

## Western Power Distribution Stakeholder Workshop Swansea February 2020



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### 1 | INTRODUCTION

On 27 February 2020, Western Power Distribution (WPD) hosted the third in a series of six stakeholder workshops aimed at gathering feedback with a view to co-creating its business plan for the next price control period, RIIO-ED2, which runs from 2023–2028. The workshop took place at the Liberty Stadium in Swansea.

The event consisted of four presentations given by WPD representatives, with stakeholders giving their feedback during three round-table discussions and via several electronic votes over the course of the day. The full presentation can be found online here: https://www.westernpower.co.uk/downloads/132043.

The workshops covered the following topics:

Workshop One	Workshop Two	Afternoon Sessions
Network reliability	Environment	Safety and health
Network resilience	Electric vehicles	Connections
Cyber resilience	Vulnerability and fuel poverty	Workforce resilience
Whole systems approach to net zero		Digitalisation, data and DSO
Innovation and new services		

Stakeholders were asked to review the 14 headline priority topics that had been suggested by stakeholders in previous years, removing or adding to them where necessary. They were then asked to suggest commitments for WPD to deliver under these priorities. In the spirit of co-creation, the topics for each workshop were split into two sets, with half of the tables discussing the first set and the other half discussing the second set in tandem. Halfway through the workshop, stakeholders were asked to review, amend and add to the commitments suggested by a neighbouring table under different priorities in order to truly co-create these with the group as a whole.

Following each round-table discussion, stakeholders were asked to vote electronically to indicate which priorities they felt were the most important under each topic area. Each stakeholder had three votes to cast on each question, with the option of allocating all three votes to one particularly important priority or splitting their votes between two or three priorities. Importantly, the voting options also included those priorities that had been suggested in the discussions.

WPD instructed EQ Communications, a specialist stakeholder engagement consultancy, to independently facilitate the workshops and 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 that each stakeholder represents.



## 2 | EXECUTIVE SUMMARY

The workshop began with an introductory presentation from Alex Wilkes, External Affairs Manager. Alex explained WPD's role distributing power to nearly 8 million homes and businesses across its network area. He then explained WPD's business planning process and how stakeholder engagement feeds into the company's business plan.

#### INTRODUCTION: THE RIIO-ED2 BUSINESS PLANNING PROCESS

Andrzej Michalowski, Planning and Regulation Special Projects Manager, outlined the regulatory framework in which WPD operates and explained how stakeholder commitments will be applied by the company. Stakeholders were then asked to introduce themselves and state their primary reasons for attending the workshop.

- Stakeholders in Swansea were concerned about WPD's role in meeting the government's net zero target of 2050, and how it might intersect with the Well-being of Future Generations (Wales) Act 2015, as well as with the often more ambitious net zero target of local councils.
- Delegates highlighted key components from the predicted future energy scenario, particularly the roll-out of the EV charging network, the outlawing of gas boilers and storage for surplus generation, as topics they were keen to discuss.
- A key concern, particularly from those stakeholders representing local authorities, was the perceived risk of investment in renewable technologies and new services, especially as the rate of innovation and change was accelerating.

#### CO-CREATING OUR BUSINESS PLAN COMMITMENTS: WORKSHOPS ONE AND TWO

The main workshop was split into two sessions. The first workshop session was presented by Paul Jewell, Policy Manager, and included the following topics: network reliability; network resilience; cyber resilience; whole systems approach to net zero; and innovation and new services. The second workshop session was introduced by Paul Branston, Regulatory and Government Affairs Manager, and included the following topics: environment; electric vehicles; and vulnerability and fuel poverty. The topics considered in both workshops and some detail of the priorities discussed are shown below.

#### Network reliability

- Stakeholders top two priorities in this area were 'power cut frequency' and 'overall health of network assets'.
- Delegates were keen to stress the critical importance of maintaining and upgrading network assets in light of predicted increased demand in the push for net zero target.
- Stakeholders created some new priorities that arose as a result of the discussions, including 'flexible services supporting power cuts (including with local authorities)', 'engage with customers over cost of network resilience' and 'future-proofing to deal with more demand e.g. EVs'.

#### Network resilience

- The top priorities in this area were: 'policy and design increasing resilience of assets (to severe weather)' and 'scenario planning / data analysis'.
- Delegates wanted to see an investment policy in place to design new, resilient assets going onto the network and proactively manage and maintain existing assets deemed at risk.
- As well as voting on five priorities under this heading, stakeholders created an additional priority that was not included in the electronic voting: 'climate adaptation planning and focus'.

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#### **EXECUTIVE SUMMARY**

#### Cyber resilience

- Stakeholders voted for 'network security risk of power cuts due to a cyberattack' and 'incident recovery plans' as their top priorities in the area of cyber resilience.
- 'Systems security risk of data loss / access' was identified as the third priority.
- A key commitment under cyber resilience was seen to be in the transparent sharing of information following a data breach or cyberattack, with knowledge sharing posited as critical to preventing future incidents.

