



# Western Power Distribution Local Investment Workshops

## South Wales

## September 2020

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## 1 | OVERVIEW

In September 2020, WPD's distribution managers hosted a series of two workshops to gather feedback from its stakeholders across the company's South Wales region. Owing to the circumstances regarding Covid-19, the workshops were held online using the Zoom platform, rather than in person.

A significant proportion of the workshop attendees represented local authorities, although other parties involved in the growth agenda, such as developers, housing associations, transport bodies and connections providers, were also in attendance. The feedback from both workshops has been collated and summarised in this report.

Each workshop covered a different geographic area within the South Wales region, as follows:

Cardiff and East Wales	10 September 2020
Swansea and West Wales	23 September 2020

This workshop series, which gave stakeholders the opportunity to get involved in WPD's RIIO-ED2 Business Plan development, was designed with a number of objectives in mind. In addition to virtually 'meeting' their distribution manager and local teams, stakeholders were able to find out about WPD, its challenges and planned local investment, and discuss network constraints and capacity issues. WPD, meanwhile, aimed to further its understanding of local growth agendas, including Local Energy Plans, and to collect information on stakeholders' ambitions around electric vehicle charging, heat pumps and other low-carbon technologies (LCTs). The company also used the workshops as an opportunity to explain its Future Energy Scenarios, share best practice and obtain feedback on any other areas of interest for stakeholders.

The workshop was split into three sessions:

- Introducing WPD
- Supporting the Growth Agenda
- Supporting the Transition to Net Zero

Each session began with a PowerPoint presentation given by a local distribution manager or WPD staff member to provide attendees with an overview of the topic in question. Each presentation was followed by a discussion in a breakout room aimed at gathering targeted feedback from stakeholders.

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

Each workshop session opened with a presentation by a WPD representative, which was followed by group discussions in breakout rooms designed to elicit stakeholder feedback. In addition to discussing the topic covered during the presentation, stakeholders were asked to feed back on a number of outputs falling under six priority areas identified by stakeholders at previous engagement events in order to inform WPD's RIIO-ED2 Business Plan. The six priority areas are detailed below and the individual outputs listed under these categories can be found in Appendix 2 of this document.

- Network reliability
- Network resilience (to severe weather)
- Connections
- Community energy
- Whole system approach to achieve Net Zero
- Innovation and new services

This report contains summaries of the findings from the breakout discussions, as well as verbatim comments and written feedback from stakeholders.

### SESSION ONE: INTRODUCING WPD

- There was widespread interest in the future of low-carbon technologies (LCTs) and their application in a range of areas, from community energy to industry.
- While some felt that the pandemic had made decarbonisation a national priority, others pointed out that high levels of uncertainty would likely have a negative impact on community energy schemes and investment.
- Stakeholders felt that WPD could support efforts to achieve a green recovery by increasing grid capacity to meet future demand, in addition to educating organisations on LCTs and engaging with their plans for growth.
- Stakeholders praised WPD's approach to faults and outages and were keen for the company to maintain its focus on resilience and reliability, particularly in the light of the effects of climate change and the rising numbers of LCTs connecting to the grid.

### SESSION TWO: SUPPORTING THE GROWTH AGENDA

- Stakeholders generally recounted positive experiences of DFES engagement, with no survey respondents characterising their experience on the negative end of the scale.
- All survey respondents at both events indicated that they would be willing to engage more with the company, and stakeholders put forward a number of organisations that WPD should also consider engaging with, including housing associations, national parks and schools.
- Stakeholders' growth plans included residential developments, Bro Tathan enterprise park, a new solar farm and business projects.
- There was agreement that community energy groups could have an important role to play in South Wales' Net Zero ambitions. It was recognised that these groups need WPD's support in terms of education, accessing capacity and finding opportunities. The idea of a community engineer was welcomed at both events.

### SESSION THREE: SUPPORTING THE TRANSITION TO NET ZERO

- Stakeholders outlined their targets for Net Zero, many of which reflected the Welsh public sector's 2030 Net Zero carbon target.
- Electric vehicles and EV charger roll-out featured heavily in stakeholders' growth plans. Heat pumps and heating technologies were also being considered, along with solar panels, wind energy and battery storage.
- It was felt that WPD's outputs around Net Zero and innovation should focus on communication and engagement, and the ideas portal proved a popular suggestion at both events. Stakeholders suggested that the company should facilitate engagement and innovation by signposting groups, making its website more interactive and supporting local supply models.

### WRITTEN FEEDBACK

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

- In terms of overall satisfaction with the online event, stakeholders rated it 8.9/10.
- 100% of attendees told us that they found the workshop either 'very interesting' or 'interesting'.
- 80% of stakeholders 'strongly agreed' that they had had an opportunity to make points and ask questions, while 20% 'agreed'.
- 90% 'agreed' or 'strongly agreed' that the right topics were discussed on the day.
- 60% thought the facilitation was 'very good', with 40% opting for 'good'.
- 90% felt the online format for the day worked either 'very well' or 'well', with 10% feeling neutral.

## 3 | ATTENDEES

A total of 34 stakeholders attended the two South Wales workshops, representing 27 organisations. The organisations represented at the workshops are shown below:

- Blaenau Gwent County Borough Council
- Caerphilly County Borough Council
- Cardiff Council
- Carmarthenshire County Council
- Carmarthenshire Energy
- Country Land and Business Association
- CWM Environmental Ltd
- Green Nation
- Hafod
- IBM
- Inframan Ltd
- Johnson and Phillips Ltd
- Milford Haven Port Authority
- Network Rail
- Newport City Council
- Pembrokeshire County Council
- Pobl Group
- Renew Wales
- Rhondda Cynon Taf County Borough Council
- Schneider Electric
- South East Wales Energy Agency
- Swansea Council
- The Green Valleys
- Transport for Wales
- Vale of Glamorgan Council
- Welsh Government
- Welsh Government Energy Service

## 4 | SESSION ONE: INTRODUCING WPD

The first presentation of the day outlined WPD's role as a Distribution Network Operator (DNO), the implications of its transition to Distribution System Operator (DSO) and its approach to working on a regional level. In addition to outlining the business planning process, the presenters updated stakeholders on WPD's response to Covid-19.

Stakeholders were also asked to give feedback on WPD's draft outputs on network reliability and resilience, which included a 12-hour target for restoring customer supply, the installation of flood defences and the reduction of tree-related faults.

Almost all attendees specialised or were interested in low-carbon technologies (LCTs), expressing an interest in rapid chargers, electric vehicles, heat pumps and solar and wind energy. However, stakeholders approached the topic of LCTs from different perspectives, covering a wide range of aspects. While some were interested in future capacity and new connections, others expressed an interest in the implications of LCTs for growth, community energy or business interests, or wanted to explore the merits of a whole system approach.

When asked about changes WPD should consider in light of Covid-19, stakeholders at both workshops pointed to the rise in homeworking as a major consideration for WPD. This had impacted people's behaviour, for example, their approach to public transport, and placed a stronger emphasis on network reliability, particularly in rural areas. In some cases, the move away from office-based work had also made communication more difficult, requiring organisations such as WPD to put in place robust data-sharing processes and ensure that their staff members remain easily contactable.

On the one hand, there was widespread agreement that the pandemic had pushed decarbonisation further up the agenda. On the other, it was pointed out that making the investment case for carbon reduction and community energy schemes would be more challenging owing to high levels of uncertainty. This point was brought home by an attendee who explained that plans to install a turbine to generate electricity for their office now seemed unlikely to progress.

Stakeholders felt that, first and foremost, WPD could support them with the green recovery by preparing to meet the additional capacity required for renewable generation. There was also demand for WPD to support organisations by helping them to understand the opportunities afforded by LCTs, and a clear appetite to partner with the company to achieve a green recovery. WPD was seen as having a key role in supporting local growth plans, and at an organisational level, it was felt that the company should be future-proofing and stockpiling if necessary.

Stakeholders broadly agreed with WPD's outputs around reliability and resilience, and there was widespread praise for the company's approach to faults and outages. However, it was agreed that some aspects of reliability and resilience had been overlooked. For example, several stakeholders felt that the outputs should acknowledge the greater need for reliability in the move to decarbonisation and the smart network. It was also suggested that the outputs should refer to customer education and engagement and the effects of climate change, which include more frequent extreme weather events. One attendee suggested that WPD should compare its performance against that of other DNOs to help frame its outputs.

## 1. WHY HAVE YOU ATTENDED TODAY?

“I’m a surveyor and I’m here representing landowners and agricultural interests. I want to know more about the future technology around the corner, for those members looking to diversify their businesses.”

**Stakeholder, Cardiff and East Wales**

“I’m the decarbonisation manager for Transport for Wales. I’m involved in the programme for rapid chargers in Wales and I’m interested in our modelling.”

**Stakeholder, Cardiff and East Wales**

“I’m a local councillor and the executive member for economic development and regeneration. I’m interested in capacity issues, especially on industrial estates, as well as the EV network and the link to renewables.”

**Stakeholder, Cardiff and East Wales**

“I’m the taxi policy officer for the Welsh Government. I look at policy development for taxi and private hire vehicles. The Welsh Government wants them to be at zero emissions by 2028, so I am looking at work to increase the uptake of electric vehicles in those areas.”

**Stakeholder, Cardiff and East Wales**

“I’m an electric engineer at Cardiff Council. I know very little about air source heat pumps, but I am aware that they are known to WPD. I wonder what the problem is behind them before I start to introduce them into my schemes.”

