go to local offices, they say that our projects are great but won’t happen. We’d like to see signposting of the potential scope for projects in locations where the network can actually take it.”
Distributed generator

“There needs to be better communications and engagement. I’d like to see more meetings and I want it to be easier to get information and challenge quotes for connections infrastructure.” **Housing developer**

“WPD needs to be clearer about why certain decisions are made.” **Distributed generator**

“Could there be some kind of communal communications platform for the West Midlands region about capacity that has already been ringfenced? You could open up the conversation more widely and improve relations between different local stakeholders.” **Distributed generator**

“We want to get heatmaps which go down to 11Kvs. Most residential supply is high voltage. We would like to see it in detail. If you have smart networks around, that would be good to see. When developers come to us they need a quick turnaround, but we can’t get the information we need quickly.”
IDNO / DNO / ICP / Utility

Application

“The main issue for us is the timeframe for connections. A lot of the funding we get is from Defra and has to be spent by a certain time. We would like to see a way of quickening and simplifying the application process, which I’ve found difficult to understand and engage with.”

Local / regional government

“When you put in for a point of connection, the information you receive is very different depending on the region it comes from, even just in terms of the standard of drawings you receive. Throughout the process there are quite a few errors, and even once you manage to decipher the designs, you go back and the points of connection are incorrect.”

IDNO / DNO / ICP / Utility

“I deal with renewables in fairly small projects. There are constraint issues in Birmingham, but WPD are usually very friendly and helpful. There is flexibility there. I’ve found the connections process easier because we usually speak to the engineer at the depot first. They’re the ones that know the local area and know whether a project is a goer or not.”

Supply chain / Consultant

“The biggest concern is keeping up with application demand, as from our perspective, targets are becoming increasingly ridiculous.”

EV / Charge point manufacturer

Design and offer

“We are putting in low-carbon technologies. However, what is crucial at this early phase of the designing phase is knowing exactly what network capacity will be, particularly with more electricity demands in the future. This information is crucial for us.”

Aggregators / Suppliers / Vulnerable customer representative

“With large-scale growth, we have large housing sites where we want early engagement. We don’t want to be bitten by a massive quote from WPD that comes in too late and basically stops the whole development.”

Housing developer

“I think my clients’ main complaint is the timeframe between the application and decision, especially from WPD. I would like information and support on flexible connections for batteries and EV. We’d like to speed up some of that process.”

Aggregators / Suppliers / Vulnerable customer representative

“The application process is easy for us, but we do lots of front-end engagement with DNOs so that we know exactly what we need to do. Although the initial process does not have any weaknesses, we would prefer more project planning from WPD later in the process, including by engaging earlier in our project processes. We would appreciate updates every three months.”

Distributed generator

“Something WPD and any of the DNOs could do is, if we put in an application in for 3,000 houses, they have to give us capacity for that amount, but they don’t tell us whether we can squeeze in a bit more before we have to request reinforcement. And when there is reinforcement, we are blind to the kind of schedule that WPD are going to use to deliver the reinforcement.”

IDNO / DNO / ICP / Utility

“It’s about having a partnership with you. We don’t want a binary ‘yes’ or ‘no’. We’d be interested in different ways of getting power and how we can phase it.”

Housing developer

“The question is how design and planning interrelate and how this applies to conventional connections. How fluid and dynamic is this process? WPD is one of the better ones in this regard.”

Supply chain / Consultant

Construction and connection

“With connections, if there was a set standard of what we receive from whoever we go to in WPD, that would help every ICP and IDNO, and the DNOs as well. Show where the point of connection is, show the X and Y of the location, state the capacity, and maybe do a zoomed-in version so we can see exactly what is going on. Standardise the drawings for each point of connection we would receive.”

IDNO / DNO / ICP / Utility

“I would like to see more clarity about how all the costs for the upgrades are being shared out among stakeholders.” **Distributed generator**

“We have good experience with local connections working with craft planners. We’re on a small scale, [so] we deal with people who know the local network. Everything works well: we have names and faces.”

Local government

Ongoing operation

“I’m not convinced that gas as a source of electricity will just stop. Nor am I convinced that power distribution can cope with growing and new types of demands in the context of this change in supply. So, WPD has to prepare for the worst-case scenario where the network can’t cope with all the new demands.” **Housing developer**

“With the smart network priority, this is something we look at and we appreciate what WPD are doing. It’s important to compensate smart flexible power. We are working more with battery developers, for example.” **Aggregators / Suppliers / Vulnerable customer representative**

“WPD are best company to deal with diversions and you do what you say you’re going to do. You’re an enabler, whereas other DNOs are blockers.” **Housing developer**

“I like to think the consultation process would involve a bit more engagement and communication. We have members saying they find getting the connections a real challenge. Some of the decisions taken could have been different if we’d have known in advance.” **Local / regional government**

“WPD assigned us a key account manager. This is a good concept which needs to be expanded upon. There have been frustrations about receiving emails from managers with no contact information.”

IDNO / DNO / ICP / Utility

“Consistency is important. I’ve had issues navigating the WPD website and my applications have been timed out. It’s an issue as sometimes you need time to find the required information.”

Supply chain / Consultant

“There is no joined-up thinking. When we laid a cable, the other one had to run the same route. And they drew another trench, instead of just laying it on the existing one.” **Distributed generator**

“As an ICP dealing with WPD, we are the customer and want to be treated as such. This means in a proactive way and we like feedback.”

IDNO / DNO / ICP / Utility

“It seems like there’s no centralised CRM for storing information, perhaps because of the local delivery model. It would be good to address this.”

EV / Charge point manufacturer

5 | WORKSHOP TWO: FACILITATING ELECTRIC VEHICLES AND OTHER LOW CARBON TECHNOLOGIES

Peter White, DSO Development Engineer, outlined WPD's EV strategy, which centred around three locations: home, en route and destination. Peter explained the various EV charging regimes before introducing the company's network assessment tool, which helps WPD to plan its network with input from stakeholders about their future plans. Stakeholders were also informed about WPD's upcoming Heat Pump Strategy Document, which responds to the need to decarbonise heating. Stakeholders were then asked to give their feedback on WPD's plans for facilitating EVs and other low carbon technologies.