#### Whole systems approach to net zero

- Stakeholders' top two priorities were 'how best to enable retrofitting (working with local authorities / developers)' and 'facilitate local generation', both new priorities created through discussion.
- In South Wales, specificity was key to understanding the prominence of retrofitting, with many stakeholders pointing to the large amount of poorly insulated housing stock on the network.
- Delegates suggested a range of additional new priorities, including 'align network development with national development framework (e.g. undergrounding)', 'cross-agency partnerships' and 'whole network data visibility'.

#### Innovation and new services

- The most popular priorities here were new: 'invest in development of new technologies', 'lobby government / macro-level innovation strategy' and 'development of battery storage'.
- A key commitment here was in WPD's ability to lobby government in order to access funding streams for innovation and reinforcement ahead of need.
- New priorities not voted on included 'facilitate retrofitting', 'share best practice' 'facilitate large-scale renewable projects', 'upgrade the grid' and 'look at product life cycles with industry'.

#### Environment

- The most popular priority in this area, 'WPD align to (or exceed) local net zero targets', garnered 23% of the vote and was a key indicator of stakeholders' desire to see WPD commit to ambitious climate targets in line with many local authorities and Welsh Government.
- The two next popular priorities were 'work with suppliers aligned with WPD's carbon targets and use of renewal energy' and 'impact on local environment and impact on biodiversity'.
- As well as voting on ten priorities, delegates created a further three that were not included in the electronic voting: 'work smartly', 'align to Welsh Government's Well-being of Future Generations Act' and 'help WPD staff to lower personal carbon footprint'.

#### Electric vehicles

- The most popular priorities were new ones which were identified in the discussions: 'innovation (e.g. inductive charging)', 'future investments, lobby government' and 'home and on-street charging (easy access)'.
- Other additional priorities identified included 'facilitate EV public transport growth', and '100% renewable energy for EV charging points'.
- A key commitment for delegates was for WPD to invest in research into innovative, wireless EV charging, particularly given the restricted access of many residents in South Wales to off-street parking.

#### Vulnerability and fuel poverty

- The top three priorities in this area were 'communication / collaboration with others raising the profile of WPD services (e.g. work with WLGA)', 'match local ambitions and needs (e.g. targeted renewables in a specific area with fuel poverty)' and 'protect the interests of vulnerable customers in the switch to a smarter network'.
- The specific needs of South Wales were again highlighted, with a key commitment being the targeted facilitation of retrofitting in areas of poorly insulated housing stock and the installation of renewables in areas of high fuel poverty.
- Delegates felt that more needed to be done to demystify smart meters for vulnerable customers.

#### **AFTERNOON SESSIONS**

In the afternoon, there were four optional afternoon sessions on specific topics. Most of them followed a similar format as the morning workshops (a discussion on priorities and commitments), albeit without a formally facilitated discussion. The 'digitalisation, data and DSO' session, however, followed a more informal format.

- 'Safety and health' was hosted by Paul Woodward, Safety and Environment Manager.
- 'Connections' was hosted by Tim Hughes, Connection Policy Manager.
- 'Workforce resilience' was hosted by Carl Ketley-Lowe, Engineering Policy Manager.
- · 'Digitalisation, data and DSO' was hosted by Paul Jewell.

#### Safety and health

- While only one stakeholder outlined their key priorities for the Business Plan, these were 'maintaining a safe, healthy and motivated workforce', 'ensuring we continue to plan, install and maintain our existing assets so that the safety or health of anyone who could be impacted by them is not compromised', and 'ensuring that we continue to meet our legal obligations to our staff regarding their health'.
- A commitment to educating relevant staff members on the health and safety threats posed by Sulphur Hexafluoride (SF6) was proposed, as was better education on health and safety threats posed by WPD assets for schools.

#### Connections

- The top priorities in terms of the Business Plan were 'low-carbon technology (including EV)', 'connection application process', 'speed and timeliness of the connections process' and 'allocation and reservation of capacity'.
- Delegates were also asked about their priorities and commitments for this year's ICE plan and prioritised 'low-carbon technology', 'network capacity allocation and reservation', 'transition to DSO', and 'communication'.

#### Workforce resilience

- While only one stakeholder outlined their key priorities for the Business Plan, their priorities were 'a happy, healthy and motivated workforce where WPD is the employer of choice', 'retention and upskilling of a specialised, highly skilled workforce' and 'putting something back into the community'.
- Commitments were proposed on how to improve racial, gender, and geographic (across WPD's operational area) diversity and providing the right training to newly promoted managers to support the business.

#### Digitalisation, data and DSO

- Stakeholders wanted to know more about the range of data that WPD holds and felt that it should make it clear that this customer data is available on request.
- Discussion centred around data as a critical tool in managing and mitigating emergencies. In that connection, delegates wanted to know if WPD were considering sharing their emergency response planning and business continuity plans.