**Stakeholder, Cardiff and East Wales**

“We have been developing solar and wind for 20 years and have worked lots with WPD. We’re looking at a 50–100 MW off-grid hydrogen project and are interested in WPD’s plans.”

**Stakeholder, Swansea and West Wales**

“I’m interested in the grid and community energy in Wales.”

**Stakeholder, Swansea and West Wales**

“I work with Carmarthenshire County Council as the sustainability manager. I have had a mixed experience with WPD: reliability and resilience are always great, but getting new connections on our new low-carbon projects has been frustrating due to capacity constraints and huge additional costs. I’m here to find out more so that this process can be smoothed out on our side.”

**Stakeholder, Swansea and West Wales**

“I’m the commercial director for Milford Haven Port authorities. My interest is around Net Zero, particularly with the potential for wind power generation, the Milford Haven Energy Kingdom project and the South Wales industrial cluster. I want to know how the grid will be able to support all of these new initiatives and what the potential repercussions on the grid will be.”

**Stakeholder, Swansea and West Wales**

“I’m the sustainable development manager at Pembrokeshire County Council and am working heavily on zero-carbon projects. I want to find out more about what WPD can do in order to support growth in this area.”

**Stakeholder, Swansea and West Wales**

“I’m the head of smart living for the Welsh Government. I am interested in a whole systems perspective and smart innovation.”

**Stakeholder, Cardiff and East Wales**

“I’m from Hafod housing association. I’m interested in future capacity and LCTs.”

**Stakeholder, Cardiff and East Wales**

## 2. WHAT HAS CHANGED FOR YOU IN LIGHT OF COVID-19 THAT WE NEED TO CONSIDER? AND HOW CAN WE SUPPORT YOU WITH THE GREEN RECOVERY?

“The big change for us has been homeworking. It has had a huge impact on carbon emissions. In the past we would have had five people travelling to meetings, but now we can do it all online, and I think that will continue long into the future. Looking forward, I am interested in how the use of renewable energy will grow in the months ahead.”

**Stakeholder, Cardiff and East Wales**

“Covid-19 has concentrated our minds on how many buildings we actually need.”

**Stakeholder, Cardiff and East Wales**

“As the energy manager in my local authority, it has obviously been quite good in terms of reducing the load in buildings. However, with the reduced use of buildings and uncertainty, it can make the investment case for carbon reduction and community energy schemes quite difficult.”

**Stakeholder, Cardiff and East Wales**

“I like working from home, but if you haven’t got the broadband connection, especially in rural areas, it isn’t going to happen. If the infrastructure isn’t there, then it doesn’t facilitate working from home.”

**Stakeholder, Cardiff and East Wales**

“Moving forward, we’ve realised that the decarbonisation agenda has accelerated. We are looking to produce a decarbonisation strategy which will go to the council later. The demand is there for the WPD network, so that’ll be a knock-on effect for them.” **Stakeholder, Cardiff and East Wales**

“It’s being able to contact your engineers quickly and easily. Due to Covid and working from home, little access to office telephones isn’t making it easy to get hold of old bodies that we contacted in the past.” **Stakeholder, Cardiff and East Wales**

“Reliability is a big issue. Locally, there’s an issue with grid capacity. I proposed building a wind turbine, but there appears to be issues about whether it can be connected to the grid or whether it can run to full capacity. I find it puzzling that we are really concentrating on renewable energy, but when you come up with proposals to contribute, it’s difficult to get them running.” **Stakeholder, Cardiff and East Wales**

“This is where the pandemic has changed things. There are very few people working in the office these days. Our plan was to have a turbine close to the office so that it can generate energy for the building, but that’s not really needed anymore. The move over to EVs is probably the next big thing. The council has now put some charging points over the borough, where previously there weren’t many at all. There is more potential now for people to look into having an EV.” **Stakeholder, Cardiff and East Wales**

“There is little effect from Covid-19 other than the need for social distancing and the massive reduction in public transport use. In terms of WPD support, for us, we need the data to make good commercial decisions – we need to know where the big opportunities are to do good things without much expense, such as bus depots and taxi ranks.” **Stakeholder, Cardiff and East Wales**

“In terms of working on residential construction contracts, a few closed early but within a short time, everyone was back on site. The way we visit is different and of course there are some delays to connections and services due to everyone’s restrictions. There’s a long-term effect on the way we design our homes, as different things, i.e. low-carbon technologies, are more important and higher on our agenda. In terms of WPD support, it’s a learning curve and we just want to understand the implications.” **Stakeholder, Cardiff and East Wales**

“Being online, you do miss out on a lot of shared information. Sharing data requires more organisation than usual.” **Stakeholder, Swansea and West Wales**

“Major developments got caught up in changes to planning consultation rules and a lot of developments were set back by up to 8 weeks.” **Stakeholder, Swansea and West Wales**

“The issue for us has been the other organisations we work with. We’re finding it more difficult to get answers from planners and councils than usual, but other than that things are ticking over.” **Stakeholder, Swansea and West Wales**

“We’re looking at what evidence we need for the delivery of the green economy in Wales. Regional planning will go ahead and be published shortly. We want to work together with WPD and National Grid to justify their spending and enable a green recovery. We want to know what discussion we can have with Ofgem to influence discussions. The Welsh Assembly Government is integrating closely with all grid operators.” **Stakeholder, Swansea and West Wales**

“There are now different priorities for people on where and how they want to live. We are seeing a need for open spaces in demand for housing. We also need to be confident we can get resources and supplies for new housing. Are WPD future-proofing and should they be stockpiling?” **Stakeholder, Swansea and West Wales**

“With new technology the end user must understand how to use it, so it continues to be smart. Residents must know how to use LCTs.” **Stakeholder, Swansea and West Wales**

“Offices need less heating and power (but are still open) and homes need more.” **Stakeholder, Swansea and West Wales**

“During the Covid-19 lockdown, 85% of the country’s energy was coming through our port at Milford Haven, so we need to ensure that our growth plans are suitably supported.” **Stakeholder, Swansea and West Wales**

“The Milford Haven energy port is a world class facility and must be able to continue to develop.” **Stakeholder, Swansea and West Wales**

### 3. WHAT ARE YOUR THOUGHTS ON THE OUTPUTS STAKEHOLDERS HAVE SUGGESTED WE DELIVER AROUND NETWORK RELIABILITY AND RESILIENCE?

“As a customer, they look good.”

**Stakeholder, Cardiff and East Wales**

“They look familiar to what I have seen elsewhere and look about right.”

**Stakeholder, Cardiff and East Wales**

“I broadly agree with the statements here. We don’t tend to have issues with long power outages and if anything does occur, it’s met within the timescales that WPD have put forward.”

**Stakeholder, Swansea and West Wales**

“We’ve had a lot of issues with floods, with some buildings completely submerged, but WPD were excellent at handling that. If anything, WPD were ahead of us and have forced us to raise our game.”

**Stakeholder, Swansea and West Wales**

“Reliability doesn’t seem like an issue. Bringing forward development and what we can plan for the future seems increasingly important. I agree with everything here.”

**Stakeholder, Swansea and West Wales**

“From my perspective the process has been extremely straightforward. In calls we’re very quickly put in direct contact with the right person.”

**Stakeholder, Swansea and West Wales**

“Think about keeping the lights on. As more and more LCTs are connected, the potential for disruption becomes greater, so the importance of dynamic systems and data visibility increases. As people are more reliant on PV and batteries, I can see the development of microgrids, which can have an impact, and this needs to be captured in the outputs.”

**Stakeholder, Swansea and West Wales**

“Outputs don’t cover black start situations. It could take 48 hours to bring some customers back up to some supply if there’s a black start, so customers and stakeholders need to be educated and engaged on this and this should be added as an output.”

**Stakeholder, Swansea and West Wales**

“From my perspective, keeping the volume of faults as low as possible is in everyone’s benefit. The costs passed on to stakeholders for upgrading the kit is a bit unfair, but obviously WPD should not be expected to shoulder all of the burden either. There needs to be a careful conversation between WPD and stakeholders.”

**Stakeholder, Swansea and West Wales**

“They seem reasonable to me. I feel that WPD is very proactive if there are outages, but it must not forget about its customer focus when resolving these kinds of scenarios.”

**Stakeholder, Swansea and West Wales**

“The other thing that I would flag up is ensuring that reliability and resilience remain at these same high levels as the energy system changes. WPD needs to make sure that the distribution and transmission grids continue to perform reliably.”

**Stakeholder, Swansea and West Wales**

“WPD must ensure that it has a good handle on the requirements for all areas in South Wales and prove that the grid can remain reliable and resilient into the future.”

**Stakeholder, Swansea and West Wales**

“In terms of reliability and resilience, I’d echo that WPD is great at keeping those two areas at high levels. Climate change hasn’t been mentioned explicitly in the outputs, but that will play a huge role with trees being knocked down and increased wind speeds.”

**Stakeholder, Swansea and West Wales**

“I have had very positive experiences of WPD, but have not seen any other work by other DNOs in these outputs. Would it be possible for WPD to add how challenging these outputs are compared to other DNOs and how well WPD is performing compared to them?”

**Stakeholder, Swansea and West Wales**

## 5 | SESSION TWO: SUPPORTING THE GROWTH AGENDA

The presenters outlined WPD's Distribution Future Energy Scenarios (DFES) and its approach to engagement and explained some of the company's draft outputs around community energy and connections.