Stakeholders generally approved of WPD's approach to delivering the EV charging network, applauding the company for its strategic and forward-looking approach. Stakeholders from a range of backgrounds recommended a more consistent, joined-up approach, with housing developers in particular requesting more information on the responsibilities of industry and local authority actors in ensuring charging points are provided in new housing. There was concern about the cost of retrofitting houses with charge points and of installing three-phase domestic supply into existing homes as this was seen as being prohibitively costly. There were also calls for greater clarity around whom would bear this cost of this. There was agreement that WPD had a responsibility to share information with stakeholders including on costs and, importantly, network capacity, especially as some local authorities had no knowledge of the existence of the company's capacity maps.

There was consensus that EVs will become more popular as prices decrease, more second-hand vehicles become available and tax breaks are offered for businesses. More engagement with EV charge point manufactures was called for as it was acknowledged that the potential take-up of EVs (projected to be 3 million on WPD's network by 2030) would result in a huge amount of strain being placed on the network. Many stakeholders were of the view that the creation of incentives for businesses and domestic customers to charge more smartly could mitigate the need for network reinforcement in due course, but it was commented that the network needs to become smarter to make this happen and that more engagement with businesses – including those that provide smart charging – would be required.

It was felt that battery storage and vehicle-to-grid would have an important role to play in the future of the network. However, stakeholders seemed less certain about how EV ownership would play out in the long term, with some agreeing that other technology, such as autonomous cars and hydrogen fuel, could reduce demand for EVs.

When asked about WPD's focus on three locations for charging – home, en route and destination – stakeholders from across the board seemed to agree with the company's approach, seeing the value in providing charge points in a range of locations, especially since driveway charging would exclude a large proportion of the population. It was felt by many that it was unfair that those without driveways could potentially be discriminated against in the future and it was positive that WPD's strategy acknowledged this.

Charging hubs in locations such as supermarkets, schools council car parks and places of work were thought by most to be the best way of rolling out EV charging infrastructure, not least as on-street charging would require a significant amount of disruption and would be problematic due to parking restrictions.

Those whose organisations already have an electric fleet saw the benefits of workplace charging and communal charging points, with one stakeholder referring to research that indicates that destination charging is more popular than home charging. There seemed to be a feeling that WPD should carefully consider how charge points will be used and when people will need to charge. Work done to understand consumers' charging behaviours such as WPD's own Electric Nation project was praised as this was seen as vital to inform the company's strategy. The point was made by one stakeholder that the increase in autonomous vehicles on the road would result in fewer cars and therefore fewer charge points being required as the need to own a car will decrease. It was felt that WPD needs to factor this in, in the medium to long term.

For most stakeholders, heat pumps did not feature in their plans. Although it was widely acknowledged that they have clear environmental merits in terms of decarbonising heat, the cost of installing them was seen as prohibitive and there appeared to be little demand from consumers, perhaps due to a lack of knowledge about their benefits. Notwithstanding this, there was acceptance that they have a significant role to play. However, local authority stakeholders commented that they do not have the authority to insist on this technology being included in new homes. It was added that it should be down to DNOs, potentially through the ENA, to lobby for changes to building regulations to facilitate greater uptake of this technology.

1. WHAT DOES THE FUTURE OF CONNECTIONS LOOK LIKE FOR YOUR ORGANISATION?

“WPD have a strategy and seem to be ahead of the game, so that’s positive.” **Supply Chain / Consultant**

“WPD has done a lot of work on this, which is impressive.” **Housing developer**

“It’s going to be a big task to get the capacity up in the timeframe you are looking at.” **Housing developer**

“That map would help us in working out where to put in our EV charging points. I don’t think anyone at the council knew that existed.”
Local / regional government

“Will LV and HV lines be incorporated into the maps? Currently this is on two different maps, and a combined map would be useful for planning.”
EV / Charge point manufacturer

“My concern is that the idea of putting three-phase supply into homes approach would only benefit new homes, as it would cost far too much to retrofit all the older homes in this country.”
Supply chain / Consultant

“The biggest issue that my sector have is that there aren’t sufficient charging points in housing developments.” **Housing developer**

“It’ll be interesting to see how EV charging and other technologies are controlled and how price signals can be used to guide charging, rather than via direct control. How do we incorporate that price signal?”
Aggregators / Suppliers / Vulnerable customer representative

“There are battery storage trials taking place right now. That’s a big thing, as batteries could form counter-offers when the DNO doesn’t have sufficient capacity.” **EV / Charge point manufacturer**

“Whole-system planning is great, but you need lots of information working together. There are phenomenal challenges!”
Aggregators / Suppliers / Vulnerable customer representative

“It would be good to understand WPD’s views about whether you think what is in place at the moment is fit for purpose in terms of the journey it takes for customers to get from their initial enquiry to having the charger installed. How do you see that scaling up for when you have 3 million electric vehicle chargers on your network by 2030?”
Aggregators / Suppliers / Vulnerable customer representative

“In your Business Plan for RIIO-ED2, you need to be clear about how you will engage with businesses that provide smart charging, and how you will use that smart charging to mitigate network constraints. You need to be clear about how you will plan to approach that, so you are not spending all of your money on traditional forms of network reinforcement.”
Aggregators / Suppliers / Vulnerable customer representative

“I would suggest following the example of the Association of University Engineers. This is a platform for engineers across universities to discuss potential smart-future infrastructure. If WPD could make use of similar types of cross-sharing platforms, that would be great.” **Distributed generator**

“WPD needs to look into case studies and research findings when implementing this approach. However, it then also needs to share this learning with different stakeholders.” **Local / regional government**

“Managing network constraints is about educating people. Electricity has always been used in a certain way. You’ve also got different generations and different businesses to manage, so as a DNO you’ve got to try and change behaviours while reinforcing.”
IDNO / DNO / ICP / Utility

“I don’t know if it’s the DNO’s role to educate people. We are the ones who talk to the customers and install the charge points.”
Aggregators / Suppliers / Vulnerable customer representative

2. DO YOU AGREE WITH THE APPROACH THAT WE'VE TAKEN FOR THE THREE DIFFERENT LOCATIONS?

"I would strongly recommend that WPD has a chat with Aston University. Researchers there found that most people charge at their destinations rather than at home. The majority of people charge their cars at work during the day." **Supply chain / Consultant**

"It's an easy fix for a DNO to consider a capacity increase in major city centres, but charge points for en-route charging are important too." **Supply chain / Consultant**

"We are keen to avoid creating a charging environment that is discriminatory. People with driveways have minimal connection costs, except for electricity, whereas those without a driveway will have to charge at expensive superfast hubs, which will probably cost more. That might dissuade some people from getting an EV." **EV / Charge point manufacturer**