#### WRITTEN FEEDBACK

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

- 100% of attendees who filled out a feedback form told us that they found the workshop either 'very interesting' or 'interesting'.
- 96% of stakeholders 'agreed' or 'strongly agreed' that they had had an opportunity to make their points and ask questions.
- 92% 'agreed' or 'strongly agreed' that the right topics were discussed on the day.
- 77% thought EQ Communications' facilitation was 'very good', with 17% opting for 'good'.
- 94% felt the venue for the day was either 'very good' or 'good'.

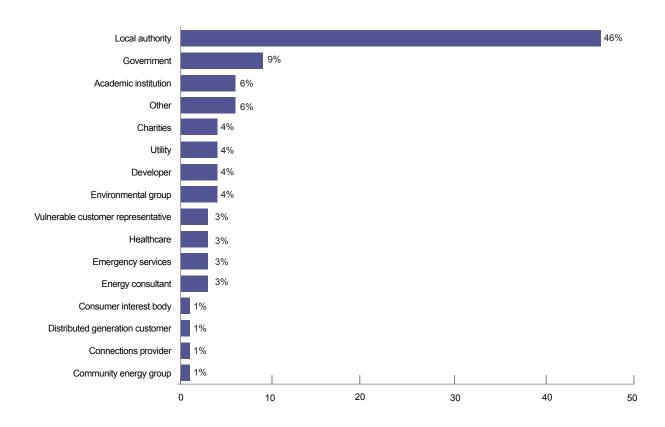
## 3 | ATTENDEES

A total of 67 stakeholders attended the workshop, representing 36 organisations. The organisations represented on the day are shown below:

- Blaenau Gwent County Borough Council
- Bridgend County Borough Council
- Cardiff Council
- · Care & Repair Cardiff and the Vale
- · Carmarthenshire County Council
- · Ceredigion County Council
- City and County of Swansea Council
- CLA
- Energy Saving Trust
- Geldards LLP
- Gower AONB
- · Green Frog Power
- IBM
- Inframan
- · Johnson & Phillips Capacitors Ltd
- Joint Emergency Services Group
- National Trust
- Pembrokeshire County Council

- · Pobl Group
- Rhondda Cynon Taf County Borough Council
- · Riverside Advice
- RSK Environment
- S&C Electric UK Holdings Limited
- SMS PLC
- South Wales Trunk Road Agent
- · Swansea Bay University Health Board
- Swansea University
- · Torfaen County Borough Council
- Traffic Wales
- University of South Wales
- Vale of Glamorgan Council
- · Wales & West Utilities
- Warm Wales
- Welsh Government
- Welsh Government (National Procurement Service)
- Welsh Water

During the electronic voting, delegates were asked to identify which stakeholder group they belonged to. The graph below summarises the results.



## 4 | INTRODUCTION: THE RIIO-ED2 BUSINESS PLANNING PROCESS

Delegates in Swansea wanted to discuss their concerns around the rapid changes to the energy system, particularly when thinking about the UK government's declaration of a climate emergency and the target of net zero by 2050. Intersecting with questions over the overarching government target were considerations over the Well-being of Future Generations (Wales) Act 2015, and the often more ambitious net zero target of local councils.

Issues such as the outlawing of new gas boilers, the cost and capacity for the connection of EV charge points and storage for surplus energy generated were all raised. For local authorities concerned about their budgets, the risk of heavy investment in renewable technologies without reliable reward was paramount. Stakeholders wanted more information on cost and capacity as they made decisions over the location and quantity of EV charge points to install, along with the location and quantity of housing development plans to approve.

Other delegates were keen to raise issues over vulnerability and fuel poverty, particularly in the move to a smarter network, and wanted reassurance from WPD over its continued commitment to the Priority Services Register and its role in collaborating with partnership organisations to mitigate the worst effects of fuel poverty. Representatives from community energy groups also sought continued or enhanced support from WPD as they worked to implement their sustainable projects.

Network reliability and the efficiency of the network were also key points raised, with many wondering how resilience could be improved with the advent of more renewable generation and more flexibility services available to both large and small energy consumers.



#### 1. WHY HAVE YOU ATTENDED TODAY?

"I work in the policy department [at a local authority]. We're interested in how we can work with WPD to bring forward certain targets set out by central government." **Local authority** 

"I'm here from the Welsh Government and I want to know how we can work together to make sure WPD's business plans are in line with the current state of climate emergency." **Government** 

"I'm interested in the wider aspect of government policy, so the Well-being of Future Generations (Wales) Act 2015, the low-carbon agenda and how EV fits into that. In my role I'm on the property team. We bring forward sites of development and help businesses when they want to expand. We work with WPD on supplies to site. We also have aspirations for low-carbon buildings." **Government** 

"As a housing developer, we are being made aware by the Welsh Government that in about five years' time, new homes may not have a gas connection, so we have to change the way we provide energy and power to new homes." **Major connections customer** 

"Local authority people need to know about the cost of getting network connections, investing in renewables and the anxiety of getting a lot of electric vehicle charging points out there. How much is that going to cost us and is there enough capacity? We know the current system and if the network has to be upgraded then we carry the cost of this. There are risky strategies for local authorities so we would like to look at alternative approaches. We want to build up our knowledge of the smart grid." **Local authority** 