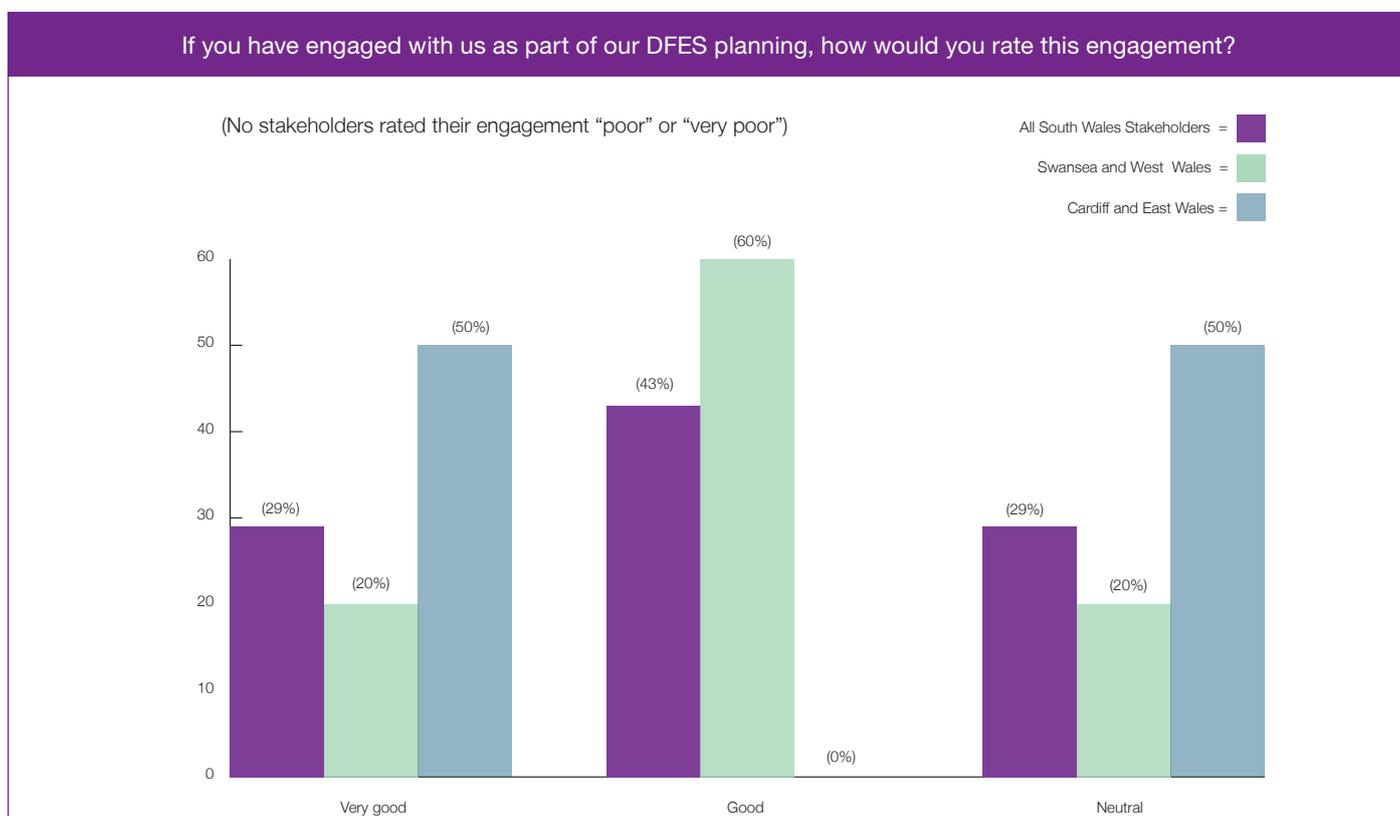
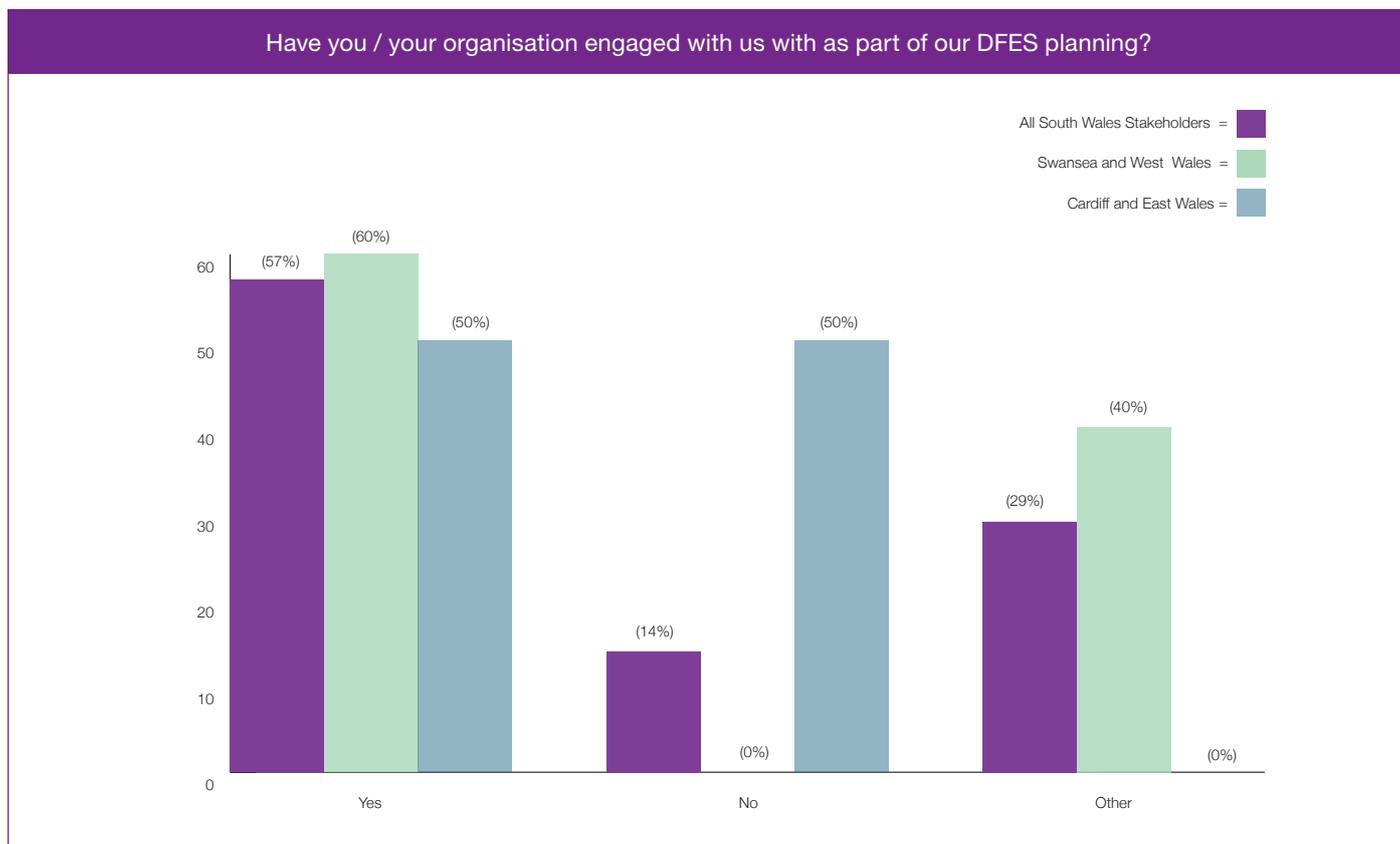
During the subsequent breakout room discussions, stakeholders were asked to give details of their own local growth plans and consider WPD's approach to supporting the growth agenda.

There was broad support for WPD's approach to DFES engagement, which was seen as an effective way of maintaining a local focus. The survey results revealed that almost half of respondents would describe their experience of DFES engagement with WPD as 'good', and no respondents expressed a negative opinion. However, suggestions from the breakout discussions indicated that WPD could improve its engagement further, particularly in terms of communication. For example, there were calls for the company to collate and publish more information on unsuccessful connection requests and make its maps clearer. Given the impact of constraints and grid capacity on housing and growth plans, stakeholders urged WPD to set out a strong business case for investment ahead of need to Ofgem.

At both events, all survey respondents indicated that they would be willing to engage more with WPD. During the breakout discussions, several Welsh Government and local authority representatives confirmed that they were interested in engaging with WPD on their growth plans, which included new housing, the development of an enterprise zone, commercial projects, a solar farm and transport planning. Stakeholders suggested that WPD could also engage with housing associations, schools, national parks and domestic customers as part of its DFES process. 38% of survey respondents indicated that they didn't think the pandemic would cause delays to developments with another 38% responding they were 'not sure'. The comments made during the breakout discussion confirmed that the extent of the impact remained uncertain.

There was widespread agreement that community energy has an important role to play going forward. The conversations highlighted the importance of early engagement with WPD and the need for detailed pre-application information, including on costs and capacity for new connections. Stakeholders felt that WPD could do more to support community energy, including prioritising local groups, engaging with and educating those involved in community energy projects and lobbying for policy change to tackle high connection costs. It was agreed that community energy groups would benefit from the guidance and expertise of a Community Engineer.