"People shouldn't be locked out of EV technology if their housing set-up doesn't enable them to have a private charger." **Supply chain / Consultant**

"An issue people will face is whether these locations will be open 24/7. You will also need to factor in other obstacles, like extra security for the car parks and how WPD are powering these locations." **IDNO / DNO / ICP / Utility**

"Quantity is also another big factor. If everyone decides to drive an EV, then every space in a car park will have to hold a charging point." **Distributed generator**

"There has to be a workplace evolution too. There needs to be incentives for EV company cars. Employers need to ensure that their employees can charge their cars during work hours." **Distributed generator**

"For me, when fitting new large-scale EV-charging sites, the big area of focus should be looking at potential charging sites that are already there, such as school car parks." **Supply chain / Consultant**

"Street designs will change and there will be far more space available." **Local / regional government**

"We have all-electric fleet cars so have communal charging points in industrial estates and business parks, but they're really old so infrastructure is not the best. But we are encouraging private businesses to share some of the infrastructure, and that has been working quite well for us." **Local / regional government**

"EV charge points are already in the locations they are talking about. Of course, volume will have to step up from where it is currently, but it is going in the right direction." **Supply chain**

"I think they have covered all the main points where you need charging." **Supply chain**

"I think going to smaller villages and towns for installing EV chargers is a kind of small-scale experiment ahead of upscaling in towns and cities. A rash approach could be costly." **Supply chain / Consultant**

"Cities are very easy to get into without driving. I've also noticed a lot of EV chargers not being used." **Supply chain / Consultant**

"I agree in general that charging points are needed at work. However, district councils are charging developers for each car parking space, so they need to balance the costs. Developers have to think a lot about how many car parking spaces they include." **IDNO / DNO / ICP / Utility**

"I think providing on-road charge points is going to be hard, because there are a lot of double yellow lines or restricted parking on most roads, especially pre-war houses." **Distributed generator**

"You can't guarantee availability on public chargers, which is where rapid charging hubs come in." **EV / Charge point manufacturer**

"Tesla charging points send you a text when your time is up, and they charge your credit card if you overstay your time." **Distributed generator**

3. WHAT SHAPE DO YOU THINK THE EV CHARGING NETWORK WILL TAKE IN THE FUTURE – OUT TO 2050?

“It will depend on whether people can afford EVs and whether they will like the styles available. Manufacturers will need to provide more choice.”
IDNO / DNO / ICP / Utility

“We produce batteries, and at the moment we are not exporting from batteries, but I think you are going to be wanting that very soon. I think next year there is going to be a step change in ownership of EVs because the price is going to drop. I think the prediction by WPD is spot on. Another issue is the manufacturing, but manufacturing is stepping up now that the big players have got involved, so next year it will increase very quickly.” **Distributed generator**

“The benefit for the tax break will be in the second-hand market. The uptake for EVs will be faster than predicted, I believe. So, that uptake will happen quicker. And that is what I worry, is that the DNO will get caught out.” **EV / Charge point manufacturer**

“It’s difficult to know because we’re trying to plan forward 10–20 years when we don’t know what the big picture will be for the energy industry.”
Supply chain / Consultant

“We need a wider cultural shift in terms of how we view cars.” **Supply chain / Consultant**

“I’m not sure. It depends on how much EVs take off. The fact that it takes longer to charge an EV than to fill up a petrol tank (and the reduced convenience that comes with that) will never sit well with some.”
Supply chain / Consultant

“If we move on with autonomous cars, once autonomous cars take off, it will take 5–8 cars off the road. If we’re not careful, we could end up with hundreds of electric vehicle chargers we don’t actually need.”
Aggregators / Suppliers / Vulnerable customer representative

“We assume that the default will be that people will charge their cars at home if they can, as this is the cheapest option, but that they will also charge them on the street and at work. With regard to external commercial options, rapid charging hubs are the most likely business case. Solutions will be highly geographically dependent.”
EV / Charge point manufacturer

“Have comparative studies with other countries been done? The situation is much better in France, for example, where EVs are entitled to free underground charging, free parking and discounts on shopping.”
Local / regional government



4. DO YOU HAVE ANY VIEWS ON THE UPTAKE OF ELECTRIC HEAT PUMPS?

"We've looked at it and the general consensus is that it costs us and general customers more. Internal as well as external costs go up, so you are paying more for equipment and bills. Unless electric costs come down, it's not really a viable option."

Housing developer

"We don't have any specific views on the uptake of electric heat pumps. However, we do want to decarbonise our heat network. So electric heat pumps are something we could be heading towards."

Local / regional government

"Where are we going to get these electric heat pumps from? How user friendly are they for our customers? The authorities need a clearer answer from us on our uptake of these pumps. But we still don't have a clear steer from our group operations team."

Housing developer

"Councils would love to insist on energy specifications in every house, as in when new homes are built, but we don't have the authority to do this. As we were saying earlier, the role of WPD in lobbying for things like this is important."

Local / regional government

"We don't have any schemes at present that will take up these pumps."

Housing developer

"It is such a new technology. I personally would wait for the teething problems to be over and it is perfected."

Housing developer

"As a connections provider, we haven't been approached to install these pumps. And in terms of new housing schemes, we haven't been approached to use them at all."

IDNO / DNO / ICP / Utility

"A lot of these issues here related to heat pumps are related to consumer uptake of these pumps, or the lack of it."

Aggregators / Suppliers / Vulnerable customer representative

"It costs about £60,000 to make a house carbon neutral, which is an additional expense on top of the price of a house."

Housing developer

"I think that heat pumps are really unrealistic due to the costs of retrofitting homes."

Local / regional government

"Norway is a good example of how it can work. It is wrong to look to one technology to solve all problems. We should not just write off gas."

Distributed generator



6 | WORKSHOP THREE: HOW OUR NETWORK CAN SUPPORT THE GROWTH IN HOUSING, INFRASTRUCTURE AND COMMERCIAL DEVELOPMENTS

Tim Hughes, Connections Policy Manager, outlined how WPD proposes to address the challenges of allocating network capacity in a fair way while managing under-utilised capacity. Tim then talked stakeholders through WPD's capacity consultation, which has led to updated proposals including simplified information requirements, Modified Infrastructure Offers to manage capacity reservation for multi-phase developments, and the introduction of flexible milestones to monitor scheme progression. Stakeholders were then asked to give feedback on WPD's proposals.