"I think the capacity on the grid is the burning issue for us. Looking at putting in more renewable energy, we have already hit the cost limit. We understand there is a smart grid agreement but this is being pushed to a new level. There are lots of studies carried out about where our stored energy will go. We struggle to get rooftops over people so how are we going to overcome this problem?" Local authority

"I'm from Welsh Water and I head up a team of special advisers who look after our vulnerable customers. I'm here to learn about WPD's vulnerable customer measures which I can use to best look after our vulnerable customers." **Utility** 

"I'm from an advisory body for vulnerable customers and we provide advice on debt and housing issues. We work in partnership with WPD to help vulnerable customers and are looking to see how we can improve the fuel situation in people's homes." **Consumer body** 

"I'm focused on community engagement and community groups. We run numerous programmes looking at energy saving measures that can be implemented in households and businesses." **Connections provider** 

"We're low to high voltage engineers. We're here to see how we can collaborate with WPD to make the network more efficient. Efficiency means the balance of active and reactive power, and how you balance that out permanently. Flexible services working with end customers are a huge opportunity area." Connections provider

"I am interested from the university perspective with resilience and fixing gear, and future resilience with electric vehicle charging, too, as this is big for us. It is the progression on the network that I am interested in." Major energy user

## 5 | <u>NETWORK RELIABILITY</u>

The top two priorities suggested by stakeholders when asked to vote on the theme of network reliability were 'power cut frequency', and 'overall health of network assets', both receiving 14% of the vote. In third place was a new priority, 'flexible services supporting power cuts (including with local authorities)'.

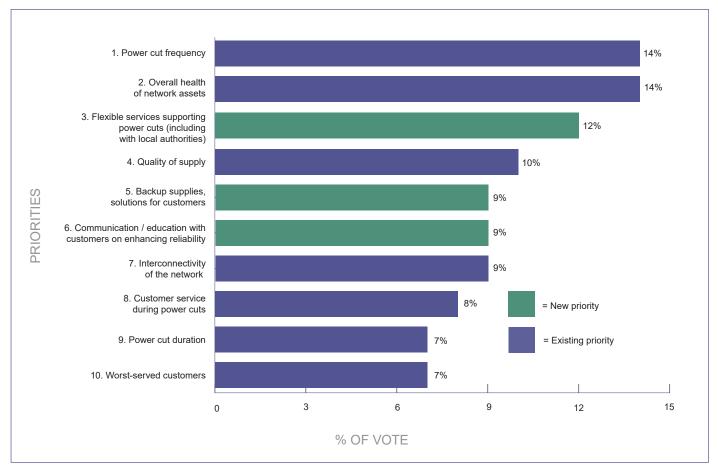
Discussing power cut frequency, many delegates wanted to see WPD proactively monitoring and evaluating its systems and responses to extreme weather events, and to pre-emptively warn customers if they thought a power cut was imminent or likely. Stakeholders from local authorities were keen to stress the impact power cuts had on worst-served customers, such as those in rural areas, or those with vulnerabilities, and wanted to see WPD do more to communicate with and offer support to those at risk. They also wanted to see a targeted reporting system in place, where WPD shares its findings and statistics post-power cut.

Stakeholders saw that maintaining and improving overall asset health was critical as the network took on both more demand and distributed generation in the push for carbon zero. They urged asset usage to be forecast in light of the electrified future, pointing out that without asset health 'everything else falls apart'. Concurrent with a forecasting programme, delegates wanted to see WPD continue its asset monitoring and replacement programme, decommissioning any assets no longer fit for purpose.

Delegates saw that a wider, smarter use of flexibility services could be of great value to a more resilient network. Those representing local authorities cited examples of schools and leisure centres with spare capacity that could be used for flexible services, and urged more collaboration with WPD to enact such initiatives. They wanted to see WPD have the ability to invest in and develop the role of storage connected to the network as backup power sources, and also saw the potential of local generation hubs as miniature power stations that could bolster local reliability and resilience. Investment in the grid to avoid unexpected draws on energy was seen as critical to enabling these smarter solutions to overall network reliability.

#### **PRIORITIES**

The graph below details the priorities for this topic ranked in order during the electronic voting. It includes those priorities that had been previously suggested by stakeholders, as well as some new priorities that were suggested during the table sessions.



#### **NETWORK RELIABILITY**

The table below includes new priorities that were suggested by stakeholders during the table sessions but were not included in the electronic voting afterwards. These are numbered for reference purposes. The order does not imply prioritisation.

Additional stakeholder priorities (not voted on during the electronic vote)			
11. Engage with customers over cost of network resilience	12. Future-proofing to deal with more demand, e.g. EVs	13. Retrofitting	

#### PROPOSED COMMITMENTS

Stakeholders were then asked to start identifying commitments against these priorities. These have been set out under the priority headings below, which are in the order that stakeholders ranked the priorities in the electronic voting. Where no commitments were suggested against a given priority, this has been noted.