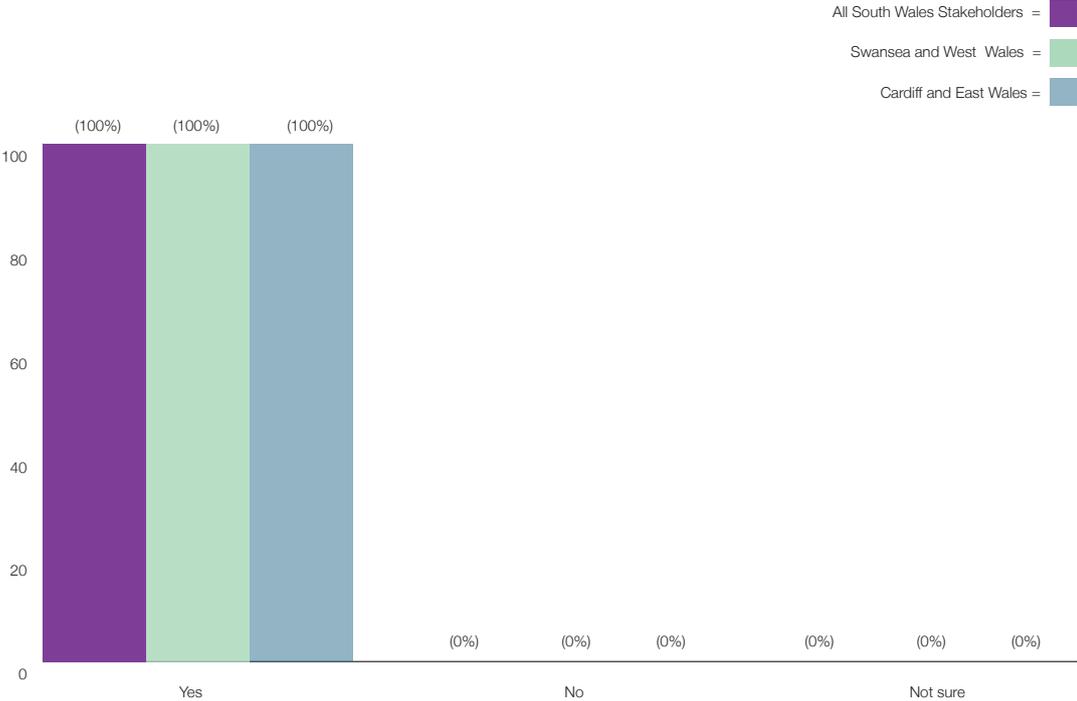
## 1A. DO YOU AGREE WITH OUR APPROACH TO DFES ENGAGEMENT? IS THERE MORE WE SHOULD BE DOING?



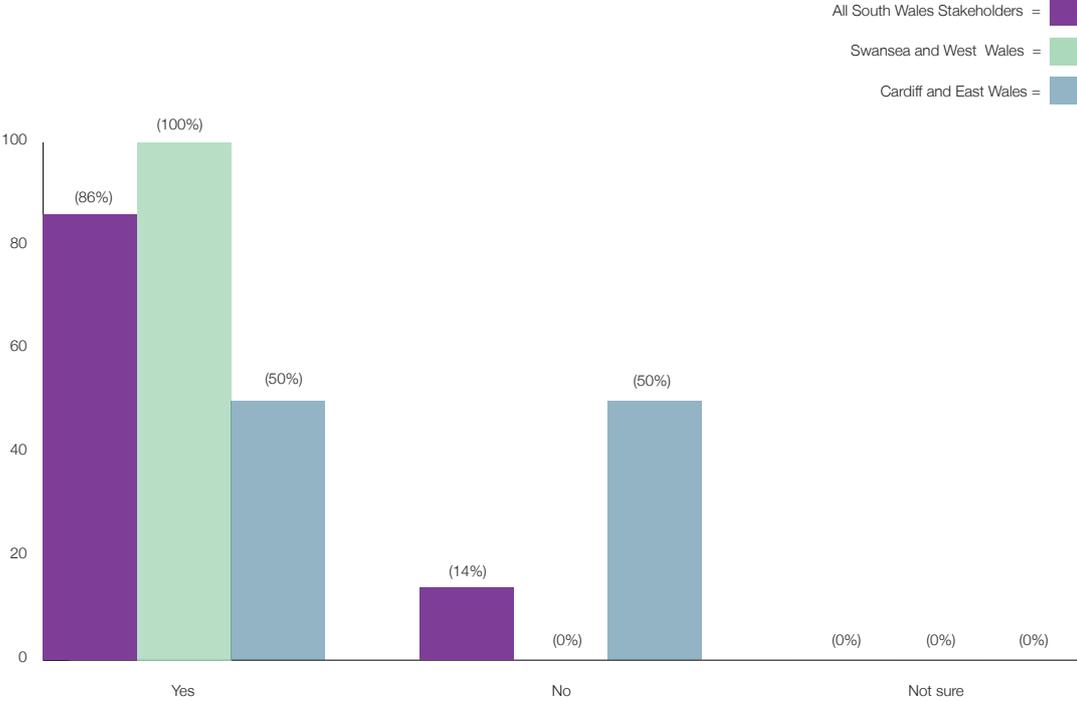
### Survey comments:

"Engagement in recent years has been excellent and WPD are at the forefront of future planning. Please continue to engage with your customers."

Would you be willing to engage with us more?



Have you heard of our Energy Data Hub?



“With taxis we are obviously looking at plans for EVs or hydrogen. We are starting work looking at charging infrastructure. There are a couple of projects going on already in Cardiff and the city region too, and it’s about trying to tie it all together to have more of a national plan. We need to understand if there are any capacity issues and we need to ensure our plans match WPD’s.” **Welsh Government**

“In terms of constraint for renewable energy and EV charging, etc., even if there seems to be capacity in a certain area, you won’t know for sure until you have made an application for a specific site. I know you have network capacity maps which give an idea about the capacity of individual transformers, but I wonder whether you yourselves keep a record of the reconnections you haven’t been able to offer people for renewable energy and EV charging, or connections that were turned down for cost reasons. It could be done in a more strategic way for investment.” **Newport City Council**

“It was difficult to say what the map represented (in terms of regional scenarios).”  
**Caerphilly County Borough Council**

“Something we’ve been working on is a renewable energy assessment as part of our second local plan. We have tried to estimate our demand and the potential resources that we could have available. We also used the national grid energy scenarios. When we get to a point where we have a final draft, we are looking at stakeholder involvement, which will involve our councillors. I’m assuming somebody from WPD would want or need to be involved at that point.”  
**Caerphilly County Borough Council**

“This would be of key relevance to us. In terms of discussions with WPD, we have an energy manager for the council who has more input. From a policy perspective we’d really appreciate your input. The Local Plan reviews will be happening all across Wales now and grid development and capacity is a major factor in housing plans.” **Vale of Glamorgan Council**

“We want long-term jobs and community / local ownership, but we also want the power produced by large wind / solar to be used in Wales rather than just exported. So, when WPD is looking at connections, they need to be devised so most of the power is used in Wales.” **Welsh Government**

“DFES is broad and despite input from local authorities, WPD run the risk of trying to do too much, so they must learn from transmission and gas ED2 draft determinations where proposed investments were disallowed as their business case was not strong enough. Funding is hugely constrained and Ofgem won’t allow investment ahead of need, so WPD must bring all this together and show we have a strong business case.” **IBM**

“The direction of travel is good and I like the local focus.” **Milford Haven Port Authority**

“To what extent do the plans consider alternative connections? This could be a game changer in terms of viability and could help future energy projects to take off.” **Renew Wales**

## 1B. ARE THERE ANY OTHER STAKEHOLDERS WHICH WPD SHOULD BE ENGAGING WITH?

“The Welsh Government believes local energy development is key and there needs to be a strong partnership between local authorities, government and networks as they are all doing relevant things.”

**Welsh Government**

“In the Welsh Government they are working on regional energy strategies. They are not there yet but Future Wales, which looks at where we will be in 2040, has been published and determines where we will be going with the planning system.”

**Welsh Government**

“The engagement meeting that I had with WPD about our large-scale industrial plans was good.”

**Pembrokeshire County Council**

“I can see a big uptake in the new technology for single domestic households. Why is there not more of an explicit focus on them in the connections engagement?”

**Milford Haven Port Authority**

“I am pleased to see the commitments to local engineers and working closely with local IDNOs.”

**Milford Haven Port Authority**

“The two national parks are also planning authorities; Natural Resources Wales should be included so you can piece together the information regarding both generation and demand. Capturing the learning and key contacts is key as this will sit differently with different authorities.”

**Transport for Wales**

“As a housing association, we feel starting with the local authority is the best way, rather than going direct to the housing association. Everything we do as a housing association goes through the local authority. Welsh Government should also be engaged with.”

**Hafod**

“Could WPD meet with us like it has with Pembrokeshire County Council? We’d love to have a meeting and get a sense of how realistic some of our aspirations are.”

**Carmarthenshire County Council**

“Housing associations and schools should be added to the list of who WPD engage with.”

**Pembrokeshire County Council**

## 2A. WHAT ARE YOUR GROWTH PLANS (INDUSTRIAL, COMMERCIAL, DOMESTIC)?

“There’s an energy manager within Swansea Council that has been employed in the last 12 months. The council has trialled new energy systems for council housing. There are also proposals for a new solar farm in the St Thomas area.”

**Swansea Council**

“I think our members are generally always looking for alternative opportunities to diversify. If there is opportunity and grid capacity available, they will be interested. However, it isn’t viable if they can’t afford it, and there’s always a cost element.”

**Country Land and Business Association**

“Growth is 300 residential units per year in South Wales, and this will include charging points.”