There was broad support for WPD's proposed approach to addressing the challenges placed on the electricity network by the rise in demand connection enquiries. It was felt that the company's proposed approach strikes the right balance, encouraging developers to move forward with their developments and not punishing them for delays that are beyond their control. Stakeholders were of the view that the current approach, which restricts DNOs from reinforcing the network ahead of need, could hinder growth of low carbon technologies and was not necessarily conducive to meeting Ofgem's aspirations of achieving net zero carbon by 2050.

Stakeholders called for more flexibility in the connections process for certain projects, including high-density projects in urban locations, where the current milestones result in developers being asked to connect before the project is ready. It was felt that a more flexible approach was appropriate as long as a developer can demonstrate that their project is moving forward or that any delays, which are often an unavoidable part of the planning process, are genuinely beyond their control. Moreover, stakeholders acknowledged that a level playing field is needed to ensure that the connections process is fair and transparent and that connections customers are not 'playing the system' by submitting spurious requests for capacity. In addition, it was commented that standardisation across WPD's licence areas is vital, with some stakeholders reporting slightly different protocols across local offices within WPD's network area.

Stakeholders commented that early engagement with local authorities, developers and the DNO is required to ensure that multiple parties work together effectively. It was felt that this would result in a better understanding of the requirements of large developments and minimise the risk of both under and over engineering the network. It was also noted that WPD should take into account councils' local plans, which involve much longer timeframes than price control periods. Stakeholders were of the view that the process could become more efficient if developers were aware of the requirements of other nearby developments, although it was noted that this may not be practical as it would require collaboration between developers, who are, by definition, often in competition. Although some felt that WPD should facilitate collaboration, an example was given where developers had shared information but this had not led to a positive outcome.

It was acknowledged that advances in technology would make the connections process more efficient. For example, digitalisation would give a more accurate real-time picture of a development's requirements as it builds out. It was commented that for large, multi-phase developments, WPD asks for granular information that customers find difficult to provide with any accuracy, such as details on the kVA capacity of individual homes.

There was therefore strong support for WPD's proposals to simplify the application process. It was felt that the process had previously been too onerous for some, which had the effect of hindering growth. It was commented that simplifying the applications process would save companies time and money. In particular, it was commented that it was positive that developers would now need only be required to provide the total kVA of a development, which made things easier for them. However, it was noted that this might still be difficult to establish for large developments, and some developers would still naturally ask for more capacity than is required. Where this was the case, it was felt that a flexible approach was needed to allow developers later in the queue to take up unused capacity, compensating those who had made the initial investment and ensuring that the costs are not simply passed on to the consumer. It was also noted that the system must ensure that developers are not encouraged to sit on capacity or 'landbank' just to make a return on their investment – something that could potentially become more prevalent if less information is required at the outset.

1. WHAT ARE YOUR VIEWS ON OUR NEW APPROACH?

“Your approach seems reasonable to me. You have to manage the network and its capacity. I understand why WPD have chosen this approach.”

Distributed generator

“As an ICP, our customers would not be happy knowing that they could potentially lose their load. But again, I understand why WPD have chosen this approach.” **IDNO / DNO / ICP / Utility**

“The costs should be equitably distributed. Those ahead in the queue should pay their fair share.”

Housing developer

“I think the milestones are all a bit wrong in terms of length at the moment. In our world, the normal jobs are high-density jobs. In the centre of Birmingham, those jobs are 30–40 storeys tall, so we are not necessarily going to be connecting anything for the first year or two. You guys come to us after 10 months and say that you need to connect in the next two months, but we’re not ready as we will only be up to the 4th floor. Then you guys rescind the point of connection, which just makes more work for everybody.” **IDNO / DNO / ICP / Utility**

“You should provide a fair commercial offer, treating everyone the same. Part of the frustration is that there is no flexibility, with no dates and no feedback. You’ve got a monopoly on that side of things while our 12 months is still ticking away, and we can’t book or arrange anything until we find out what dates they can do their work. Engineers should be able to communicate better and understand that each job is different.” **IDNO / DNO / ICP / Utility**

“It seems like Ofgem are not set up to be consistent with the zero-carbon target. On the one hand, they aren’t allowing you to do anything, but at the same time, they want you achieve net zero. There’s a disconnect there.” **Distributed generator**

“I would like to see greater dialogue with local authorities at the very start of the process in order to link everyone together and get everyone on the same page in terms of expectations.”

Local / regional government

“The infrastructure offer needs to be made more sophisticated in order to cater to different developers, depending on the infrastructure that they already have.” **Local / regional government**

“Your approach strikes the right balance. As long as developers can easily prove that they are moving along with their projects, there shouldn’t be a problem.” **Housing developer**

“Do you think that there will be more prospective applicants for capacity if there are fewer information requirements? I just worry that people will try and take their chances.” **Supply chain / Consultant**

“There needs to be more dialogue between local government officers and WPD. A lot of projects are subject to a five-to-seven-year planning process from conception to completion. Local authorities can advise WPD on where all of these projects are and help to ensure all the right capacity is where it should be.” **Local / regional government**

“WPD needs to help get government agencies to start working together to make it easier to share intelligence.” **Local / regional government**

“When we needed a new connection put in, the size of the individual users didn’t justify the half a million-pound cost. WPD said they won’t install a cable until they’re sure of having enough users, so things came to an impasse. The process seems to be turning the supply into a commodity itself that is a tradable product.” **Local / regional government**

“WPD could possibly provide more information on understanding how much power third parties need, making it a two-way process.”

Local / regional government

“It makes sense. If you don’t have planning permission, you shouldn’t be building. That seems reasonable.” **Housing developer**

“WPD do still need that sanction to be able to remove that offer for those developments that don’t exist.” **Supply chain**

“There is no flexibility of WPD towards the customer after the acceptance stage. The whole process is too rigid. It just stops if you do not tick all the boxes. We have conversations off the record, so we know if we will get planning permission, but officially the council does not commit. WPD should take a flexible local approach rather than following protocol.”
Housing developer

“The new approach definitely looks viable. We don't need massive capacity upfront. We won't need a lot of capacity for years and years.”
IDNO / DNO / ICP / Utility

“Something has been missed in terms of the reallocation of unused capacity. Someone may ask for 10 MW. Then the network is built, the system is in full operation, but they only use 5 MW. In that scenario, 5 MW goes back into the network. With digitalisation, a clearer picture can be established as things are being built.”
Supply chain / Consultant

“Network infrastructure must be future-proofed. WPD must come to local authorities to tell us what needs to be done in order to bring housing up to standard in order to move forward.”
Local / regional government