Priority 1: Power cut frequency — Proposed Commitments				
a) Regularly monitor     systems and weather     events	b) Share statistics on power cut frequency with stakeholders	c) Address most at-risk customers	d) Maintain service needs of the network	

"I think that it would be good for WPD to regularly monitor its systems and potential extreme weather events, and get the information out to consumers as quickly as possible. It could harness the data that it has across these systems better." **Local authority** 

"WPD should report back to customers. If you have targets then end users need to know what these are." **Local authority** 

"For me, it is really important to have funding in place to help the worst-served customers as they are often in rural areas." **Local authority** 

"I think that there is value in helping these vulnerable customers." **Local authority** 

"A commitment would be to keep maintaining the service as we do not have as many power cuts in this locality." **Local authority** 

#### Priority 2: Overall health of network assets — Proposed Commitments

- a) Forecast asset usage in preparation for higher demand
- b) Continue maintenance and replacement programme

"There are so many components that are going to be added to the network and in a decade's time, I'm worried about how the network will cope. One worn out asset could blow out the whole thing." **Local authority** 

- "Continually upgrading infrastructure assets is key." **Local authority**
- "I think overall health of the network needs to be a higher priority as well because you need to maintain things very well otherwise everything else falls apart." **Major energy user**

"WPD needs to ensure that the assets on the network are kept healthy in order to try to reduce power cuts as much as possible." **Local authority** 

## Priority 3: Flexible services supporting power cuts (including with local authorities) — Proposed Commitments

- a) Work with LAs to find and use spare capacity
- b) Develop role of battery storage as backup power source
- "Flexible services with local assets to provide in power cuts." **Local authority**
- "Commercially speaking, we're now frequently putting combined heat and power heating and power units into schools and leisure centres. As a local authority we have 12-15kW of PV on the roof. It could be that schools and leisure centres might become miniature power stations if the reliability issues are addressed." Local authority
- "I think we're on the precipice of a massive sea change with all these flexibility networks so we're looking at massively prioritising interconnectivity. The grid needs to be ready so that you avoid any unexpected draws on energy and that will protect people against power cuts." **Local authority**

"There is a role for energy storage within power cuts." **Major energy user** 

#### Priority 4: Quality of supply — Proposed Commitments

- a) Sustain power quality in light of asset health and increased demand
- b) Measure and give more information on brownouts
- c) Increase quality of supply
- d) Engage with commercial customers to develop solutions

- "There needs to be more consideration about how asset health affects the quality of the supply." **Local authority**
- "There are so many components that are going to be added to the network and in a decade's time, I'm worried about how the network will cope. One worn out asset could blow out the whole thing. I think that quality of supply could be the obstacle in delivering the social and economic goals that I am trying to achieve in my professional brief." **Local authority**
- "Presumably 'brownouts' have a greater effect on healthcare systems and computer systems." **Major connections customer**

- "Does WPD measure exactly how many incidents there are and the impact of these? Is there a way of measuring costs to businesses? There is a perception that this is having an impact on people's lives." **Major connections customer**
- "Do you actively increase quality of supply as a priority already? Some customers are acutely aware of this, whereas others are blissfully unaware." **Connections provider**

"To help with quality of supply, WPD could engage with commercial customers and offer solutions." **Connections provider** 

#### **Priority 5: Backup supplies, solutions for customers** — Proposed Commitments

- a) Invest ahead of need in battery storage
- b) Define which customers most need backup storage
- c) Decide whose role it is to provide storage

- "Have the rules changed according to battery operation over the year?" **Local authority**
- "We've looked at business estates being energy selfsufficient, but the problem is the backup as businesses need security of supply. We're talking about moving away from gas for industry. There's still a lack of understanding too on switching from gas." **Government**
- "Who bears responsibility for battery storage? I don't think it's appropriate to give everyone a battery but perhaps there's a place for DNOs to suggest it. They're very expensive." **Connections provider**
- "There is an easy way out. It's always the developer that pays but if the government have come up with this, they should pay!" **Major energy user**

#### **Priority 6: Communication / education with customers on enhancing reliability** — Proposed Commitments

- a) Educate on EVs and the future needs of the network
- b) Put more resources into proactive communication via social media
- "Maybe there could be a way that we don't have to go looking for information, and WPD could actually get in touch with us. Proactive communication." **Local authority**

"Social media is useful for this." Local authority

## a) Increase automation b) Invest ahead of need to future-proof the network for increased distributed generation c) Lobby for incentives for local energy producers

"When you have severe weather conditions, automation and switching things in should be increased." **Connections provider** 

"From my perspective, the interconnectivity of the network stands out. In particular, this is of interest with generation, PV systems, convertors in the home and whether they have a role in supporting WPD to keep the lights on. One question is whether the financial incentives are in place to make this viable." **Connections provider** 

"I think the interconnectivity of the network is most important for me. With low-carbon in the future you're going to have lots of smaller supplies feeding back onto the network. I wouldn't know the inner workings of it but it's about those smaller businesses not losing out. I suppose it goes into quality of supply as well." **Business customer** 