**Hafod**

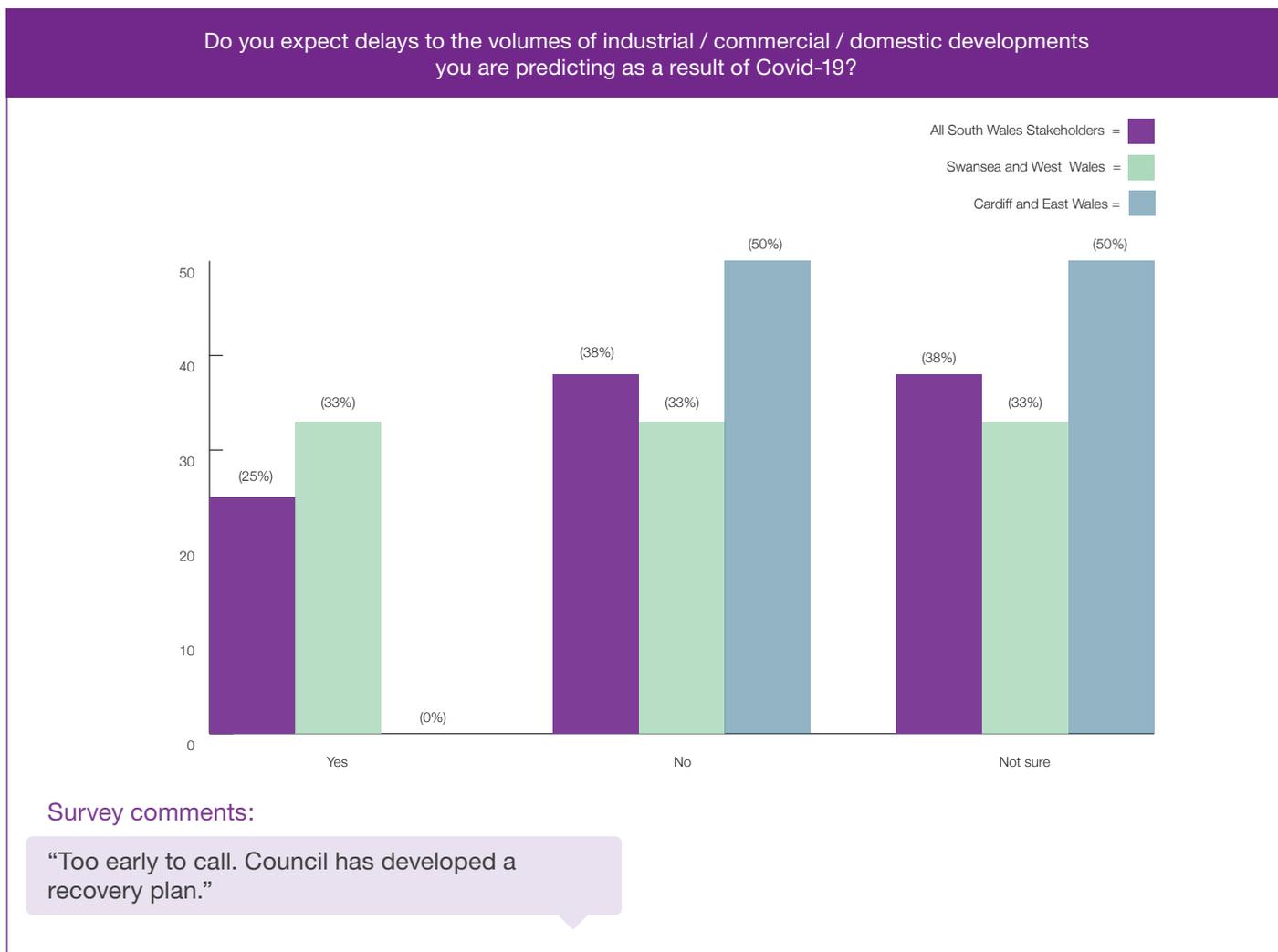
“We’re waiting on the transport and decarbonisation strategy and hoping that will give a really clear steer on how the Welsh Government will take this forward. Hydrogen is also included in the plans.”

**Transport for Wales**

“We’re developing out parts of the enterprise zone. This one relates to Cardiff airport and has been rebranded as Bro Tathan. We’re having discussions with developers at the moment and we’ll be looking to develop out very quickly. Large housing applications and education resources have already been put forward for a long time now. This enterprise zone development will be quite large and includes a 10% EV capacity.”

**Vale of Glamorgan Council**

## 2B. DO YOU EXPECT DELAYS TO THE VOLUMES YOU ARE PREDICTING AS A RESULT OF COVID-19?



“I think that lengths of delays to volumes are dependent on the full extent of the impact of Covid-19.” **Milford Haven Port Authority**

“If anything, we’ve seen an increase in applications for planning for housing. Lockdown hasn’t had a massive effect on development in our area.” **Swansea Council**

“The Covid crisis has not put a stop to our ambitions.” **Carmarthenshire County Council**

“I’ve been involved in a number of school build projects. It was a challenge at the beginning, but I can access most of the information I require to carry out my work. We are involved in three primary school planning projects and we’ve been able to continue through daily online meetings.” **Carmarthenshire County Council**

“From my perspective, it’s been good that so many people are talking about the green recovery. It gives us all a focus for progress.” **Pembrokeshire County Council**

### 3. WHAT ARE YOUR THOUGHTS ON THE OUTPUTS STAKEHOLDERS HAVE SUGGESTED WE DELIVER AROUND CONNECTIONS AND COMMUNITY ENERGY?

“When enacting community energy projects, it has to be such a happy confluence of things being right for plans to go ahead. I can understand why WPD doesn’t write costs on their capacity maps, but we have to test the price of projects. There has to be a happy medium between writing it on a map and an endless back and forth to find out a hidden cost that eventually cripples a project. Ultimately, working out more open data sharing around connection costs with WPD and Welsh Government could save an incredible amount of money.” **Stakeholder, Swansea and West Wales**

“When starting a planning application, you need surety of the implications of your proposals, and whether they are financially viable or not. These are investment issues you need to be assured of before putting time and energy into a proposal. Having the opportunity to speak to people at the early stage is crucial to not wasting time and money. It would be welcomed by our members, who may not be the biggest potential customers but who do have the assets to be able to do some of this in the rural areas.” **Stakeholder, Cardiff and East Wales**

“Increased engagement over connections would be useful for us. There are a couple of different projects taking place and we need to start thinking about where these will be and see if there are gaps in EV charging infrastructure. It would be useful having a contact for the Cardiff area so we can see whether our plans match yours.” **Stakeholder, Cardiff and East Wales**

“We have looked at putting panels on roofs of housing estates and have experienced serious obstacles. We have had to adjust their positioning and stagger them due to the constraints on the network. I appreciate the problems that WPD is trying to juggle, but it’s frustrating.” **Stakeholder, Swansea and West Wales**

“We want to put EV chargers in and it would be really useful to know where they should put them – it would be nice to have mapped data.” **Stakeholder, Cardiff and East Wales**

“I would add planning authorities to engagement with local authorities.” **Stakeholder, Cardiff and East Wales**

“This is really good and supported. The connections and community energy outputs are really good and welcomed and WPD has worked hard.” **Stakeholder, Swansea and West Wales**

“What about the costs of grid applications? Some of the prices for grid applications are scary and completely halting a lot of our projects. WPD need to be subsidising connection costs if they genuinely want local authorities to invest in zero-carbon projects.” **Stakeholder, Swansea and West Wales**

#### 4A. WHAT ROLE DO YOU THINK COMMUNITY ENERGY GROUPS CAN PLAY IN THE FUTURE? IS THERE ANYTHING MORE WE COULD DO TO SUPPORT IT?

“There is a great aspiration around community energy projects and renewable power in South Wales. They could help communities reach Net Zero and need to be actively supported by WPD.”

**Stakeholder, Swansea and West Wales**

“The experience we’ve had with local authorities and community groups engaging with WPD has been very positive. WPD has very good communication and are good at early stage engagement as well.”

**Stakeholder, Cardiff and East Wales**

“One challenge is that you don’t necessarily have heat deposits to secure a connection. You just need a small deposit. Network planners have been very sympathetic and when they see that a project is moving forward, they don’t cut it off. If there is limited grid capacity, is there a way for local groups to be given some kind of priority?”

**Stakeholder, Swansea and West Wales**

“Increased education and engagement with the groups. Maybe hold specific workshops for them and online events, for their members to attend to understand the whole process better.”

**Stakeholder, Cardiff and East Wales**

“WPD has a role of finding the opportunities. There is an imbalance between generation and consumption.”

**Stakeholder, Cardiff and East Wales**

“Is WPD engaging with the gas networks in terms of looking at a whole systems approach? I’m sure that it is, but it’s a question worth asking.”

**Stakeholder, Swansea and West Wales**

“Community energy groups can definitely play a role. One good example in South Wales is Energy Local, which has helped local people to match their electricity use to local levels through information that they are given by the group. This could help solve grid constraints. Energy Local uses smart meters, so if WPD could encourage further uptake of the second-generation smart meters; that would help them.”

**Stakeholder, Swansea and West Wales**

“There needs to be closer working in planning.”

**Stakeholder, Swansea and West Wales**

“We’re working with local authorities and community groups. Some of the issues mentioned earlier about extortionate connection costs are things we come up against on a daily basis. I’m interested to know how WPD can help drive policy change on a much higher level to tackle this.”

**Stakeholder, Swansea and West Wales**

“It’s something that very much appeals to me. It’s just getting the community on board and enthusiastic. I think it should be pursued, and if WPD could help us that would be good.”

**Stakeholder, Cardiff and East Wales**

“We have one community scheme in Caerphilly. The initial thoughts are that it might not be feasible or viable. We are offering whatever help we can to the community group at this stage. We are keen to assist, as you should be, too.”