“Developers can be late getting planning permissions as they want to secure the load early. They will try to keep their options open. If, after five years, a client is using only some of their capacity, what happens to the rest? And what if a developer built the infrastructure for a certain load, but then some of it was used by a second comer?”
IDNO / DNO / ICP / Utility

“There are a lot of instances of over-allocated capacity. We need flexible agreements that can cater to higher demands during the day and less at night. We need a smarter interplay between demands for connection.”
Distributed generator

“Over large sites, say, for example, one with 1,000 units being built over five years, you get planning in phases, so you need scope for flexibility. When they ask you how long you keep going with the development, the answer is, how long is a piece of string?”
Housing developer

“I can understand where you're going with this new approach; it's about being upfront with your communication – which is good.”
Housing developer

“It looks good, but you engage on four- or five-year plans, whereas we work on 20-year plans.”
Local / regional government



2. DO YOU HAVE ANY SPECIFIC COMMENTS ON THE ASPECTS OF OUR NEW PROPOSALS?

“I would like to know if there are any obstacles as to what happens if a company goes into administration.”
Local / regional government

“I am interested to know about the challenges of tracing the application.” **IDNO / DNO / ICP / Utility**

“Your new approach is welcome. It sounds good. Lost time during connection applications are a significant concern for us. You simplifying this part of the process will mean that this concern is removed.”
Local / regional government

“For our company, you have to agree the lease first. Then it is followed up by the connection and the planning. It seems to be a lot quicker for our sector.”
IDNO / DNO / ICP / Utility

“We’ve overestimated and we’ve also underestimated, not just with electricity, but also with adopted heat networks, which are massively over specified but which actually need half the amount of power initially estimated.”
Aggregators / Suppliers / Vulnerable customer representative

“You’ve got your capacity. But how is a developer or connection-owner incentivised to be more accurate about estimates? Is there a cost to capacity and if they’re holding too much capacity, can they be incentivised to give some of that back? After all, the cost ends up somewhere, and often with the consumer.”
Aggregators / Suppliers / Vulnerable customer representative

“With big projects in particular, we don’t know the exact details so we can’t say we don’t, in fact, need this much power.”
Aggregators / Suppliers / Vulnerable customer representative

“The only thing I don’t like is that they want to know how much kVA each house is using, and I don’t know that.” **Housing developer**

“I could see a situation with your new approach where you’ve got two different developers with identical developments. The first gets there first but doesn’t have the capacity for whatever reason, whereas the second does have the capacity. Developers can be petty – what’s to stop them paying that initial connection cost just to freeze out their competitor?”
Housing developer

“I know we want to make sure we only have to do something like digging up the roads once. Infrastructure should be there to add additional capacity as and when needed. We get criticised because activities taking place in the here and now just dig up a road once.”
Local / regional government

“When you upgrade a cable, couldn’t you say to people around there, are you going to put anything on in the next five years? But I do realise that’s difficult.”
Aggregators / Suppliers / Vulnerable customer representative

“Is there a response time that you [WPD] are going to commit to? In the past it’s been hard to get a response from you about getting things installed. What commitment are WPD going to give when we are trying to get a project off the ground? There’s a lot in the presentation about what they need us to do as a customer, but then we need that guarantee from them that they’re going to turn up and make sure that things do progress with the supply for a project.”
Local government

“Regarding equipment type, there has not been much information about sharing between local WPD offices. Information has to be submitted separately to different offices. There should be shared documents that the different offices can access.”
EV / Charge point manufacturer

“Although developers would appreciate having their capacity secured, it may make some too greedy, as they want to leave their options open, but they can end up paying for much more than they need.”
IDNO / DNO / ICP / Utility

“If the planning cap on energy storage were lifted, it would have a massive impact. Would it change WPD’s view on the technologies that are being connected? It will no longer be just batteries.”
Supply chain / Consultant

3. IS THERE ANYTHING ELSE WE SHOULD CONSIDER WHEN TRYING TO ENSURE A FAIR ALLOCATION OF CAPACITY?

“Are we able to freely know about points of connection for adjacent developments? WPD were not particularly happy about us working collaboratively with another developer.” **Housing developer**

“The proposals do address the imbalance between first and second comers. It is confusing when you're in a connections queue. We try to get non-contestable offers, not through ICPs, as they are only interested in making profit.” **IDNO / DNO / ICP / Utility**

“It is hard being the last customer to apply for a planning application, especially if you have a big development. For the future, looking at the priority of planning applications could be crucial.” **Distributed generator**

“My first point is about trying to link up where reinforcement is needed for local developments. It would benefit the network if we could facilitate community energy schemes at those locations, but we don't know about those, so we can't move them forward. My second points are that we need to electrify the railway across UK. I'm not sure if the DNO is involved in that or if that falls within the remit of National Grid instead.” **Distributed generator**

“Realistically, there's not a great deal extra you can do: if someone asks for a load and they don't want to pay for it, it won't happen.” **Housing developer**

“We would be willing to accept an offer with yearly capacity release as long as we know what we're building to. For us, 200 kVA per year is perfect; we can only build 160 homes a year.” **Housing developer**

“The problem is the developers aren't going to talk to one another; it would be up to WPD to organise that.” **Utility**

“If you do your due diligence and ask how many they're going to build, they say 80 a year, then you can predict supply and coordinate it.” **Housing developer**

“The people that are most affected are people who want the biggest connections. Individuals can get left behind because of this.” **Supply chain / Consultant**

“The problem was that in the past, there were generators putting in applications on pieces of land and then going to landowners and saying, 'we've secured the capacity, so you need to buy it off of us, because no one else can get it now', so this new approach helps to address that.” **IDNO / DNO / ICP / Utility**

“There needs to be some kind of plan from WPD to demonstrate to us that the approach can be consistently applied, and for that you need to resource it.” **IDNO / DNO / ICP / Utility**

“If I were WPD, I would make sure I looked at the constrained areas, because you don't want them to fail. But that would mean that the approach would not be implemented consistently across areas.” **IDNO / DNO / ICP / Utility**

“You could automatically tell people in less constrained areas that they are expected to adhere to those milestones, but you won't necessarily police them.” **EV / Charge point manufacturer**

“In low-constraint areas, maybe they don't need milestones. Maybe they should just have to prove that they can show progress after a certain amount of time.” **IDNO / DNO / ICP / Utility**

“I can see where WPD are going with it as it is going to free some capacity up. It doesn't give us the certainty we need though.” **Housing developer**

7 | WORKSHOP FOUR: HELPING STAKEHOLDER GROUPS TO WORK TOGETHER BETTER

The final session of the morning involved an exercise designed to find ways for different stakeholder groups to work together more effectively. Stakeholders were split into groups according to the sectors in which they work. They were then asked to state which groups they would benefit from engaging with more regularly, what topics should be covered by this engagement and which methods they should use to address any challenges. Their comments were noted down and reported back to the rest of the group at the end of the session. Stakeholders were then encouraged to network with representatives from the groups they wished to engage with more regularly over lunch.