"Perhaps WPD could implement incentives for local producers to create a more reliable network." **Local authority** 

#### **Priority 8: Customer service during power cuts** — Proposed Commitments a) Maintain frequent b) Collaborate with c) Better d) Improve e) Increase communications National Grid signposting to communications awareness to rural and atmultichannel with stakeholders of PSR and risk customers communications: involved in consider app, outage supporting vulnerable map, phone, text outages customers not on the PSR

"I think rural communities in north or west Wales always have rubbish Wi-Fi, no public transport and their power goes off more often. There should be a system that kicks in for rural communities that assists them in the event of a power cut. There needs to be a rural community focus group." Major connections customer

"There is no equivalent to VIP like National Grid. You should be seeking funding with Ofgem to fund this." **Local authority** 

"We didn't know about the app. You could publicise it on social media and it will become more well known in communities." **Healthcare body** 

"Something that works well is your online network map. I can see all the areas affected and how long they'll be off for. That's really useful to me." **Local authority** 

"We're looking at how can we improve people's life in their homes. There's going to be a point where those on the PSR are going to be heavily reliant on the Internet, so electricity cut off is going to be a big issue. Maybe consider people from a specific group of the PSR." Charity

"I'm not aware of the PSR, so this is a communication thing again. I'd definitely support more awareness." **Local authority** 

#### **Priority 9: Power cut duration** — Proposed Commitments

- a) Address most severely affected customers
- b) Maintain a proactive information service
- c) Feedback to customers post-power cut

"Someone vulnerable at home needs to be told how long it will take." **Major connections customer** 

"It feels like power cut duration is something you don't have much control over. As long as we know the procedure when something happens, that's more important than an arbitrary deadline." **Local authority** 

"It's more about keeping people informed." **Local authority** 

"If WPD could produce information about how you deal with power cuts, how many there are and what the causes are then people will get a sense that WPD are actually doing something and performing. WPD should tell the customers what their targets are and if they are achieving them. People want to be able to speak to someone to be reassured that something is being done. If your power has gone and you are a customer then it would be great for people to receive a text."

Major connections customer

#### **Priority 10: Worst-served customers** — Proposed Commitments

- a) Ensure better communication with worst-served customers
- b) Collaborate with LAs to map and support worst-served
- c) Set target to reduce an agreed percentage of worst-served customers
- d) Invest in undergrounding for worst-served rural customers

"If I was a customer in a worst-served area and having a lot of problems I would want to know what's being done to change that on a very practical level." **Local authority** 

"I understand that it's impossible to bury all the wires in the rural areas though. That would come at a huge cost." **Local authority** 

"So there was nothing about worst-served customers at all? Is there any information to show where the worst-served customers are? This could be in the form of an easily accessed map on your website." **Local authority** 

"Local authorities should be communicated with more on what is being done to improve the worst-served areas. People often come to us with their power outage problems and it's vital for us to be able to communicate what's being done to help." **Local authority** 

"For me, it is really important to have funding in place to help the worst-served customers, as they are often in rural areas." **Local authority** 

"We have remote cottages that need investment and undergrounding." **Local authority** 

#### **Priority 11: Engage with customers over cost of network resilience** — Proposed Commitments

a) Remove barriers for exporting energy

"WPD need to be at the table of discussion for tariffs and costs and be active in removing the barriers for exporting." **Local authority** 

#### Priority 12: Future-proofing to deal with more demand, e.g. EVs — Proposed Commitments

- a) Provide more support for councils and rural areas to upgrade infrastructure
- b) Lobby government for a coordinated network approach

"Assets such as overhead cabling are key infrastructure priorities." **Local authority** 

"You need to be helping us to afford and introduce infrastructure across the board including rural areas that tend to be costly and most difficult." **Local authority** 

"It is about communication with local energy plans and understanding what is happening and what the appetite is and facilitating that. Network reliability also includes that future-proofing." **Local authority** 

"I think government need to work with WPD to organise EV chargers." **Major energy user** 

#### **Priority 13: Retrofitting** — Proposed Commitments

a) Set a quality standard for retrofitting

"Retrofitting is working closely with Western Power Distribution to regulate the quality." **Major connections customer** 



## **6 | NETWORK RESILIENCE**

Delegates were asked to vote for their top priorities under network resilience. The top priority was a new one identified during the discussions, 'policy and design increasing resilience of assets (to severe weather)', which received 32% of the vote. The second most popular was 'scenario planning / data analysis', with 29%.