**Stakeholder, Cardiff and East Wales**

#### 4B. STAKEHOLDERS SUGGESTED WE COULD HAVE A DEDICATED COMMUNITY ENGINEER IN EACH OF OUR LICENCE AREAS – WOULD YOU SUPPORT THIS?

“I would support having a Community Engineer.”

**Stakeholder, Swansea and West Wales**

“I think you should have a dedicated member of staff working with community groups. Not everyone interested in grid connections is an electrical engineer, so having someone at the front end to do some hand-holding through the more formal processes would be beneficial.”

**Stakeholder, Cardiff and East Wales**

## 6 | SESSION THREE: SUPPORTING THE TRANSITION TO NET ZERO

The third presentation outlined WPD's efforts to support the transition to Net Zero, including the use of low-carbon technologies (LCTs), such as electric vehicles and heat pumps, as well as efforts to minimise losses.

During the breakout discussions, stakeholders were asked about their organisation's targets for Net Zero and plans for low-carbon technologies. They were also asked to feed back on some of WPD's draft outputs around Net Zero and innovation.

Across both events, most survey respondents (75%) reported that their local authority had set a target date for reaching Net Zero, and half of respondents indicated that their local authority had declared a climate emergency. When stakeholders outlined their Net Zero targets, 2030 appeared to be a key date for a number of organisations. Stakeholders reminded WPD that the Welsh Government's approach to Net Zero differed from that of the UK Government, pointing to the Welsh public sector's ambitious 2030 Net Zero carbon target. Welsh Government representatives stressed the importance of joint planning between gas and electricity and highlighted the need for communication and collaboration across industries.

Transport featured heavily in plans to achieve Net Zero, for example, some councils intended to roll out EV chargers in council buildings, depots and schools or were transitioning to an electric fleet. Transport for Wales highlighted the need for more research to enable the decarbonisation of the bus and taxi fleet, and some local authorities were researching the best locations for chargers. Some organisations, such as Pembrokeshire County Council and Carmarthenshire County Council, were considering hydrogen as a potential solution for decarbonising transport, although hydrogen did not yet seem to feature in concrete plans.

Stakeholders reported plans to install renewables on council housing stock and publicly owned buildings, and battery storage was suggested as a way to complement renewable generation in Wales. The potential for heat pumps had recently been illustrated by a successful project by Swansea Council and Swansea University involving the retrofit of a housing estate, although the Vale of Glamorgan Council reported that it had encountered issues when considering the installation of heat pumps in council buildings owing to their listed status. Some were considering the use of passive heating, while the Welsh Government reported that it planned to work with other organisations to implement heating technologies.

Stakeholders at both events felt that engagement and information sharing should be at the heart of WPD's Net Zero and innovation outputs, with the ideas portal seen as a positive development in this field. Several attendees felt that by improving its communication, WPD could help to address the lack of capacity for renewable connections. For example, the company was advised to compile information on connection applications that were unsuccessful owing to lack of capacity and share its findings, in addition to holding more open-ended conversations around flexibility services during the application process. Some stakeholders felt that WPD's role in Net Zero should be wider in scope, perhaps encompassing a facilitating and signposting element with a view to providing a wider stakeholder forum. Furthermore, given that some customers and areas risk being excluded from the benefits of the Net Zero transition, a number of attendees called on WPD to ensure a just transition that avoids inequality.

## 1A. WHAT ARE YOUR TARGETS FOR NET ZERO?

“Schneider Electric have made a few commitments. One is that we aim to be carbon neutral by 2025. Another big step we’ve taken is that we’ve decided to get rid of SF6 in our switchgear by 2025. This will help WPD and everybody to make a more sustainable network for everyone.” **Schneider Electric**

“The low-carbon delivery plan is set to 2021–25, I think.” **Welsh Government**

“We’re aiming to hit Net Zero by 2030.” **Carmarthenshire County Council**

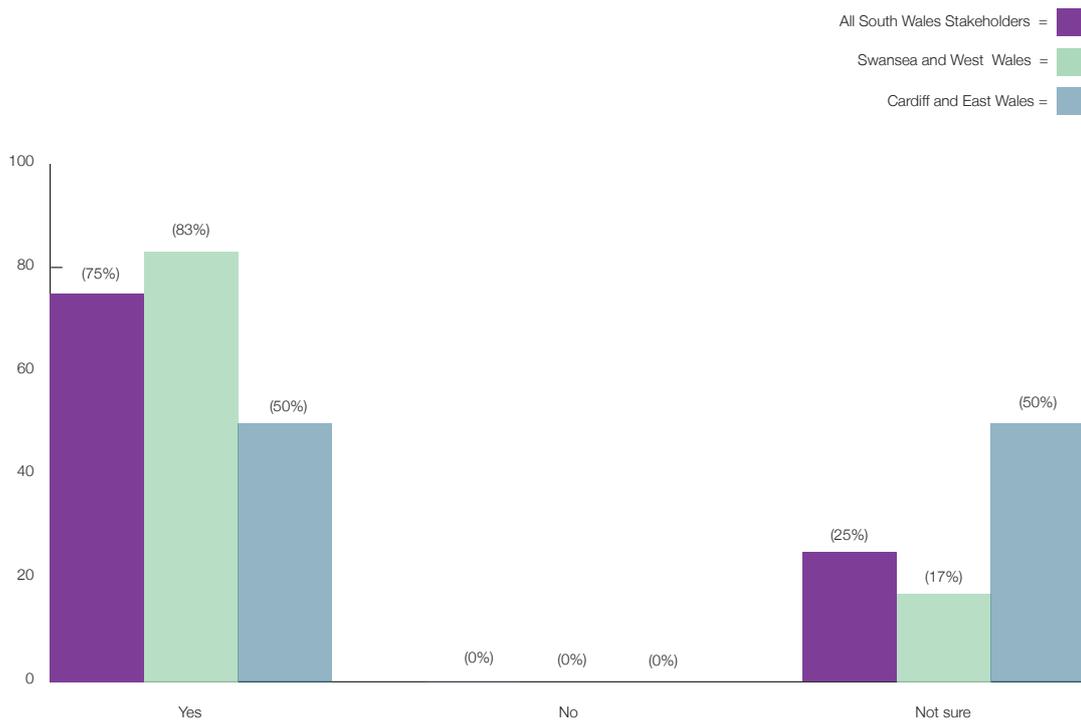
“The Welsh Government’s aspiration is for all public services to be Net Zero by 2030.” **Pembrokeshire County Council**

“The Welsh Government’s aspirations to hit Net Zero before the UK Parliament need to be reflected in the Business Plan. It needs to show a degree of flexibility.” **Milford Haven Port Authority**

“Through an assessment, we will be highlighting what renewable energy source we would prefer for Caerphilly. We will also be looking at setting targets. We want to be ambitious but also realistic with it.” **Caerphilly County Borough Council**

“The Welsh Government have targets relating to getting all fleets electrified by 2030.” **Pembrokeshire County Council**

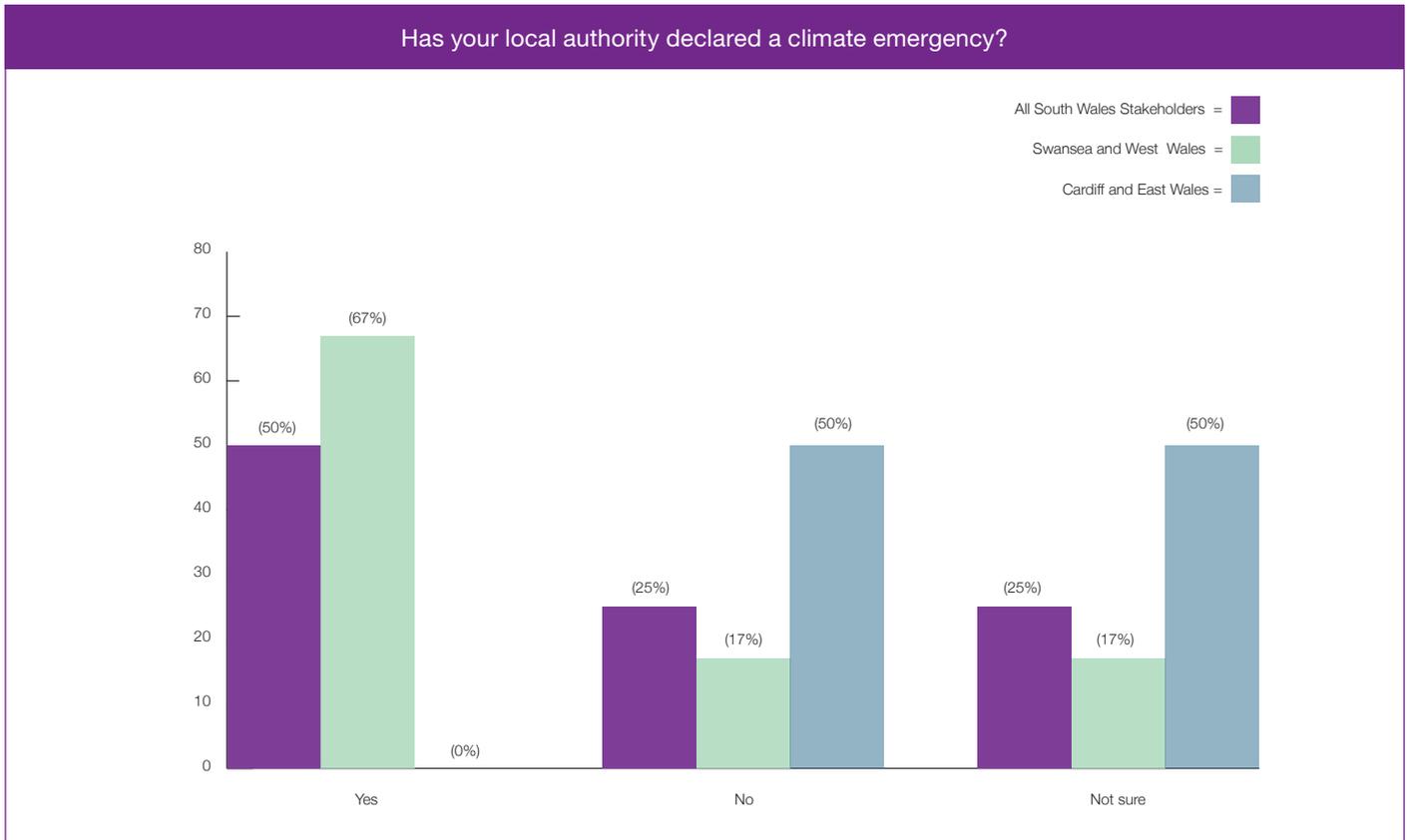
Has your local authority set a target date for reaching Net Zero?