The exercise demonstrated that greater cross-sector collaboration is a goal shared by many stakeholder groups, with some tables naming up to five other sectors that they would like to engage with more regularly and others simply putting 'all'. Stakeholders seemed particularly keen to work more closely with DNOs and local authorities, which were each singled out by six of the nine stakeholder groups. As a general theme, it was felt that all parties needed to work together more effectively to coordinate the delivery of new homes with the associated increased demand arising from EV charging, heat pumps and other technologies. It was also noted that greater collaboration could also make it easier for more community energy projects to be rolled out across the network.

It was felt that WPD should play a greater role in engaging with councils' Local Plans and in strategic planning through regional government and should collaborate with housing developers, in particular, as they do this. In addition to the seven different stakeholder groups represented at the workshop, attendees were also interested in working more closely with organisations such as the ENA, Transport for Wales, battery storage providers, housing associations, business groups, universities, EV manufacturers and users, and low carbon suppliers.

In terms of how stakeholders would like to engage with other sectors, it was felt that attending workshops, forums and face-to-face meetings was appropriate as there is no substitute for face-to-face engagement. There were also calls for greater engagement through trade bodies, including the ENA and Home Builders Federation (HBF) and for WPD to ensure that it contributes to all relevant consultations.

It was commented by those representing IDNOs that local authorities needed to be educated on their role as many had little knowledge of this at present, which presented a challenge.

Those representing the EV sector, including charge point manufacturers, requested more collaboration with WPD to address the challenges associated with working with such a large company, such as the perceived lack of consistency and standardisation. It was felt that a central repository of information could be provided in order to address this. A lack of consistency was also raised by the group representing IDNOs / DNOs / ICPs and utilities. In order to address this, it was suggested that WPD should work with other DNOs to agree common processes and should also adopt a policy of making it easier for connections customers to give feedback on processes, in order to refine them in the future, in the same way that water companies do.

Several groups, including those representing aggregators / suppliers / vulnerable customers, the supply chain and distributed generation felt that WPD could help improve inter-sector engagement by playing the role of facilitator, providing subject-specific forums, mediating between developers (for example, to ensure that capacity is allocated equitably) and by bringing stakeholders such as developers, generators and councils together as an independent and impartial third party. It was suggested that WPD could set up local hubs so that these stakeholders can come together to work more effectively in partnership with each other.

WORKING BETTER TOGETHER FACILITATION BOARD

Aggregators / Suppliers / Vulnerable customers			
Stakeholder type	Requirements / challenges	Method of engagement	How can WPD help?
DNO	<ul style="list-style-type: none"> Facilitating flexibility Flagging innovation 	<ul style="list-style-type: none"> Events Directly email Focused workshops On the ground collaboration 	<ul style="list-style-type: none"> Internal collaboration and providing greater visibility of what you're doing, as every time we meet there's something new Collaborative engagement
Battery Developers	<ul style="list-style-type: none"> Realising revenue 	<ul style="list-style-type: none"> Events and workshops ENA as a vehicle to ensure standardisation 	<ul style="list-style-type: none"> Incentivise and provide flexibility services

Distributed generation			
Stakeholder type	Requirements / challenges	Method of engagement	How can WPD help?
All	<ul style="list-style-type: none"> EV requirements and specs 	<ul style="list-style-type: none"> Add to approval list 	<ul style="list-style-type: none"> Lobby with the ENA (e.g. for heat pumps)
	<ul style="list-style-type: none"> Creation of a system-wide resource register to help generators to collaborate 		<ul style="list-style-type: none"> Provide active network management
	<ul style="list-style-type: none"> Facilitating community generation projects 		<ul style="list-style-type: none"> Communicate when large requirements needed, e.g. development Set up local hubs for developers to interact with councils. Set up a group to bring developers, generators and local authorities together. Partner with LEPs.

Housing Developer			
Stakeholder type	Requirements / challenges	Method of engagement	How can WPD help?
Other housebuilders	<ul style="list-style-type: none"> Supply/demand – how to share capacity 	<ul style="list-style-type: none"> (via HBF previously) 	<ul style="list-style-type: none"> As the mediator between developers to share capacity Monitor continually any spare capacity, more work for WPD but fairer Would help councils / not kill sites
Local authorities			<ul style="list-style-type: none"> Work with LA to understand Local Plan requirements
Low carbon suppliers	<ul style="list-style-type: none"> Requirement to supply in new housing developments but need contracts to understand the technologies 	<ul style="list-style-type: none"> Face to face 	<ul style="list-style-type: none"> Invite low carbon suppliers, e.g. suppliers of heat pumps to stakeholder workshop events

EV / Charge point manufacturers			
Stakeholder type	Requirements / challenges	Method of engagement	How can WPD help?
DNO	<ul style="list-style-type: none"> At WPD, disjointed branches, repeated conversations, data capture issues 	<ul style="list-style-type: none"> Involvement in the consultation process Clearer signposting to whom we talk to in all scenarios if yes or no 	<ul style="list-style-type: none"> Facilitate conversations EV map capacity is good, create more like this. Great centralised database of all information should be provided – that is easily accessible to everyone

IDNOs / DNOs / ICPs / Utilities (Group 1)			
Stakeholder type	Requirements / challenges	Method of engagement	How can WPD help?
WPD	<ul style="list-style-type: none"> Lack of consistency in design Different processes by region Timeframes are different by region 		<ul style="list-style-type: none"> More communication between DNOs to drive consistency Enable customers to more easily feed back to you [WPD] and have calls with them after connections [like Severn Trent do]
Local authorities	<ul style="list-style-type: none"> Lack of awareness that network is [supported by] IDNOs Lack of understanding of who we [IDNOs] are 		<ul style="list-style-type: none"> Provide developers with a requirement to tell local authorities that they are using an IDNO