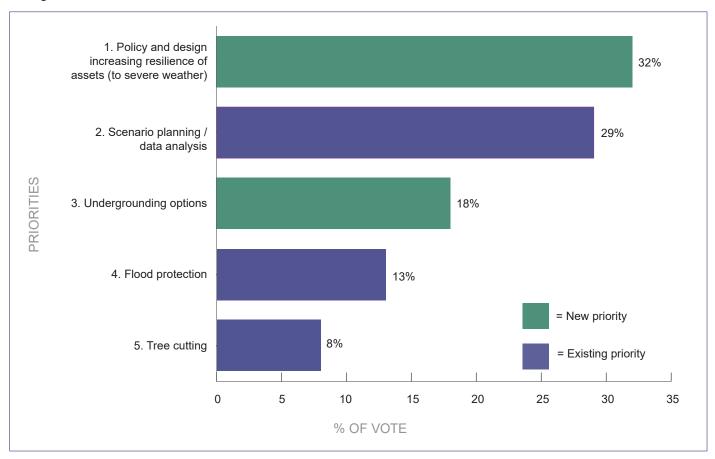
Stakeholders felt that WPD should broaden its scope and reach as regards innovation and research and look to other countries' strategies for dealing with extreme weather events and asset protection, particularly the United States. They also felt that an investment policy was needed to proactively review and design new assets going onto the network and maintain existing assets deemed at risk.

Discussing scenario planning and data analysis, many wanted more access to smart meter data to more accurately illuminate areas where resilience was low and needed to be bolstered. Location specificity was a point raised across this priority, with further suggestions made around holding workshops for increasing personal resilience in areas where it was needed. Furthermore, delegates wanted to see WPD communicate more focused, place-specific scenario planning, as it was felt that what was happening in the wider network was not always relevant to all.

Undergrounding the network was seen by many as a critical method for increasing resilience, although there was not complete consensus on this point. Some felt it was too expensive, and therefore did not provide value for the customer, while others thought that it did not present a solution to every climate-based challenge, seeing undergrounding as useful to mitigating the effects of strong winds but not necessarily flooding.

#### **PRIORITIES**

The graph below details the priorities for this topic ranked in order during the electronic voting. It includes those priorities that had been previously suggested by stakeholders, as well as some new priorities that were suggested during the table sessions.



The table below includes new priorities that were suggested by stakeholders during the table sessions but were not included in the electronic voting afterwards. These are numbered for reference purposes. The order does not imply prioritisation.

Additional stakeholder priorities (not voted on during the electronic vote)

6. Climate adaptation planning and focus

#### PROPOSED COMMITMENTS

Stakeholders were then asked to start identifying commitments against these priorities. These have been set out under the priority headings below, which are in the order that stakeholders ranked the priorities in the electronic voting. Where no commitments were suggested against a given priority, this has been noted.

#### Priority 1: Policy and design increasing resilience of assets (to severe weather) — Proposed Commitments

a) Research and invest in new technologies that increase asset resilience

"Is there anything about reviewing / redesigning your network assets to manage resilience in light of changing concerns?" **Government** 

"Investing in technologies used to bolster resilience, seen in other countries such as the US, is a prudent idea." **Connections provider** 

#### Priority 2: Scenario planning / data analysis — Proposed Commitments

- a) Share smart meter data with relevant parties
- b) Increase individual property resilience through workshops and collaboration with emergency services and local authorities
- c) Communicate more focused, locationspecific scenario planning
- d) Commit to longer-term resilience planning for grid transformation

"The last presenter said that the South Wales was monitored minute by minute. It would be good if that data was made public. We all know there's constraints on the network: would that data show at what times of day?" **Local authority** 

"Your communications have been good during the past few weeks of bad weather. But the problem is we're not interested in your area as a whole. I'm interested in Wales; I'm not bothered about what happens in the rest of the country." **Government** 

"Come down to a local authority level. Maybe an officer could do some workshops with the local community." **Local authority** 

"Local authorities have emergency plans for various situations. They have to be realised as things happen, for example, we're starting to communicate on coronavirus. It's about reacting to the situation when it arises, and that's where the support comes in with the emergency planning teams." **Local authority** 

"You might want to think about how you cater for resilience, moving away from power and looking at transport and heat as well. Think about longer-term resilience planning when you start to transport heat." **Utility** 

#### **Priority 3: Undergrounding options** — Proposed Commitments

a) Explore undergrounding options

"You'll be spending money on tree cutting anyway, so why not just transfer it to undergrounding the network?" **Local authority** 

"Undergrounding is very expensive, so it's not going to provide value for the customer." **Utility** 

"Something about adaptation to the changing climate. You're undergrounding cables because of the wind but then you're getting significantly more problems because of the flooding." **Major energy user** 

"Undergrounding is a very good idea." **Emergency services** 

#### **Priority 4: Flood protection** — Proposed Commitments

- a) Relocate assets in flood protection zones
- b) Install flood protection as standard in new substations
- c) Analyse future weather scenarios and work with housing developers, utilities and asset designers to mitigate future risks

"With regard to two new substations, nobody has said to us as part of the planning whether that is the best place to put that substation in terms of flooding risks. There should be a flood defence automatically built into this." **Major connections customer** 

"Are there business continuity plans which will take into account land and premises being lost due to flooding?" **Local authority** 

"We need to accept that there will be rising sea levels and extreme weather, so WPD needs to take appropriate measures and prepare for the future." **Local authority** 