## 1B. HAS YOUR ORGANISATION DECLARED A CLIMATE EMERGENCY?

“Our zero-carbon target is 2030. We’ve announced a climate crisis. We’re looking at district heating for all projects. We’ve also been looking at installing EV charging points in all council owned commercial buildings.” **Vale of Glamorgan Council**

“Some councils haven’t declared a climate emergency. These councils aren’t declaring it until they have a solid understanding of how to tackle it.” **Rhondda Cynon Taf County Borough Council**



## 2A. WHAT LOW-CARBON TECHNOLOGIES ARE YOU PLANNING TO USE AND HOW / WHEN WILL YOU BE ROLLING THESE OUT? (E.G. HEAT PUMPS, BATTERY STORAGE, ELECTRIC FLEETS, ETC.)

“Most of our projects link back to our Net Zero initiatives. The plan is still there and includes installing large-scale renewables on our council housing stock and rolling out EV charging points. Our fleet review will involve rolling out large-scale EV chargers across the council buildings and schools. We have ambitious goals and would love to engage further to see how far we can go.” **Carmarthenshire County Council**

“PV and the wind are the best that the Carbon Trust suggested to us for our area. They are the ones that we will be pursuing for Caerphilly.”  
**Caerphilly County Borough Council**

“We’re intending in early 2021 to put in 1,200 charging points and will need to do a formal application. We’re looking at 50 kW for the large parts of the country with poor provision. We’re hoping to ensure the decarbonisation of bus and taxi fleets within 8 years, so lots of research is needed in a short period.” **Transport for Wales**

“We are looking at the development of battery storage. Wales generates more than it uses, so export would be beneficial.” **Green Nation**

“Our council to date has mostly focused on our own organisation, and we are in the process of putting together a wider plan for the city. There’s also the South East Wales work commissioned by the government, talking about the numbers of EV chargers and heat pumps that are required by certain dates to meet certain targets.” **Newport City Council**

“We have regional energy strategies, and that work will continue to evolve and grow. There are ongoing discussions between the Welsh Government and Ofgem, and others, about how this connects with your planning going forward. We are also dealing with hydrogen, through your joint future planning in terms of gas and electricity working together. We have transport planning going on, and also the development of the new low-carbon plan, which will cover not only the Welsh Government but all organisations in Wales to reach the 2030 and 2050 deadlines. The National Grid are also doing planning in terms of their Zero 2050 project working across South Wales. Additionally, we’re working with industry clusters, not only looking at hydrogen but also at how industries can help contribute to Net Zero. It’s important that we keep on top of it in terms of communication and collaboration across industries.” **Welsh Government**

“We have large-scale heating plans for council housing.” **Pembrokeshire County Council**

“We have a fleet of electric vehicles and provisions for EV charging points at some of our depots. Swansea Council in combination with Swansea University have done a very successful project of retrofitting a housing estate with ground source heat pumps and hopefully we can start to apply this across our area. It’s all in the planning process and we need to liaise with WPD to put these great plans into action.” **Swansea Council**

“All new school developments have to meet certain standards of generation, like on-site wind, solar panels and heat pumps. We’re looking a lot into passive heating. We’re looking into putting PV into the seams of new buildings. We’re looking into what it would cost to retrofit heating in council buildings. We’ve come up with a problem in that a lot of the council buildings are listed. We’re also in the process of purchasing an electric fleet.” **Vale of Glamorgan Council**

“We try and put EV chargers on all our buildings and factories.” **Schneider Electric**

“Most of the work we do is with electric producing technologies. We’re working at putting wind and solar into publicly owned buildings. Because of the nature of the groups we work with, heat is not really what we do, but we’re trying to work more with other organisations to implement heating technologies.”  
**Welsh Government**

“A lot of data is being collected currently to mark out suitable locations for chargers. We are also grappling with whether to use hydrogen vehicles, based on costs.” **Pembrokeshire County Council**

“We would like to use hydrogen refuse vehicles, but we may not be ready to do so for five years. These vehicles would be covering a large area.”  
**Carmarthenshire County Council**

“There’s a recognition that electric vans for maintenance guys are viable and cost-neutral, so we’re planning on doing that. The maintenance guys want to charge from home and want us to fit a meter so that the excess energy is charged back to us. We’re going to scope out where the drivers live and then get back to WPD to show where chargers will be required. We are also thinking about hubs too.”  
**Pembrokeshire County Council**

## 2B. DO YOU PREDICT ANY DELAYS TO THE ADOPTION OF LCTS AS A RESULT OF THE COVID-19 PANDEMIC?

“The Welsh Government has a strategy for the decarbonisation of buses and taxis by 2028. Covid-19 hasn’t affected us a huge amount. As the strategy is related to carbon targets, it needs to carry on through the crisis.” **Welsh Government**

“A lot of office workers are now working from home and will continue to do so for the foreseeable future. This will impact on EV charging practices in the future, particularly where charging points are needed.” **Schneider Electric**

## 3. WHAT ARE YOUR THOUGHTS ON THE OUTPUTS STAKEHOLDERS HAVE SUGGESTED WE DELIVER IN RELATION TO NET ZERO AND INNOVATION? DO THESE SEEM RIGHT?

“We are talking a lot about future energy scenarios and asking for input about future strategies and future potential deployment. Have you undertaken any work to understand the LCTs and EV charging that hasn’t been able to be installed previously? That is, projects that have come to you for grid connections but then not been accepted. I think that could be an interesting baseline if you’re making the case for an additional investment.” **Stakeholder, Cardiff and East Wales**

“WPD’s engagement is wonderful and this portal is just another layer on top.”  
**Stakeholder, Swansea and West Wales**

“With regard to Appendix D, you don’t talk about solutions in terms of connections that demand management could help with. If people come in and say they want to do something, and you tell them the infrastructure costs, is there flexibility for responses or suggestions in terms of things that would benefit you, as well as them?”  
**Stakeholder, Cardiff and East Wales**

“I realise that this isn’t WPD’s core role, but getting groups together who could join up the dots themselves would be incredibly useful. The signposting role is definitely one worth considering.”  
**Stakeholder, Swansea and West Wales**

“Can you do anything with your website, to help facilitate things in a more interactive way?”  
**Stakeholder, Cardiff and East Wales**

“Maybe even facilitating the process by referring stakeholders to central or national bodies could be possible.” **Stakeholder, Swansea and West Wales**

“An interactive ideas portal and information sharing would be useful.” **Stakeholder, Cardiff and East Wales**

“Everything seems to be heading in the right direction, but it would be great to think more about local supply models. They would be a real game changer and would get people more involved in generating their own electricity.”  
**Stakeholder, Swansea and West Wales**

“We need more of an open book when it comes to planning information.”  
**Stakeholder, Swansea and West Wales**

“Something that struck me was the possible inequality that arises from electric charging. That someone who has a private drive will be paying 14p and someone in a block of flats will be paying 30p is outrageous, and we need to work together to make sure that doesn’t happen moving forward.”  
**Stakeholder, Swansea and West Wales**

“They seem fairly straightforward. I think sharing new ideas seems like a good aim.”  
**Stakeholder, Swansea and West Wales**

“Most issues need to be tackled at a higher policy level.” **Stakeholder, Swansea and West Wales**

“I like the innovation portal. Knowing that this is there will be beneficial for me.”  
**Stakeholder, Swansea and West Wales**

“The consultation up front about these projects has been fantastic and we could share our wider aspirations if there was a wider forum. This would make things smoother for both sides.”  
**Stakeholder, Swansea and West Wales**

“WPD needs to bear in mind the differences in capacity across the network when putting upgrades in place. For example, it would be a lot easier to connect an EV charger in Cardiff than in the Rhondda Valley. There is lots of potential for exporting renewable energy and electrifying trains in rural South West Wales, meaning that there is potential for growth. These areas must not be left behind and should be included in the upgrades.”