IDNOs / DNOs / ICPs / Utilities (Group 2)			
Stakeholder type	Requirements / challenges	Method of engagement	How can WPD help?
DNOs/IDNOs	<ul style="list-style-type: none"> All have different specs of materials 		
DNOs	<ul style="list-style-type: none"> Connection charges with other DNOs (charges for quotes) 		
Local authorities	<ul style="list-style-type: none"> Section 50s [street works licences] are all different Different processes at each council 		<ul style="list-style-type: none"> Utilise your existing council relationships
WPD	<ul style="list-style-type: none"> 12-month energisation date Getting disconnection threats 		<ul style="list-style-type: none"> Clarify why disconnection threats have been posted, as we have often progressed on our plans by that point.
Developers	<ul style="list-style-type: none"> Seeing ahead long-term, re: connection load requirements 		<ul style="list-style-type: none"> Provide better information on load requirements, EV points etc

Local / regional government (Group 1)			
Stakeholder type	Requirements / challenges	Method of engagement	How can WPD help?
All, especially WPD	<ul style="list-style-type: none"> Better capacity planning – who pays and how they pay Engaging with local plans Certainty needs to be given to developers Getting local councils involved Helping people understand the consequences of energy developments 	<ul style="list-style-type: none"> Arrange regular meetings 	<ul style="list-style-type: none"> Engage with local plans Engage with larger planning applications Regular contact with councils / councillors Provide education

Local / regional government (Group 2)			
Stakeholder type	Requirements / challenges	Method of engagement	How can WPD help?
Housing developers	<ul style="list-style-type: none"> Infrastructure for EVs at new builds 	<ul style="list-style-type: none"> Supporting planning policy Pre-application meetings 	<ul style="list-style-type: none"> Ensure network is up to standard More intelligence sharing
Highway authority	<ul style="list-style-type: none"> Joint infrastructure plan meeting requirements of highway authority 	<ul style="list-style-type: none"> Closer working with the regulations team Proactive meetings and intelligence sharing 	<ul style="list-style-type: none"> Potential for WPD to apply new equipment when Highways authority does work
Transport for Wales / Welsh government	<ul style="list-style-type: none"> EV charging points 	<ul style="list-style-type: none"> Data sharing Face to face meetings 	<ul style="list-style-type: none"> Be more involved in consultation events Understanding founding mechanisms
EV Manufacturers	<ul style="list-style-type: none"> Most local authorities will want to use EV chargers from a lease point of view Commercial viability 	<ul style="list-style-type: none"> Open market procurement? 	
Driving sector / EV users	<ul style="list-style-type: none"> Understanding types of charger required (rapid, etc.) 	<ul style="list-style-type: none"> Workshops Feasibility studies 	

Supply chain / Consultant (Group 1)			
Stakeholder type	Requirements / challenges	Method of engagement	How can WPD help?
WPD	<ul style="list-style-type: none"> Keeping up to date on project specific “stuff” 	<ul style="list-style-type: none"> Subject specific forums 	<ul style="list-style-type: none"> Round-table discussions are very good
Supply chain / Consultant (Group 2)			
Stakeholder type	Requirements / challenges	Method of engagement	How can WPD help?
Local authorities	<ul style="list-style-type: none"> Planning consents Technical knowledge Budgets vs assumptions 	<ul style="list-style-type: none"> Workshops 	<ul style="list-style-type: none"> Making information clearer Case studies Tie in areas of development with capacity
Universities		<ul style="list-style-type: none"> CPD seminars 	
Utilities	<ul style="list-style-type: none"> Innovation technology 		
Business groups, SMEs		<ul style="list-style-type: none"> Online forum 	
Housing association	<ul style="list-style-type: none"> Technology knowledge 		<ul style="list-style-type: none"> Sharing information

H

Working together better

How Can We Help?