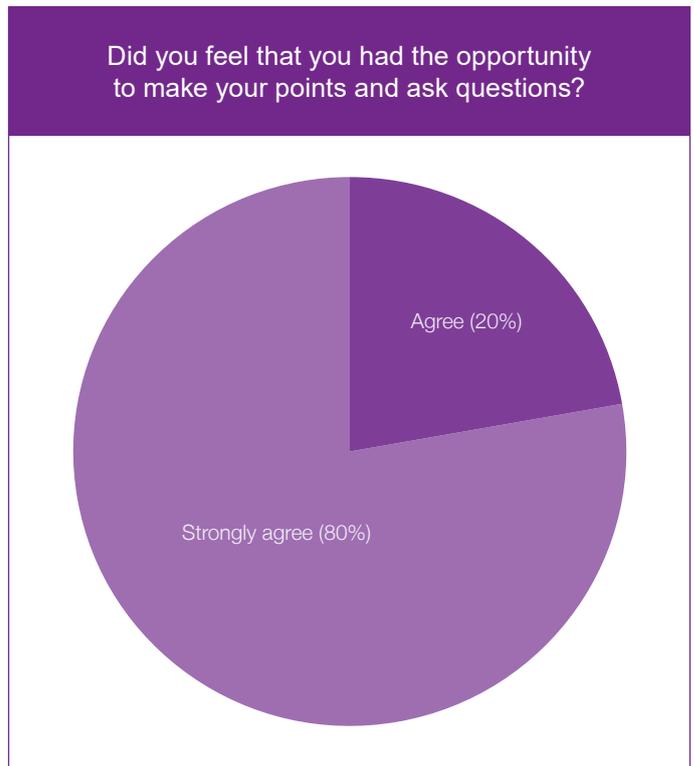
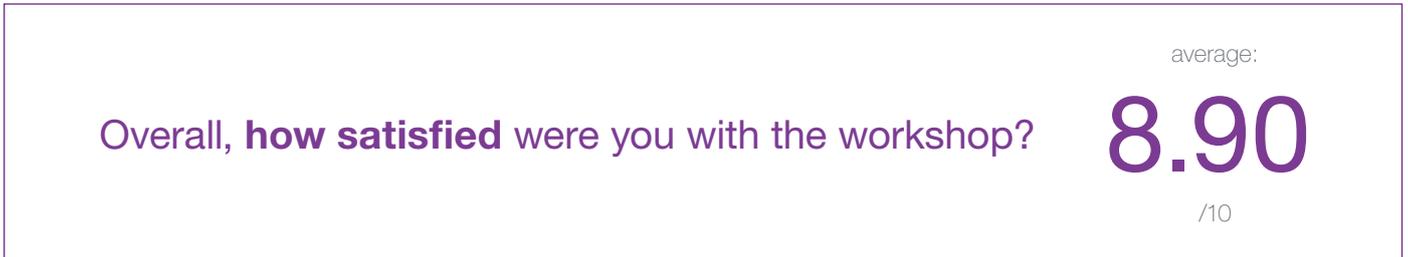
**Stakeholder, Swansea and West Wales**

“Our members are keen to put in renewable energy operations, like solar and wind, and they ask a lot about grid capacity. It’s a big issue for us. The network supplying basically the whole of Wales is pretty much up to capacity, and any opportunity to break the logjam would be great. Our members have the land for renewable technology, but they can’t use it right now because there’s no grid connection available, so you need more innovation there.”

**Stakeholder, Cardiff and East Wales**

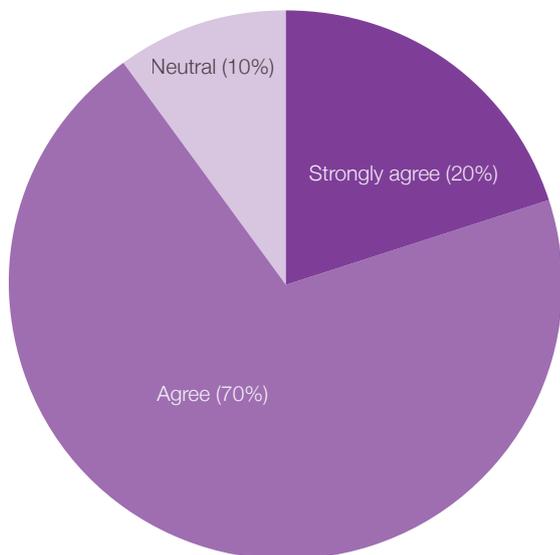
## 7 | APPENDIX 1: EVENT FEEDBACK

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

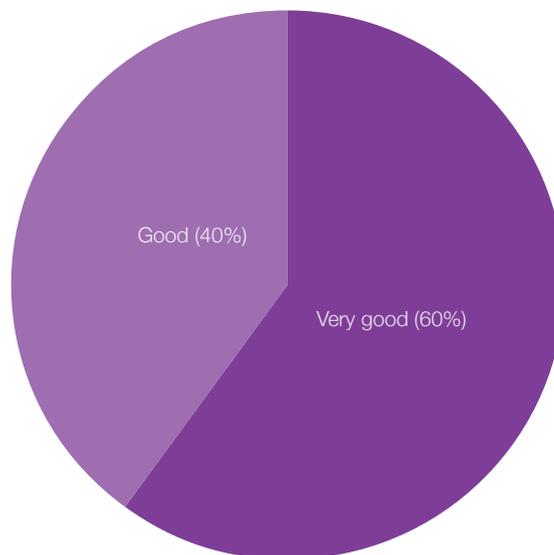


“I feel I probably said too much!”

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



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



“I’ve not been involved directly in the energy industry, so it is always useful to see what the latest hot topics are.”

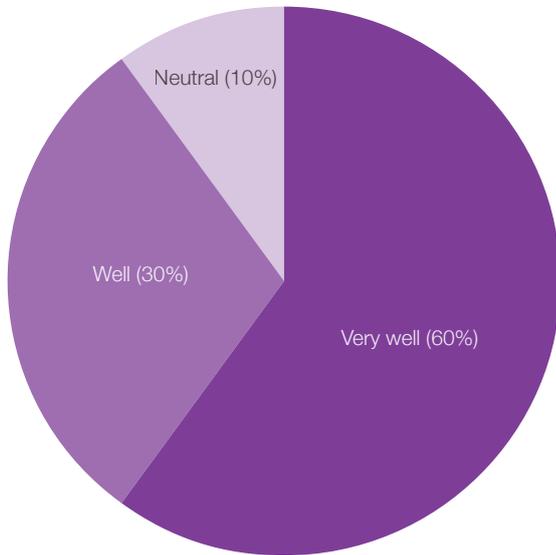
“I have attended other WPD workshops before and seen much of the same material being presented. I think what is missing is an explanation from WPD on the regulatory framework you operate in, so telling us what we can and can’t do.”

“They did well considering it was all new technology.”

“Great use of technology. I am impressed.”

“Excellent moderation from the facilitator. It could possibly be improved by being handled by someone from WPD, who has a day-to-day working knowledge of the issues being covered.”

### How well do you think the online format worked?



“I thought the online format was good.”

“Zoom is not an appropriate tool for business meetings in my opinion.”

### Any other comments?

“Well structured and organised. Plenty of opportunity for feedback. Two less positive points: this survey seems to be only aimed at local authorities. You also need to look at Teams / Skype for Business and WebEx as I don't think Zoom is consistent and reliable enough. Our organisation won't let us use it as they say it's malware.”

“Good workshop and hopefully the start of more engagement, especially as Newport City Council look towards wider climate / carbon strategies.”

“I will endeavour to make this knowledge more widespread with other colleagues within the local authority, including how to access the information.”

“Excellent event. Looking forward to engaging further with WPD.”

“Thanks for the meeting. Very well presented and great use of technology. I'm impressed.”

## 8 | APPENDIX 2: OUTPUTS

### NETWORK RELIABILITY & RESILIENCE

Volumes of faults will be no higher than in ED1 but in ED2 there will be a reduced impact on the customer.
Inspect, maintain and repair defects on our network in line with our policy.
Reduction of tree related faults on high voltage (HV) and extra high voltage (EHV) overhead networks due to use of LIDAR but in ED2 there will be a reduced impact on the customer.
Further improve our asset condition data to ensure we efficiently improve the health of our network.
Continue to focus on restoring supplies quickly and will continue to target achieving more than 85% of customers (that are not automatically restored) within one hour.
WPD will continue to focus on restoring customer supplies within 12 hours.
In ED2 we will complete a resilience clearance programme on the EHV network.
In ED2, we will continue to install further flood defences to reflect updated data from the Environment Agency.
Underground or divert overhead lines that are adjacent to or cross school playing areas.

### CONNECTIONS & COMMUNITY ENERGY

Provide new connections quotations and energisation in line with customer requirements.
Provide our broadest range of pre-application information ever to support customers looking to connect to the network.
Engage with local authorities and local enterprise partnerships to understand their requirements for strategic investment in terms of changes in demand or network use.
Improve DNO/IDNO cross border working practices and promote competition in connections (to ensure that the consumer is best served under the process).
During ED2 the significance of Community Energy projects will be further enhanced, including the introduction of an annual call targeted especially at community groups and their representatives.
Have a dedicated Community Engineer in each of our licence areas.

### NET ZERO & INNOVATION

Engagement with stakeholders on an annual basis to create refreshed Future Energy Scenarios.
Our popular annual innovation project ideas call will continue throughout ED2 with priorities set through stakeholder engagement. Our team of dedicated innovators will also scope and propose projects along with colleagues across the business.
A new interactive “ideas portal” will be developed aimed at staff, third parties, communities and other stakeholders where suggestions for new projects can be made.
Develop a balanced scorecard approach to identify the areas where flexible services will benefit the customer.
Ensure customers aiming to connect new LCTs (such as electric vehicle charge points) are engaged regularly, with new services and processes developed to respond to their needs and provide clarity on connections rules.