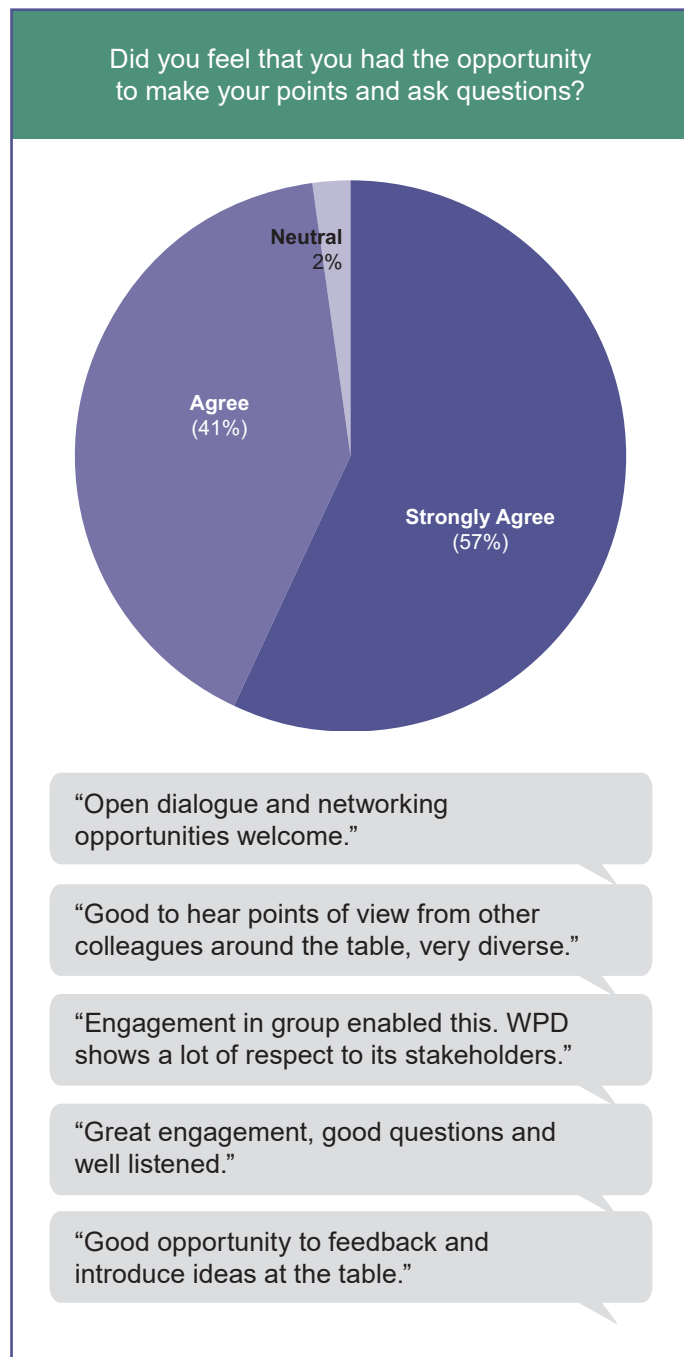
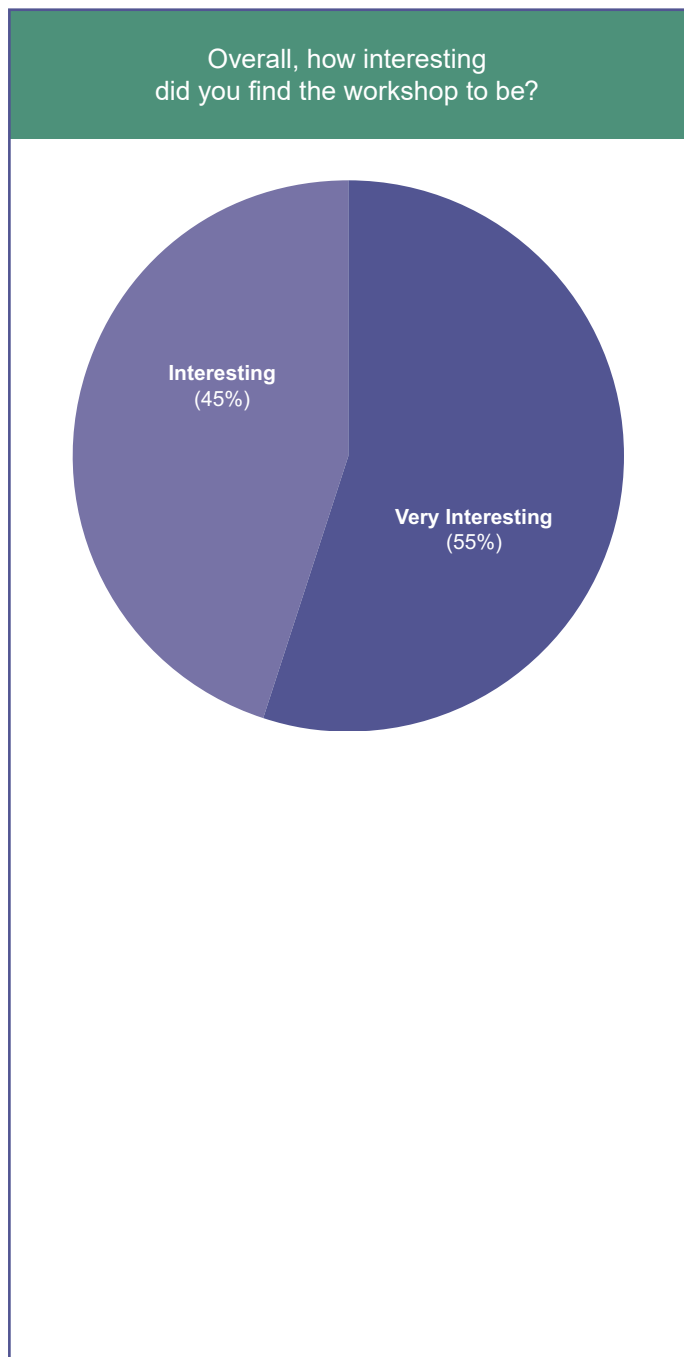
Recruitment / Engagement

U.K.

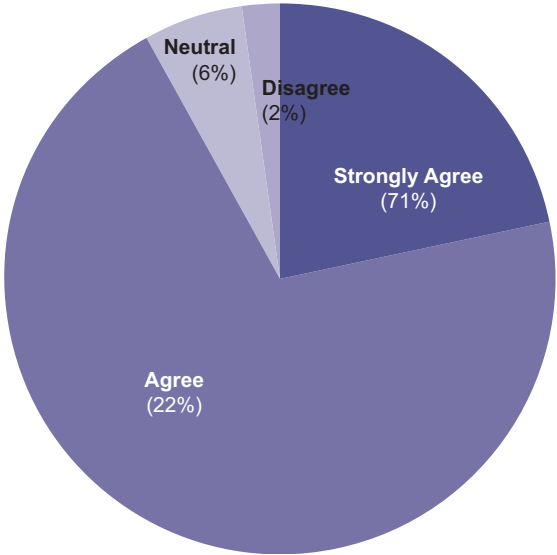


8 | WORKSHOP FEEDBACK

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

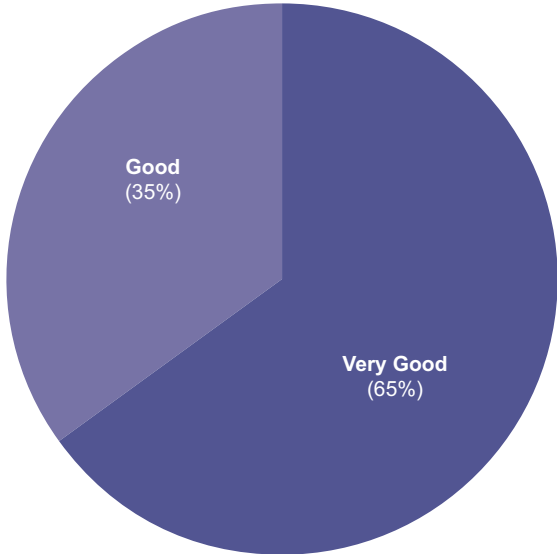


Did we cover the right topics on the day?



- “Useful to explore role of local planning authorities making and application determination and data sets.”
- “All aspects were covered and all relevant to both my role and company.”
- “Yes, very focused on areas related to the housing development industry.”
- “Yes, for the purpose of today, it was very useful.”
- “Perhaps a further event on EVs and heat pumps.”

What did you think about the way that the workshop was chaired by your table facilitator?



- “Good to have a professional facilitator who let everybody be involved.”
- “Excellent approach to capture important views from a range of diverse customers.”
- “Excellent insight and good management of the table and their various areas of expertise.”
- “Clear and able to steer conversations to obtain consensus.”
- “Very well presented and facilitated, excellent listening skills.”

ANY OTHER COMMENTS?

- “Great session, keen to be involved further.”
- “Another interesting event, provided a chance to provide feedback to WPD and network.”
- “Excellent turn out for a well-prepared event. Hope to play a part in the future growth and strategy.”

- “Enjoyed hearing the varieties of viewpoints [...], have learnt a lot from the expectations of customers.”
- “Very informative, great way to meet new people, share ideas and find out what is going on. [A] great event.”
- “Useful networking opportunities.”