"Climate change is happening at such a rapid rate and our protocols are no longer able to keep up with worstcase projections. We need to protect the networks and the substations from these extreme weather events." Local authority

#### **Priority 5: Tree cutting** — Proposed Commitments

- a) Commit to a strategy of planting at least one tree for every tree felled or cut
- b) Communicate your habitat maintenance programme to key partners such as landowners, woodland trusts and charities and local environmental groups
- c) Work strategically with local authorities' environmental teams on initiatives relating to clearing of debris to prevent flooding and the recycling of cut wood

"WPD should continue carbon offsetting by planting trees when they are cut down. One for one should be the bare minimum. They could work with landowners who are planting trees. Wales is stripping their trees and it is a big area where we can win. I am heavily involved in a new drive to build homes using Welsh timber but there is not enough of it." Major connections customer

"Do you provide compensatory trees when you cut down trees? A commitment could be working with local charities like woodland charities. Perhaps like-for-like replacement (i.e. replacing one tree with another) is not always the best approach." **Local authority**  "You need to take into account the type of tree you're planting, too, as that has a bearing on wildlife." **Business customer** 

"I was asked to bring this up from a central London point of view but tree cutting on private land is sometimes an issue. WPD is good at ensuring that it works with landowners and offers compensation where possible. Others in your industry haven't been so good." **Business customer** 

"Definitely link with biodiversity teams. They know what to plant and where." **Local authority** 

#### Priority 6: Climate adaptation planning and focus — Proposed Commitments

While this was established as a new priority, no formal commitments were articulated against this priority in the discussions. The following verbatim comment was, however, captured.

"Something about adaptation to the changing climate. You're undergrounding cables because of the wind but then you're getting significantly more problems because of the flooding." **Major energy user** 

## 7 | CYBER RESILIENCE

Delegates were asked to vote for their top priorities under cyber resilience, and the favourite was 'network security – risk of power cuts due to a cyberattack', with 30%. The second most popular was 'incident recovery plans' with 22%, and third was 'systems security – risk of data loss / access' with 20% of the vote.

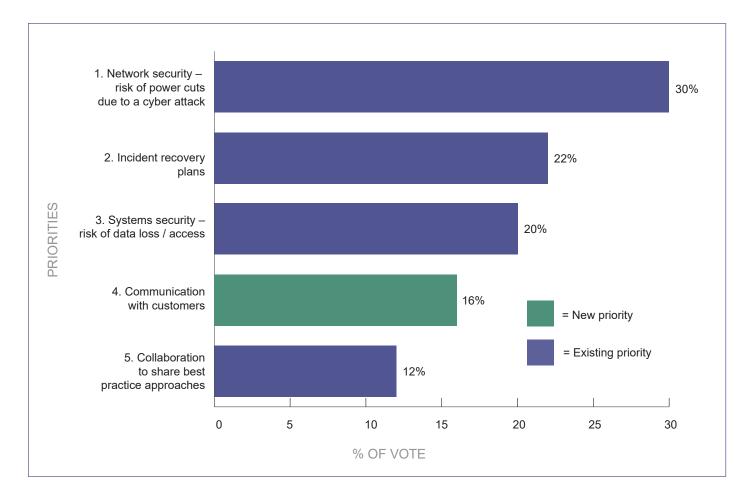
Discussing the top priority on network security, it was clear that stakeholders felt that any level of attack resistance below 100% was unacceptable, and that, given the critical role of both data and power in consumers' lives, WPD had a duty of care to uphold the highest possible standards in this area. They also wanted to see WPD commit to openness and transparency in the case of a data breach or cyberattack, sharing the details and also the steps taken to mitigate it. Knowledge sharing was seen as key to preventing further attacks.

Under the priority 'incident recovery plans', stakeholders advocated testing various scenarios to increase resilience across a range of situations, most importantly in the case of healthcare. Delegates were also keen for WPD to recognise the importance of keeping customer data safe under the systems security priority, seeing not only benefits but the increased risks that might come with greater access to smart meter data. Some argued for splitting consumer data into levels, or bands, according to its sensitivity, separating, for example, personal information such as addresses and phone numbers from bank details.

In all cases, delegates urged WPD to be proactive, share best practice, work with IT experts and local authorities and remain hyper vigilant to the threats posed by online hackers and attacks.

#### **PRIORITIES**

The graph below details the priorities for this topic ranked in order during the electronic voting. It includes those priorities that had been previously suggested by stakeholders, as well as some new priorities that were suggested during the table sessions.



#### PROPOSED COMMITMENTS

Stakeholders were then asked to start identifying commitments against these priorities. These have been set out under the priority headings below, which are in the order that stakeholders ranked the priorities in the electronic voting. Where no commitments were suggested against a given priority, this has been noted.

#### Priority 1: Network security – risk of power cuts due to a cyberattack — Proposed Commitments

- a) Work to the highest possible standard: be 100% resistant to cyberattacks
- b) Have robust recovery plans in place
- c) Maintain an open channel of communication with customers in the event of a cyberattack
- d) Invest in resources and technology to prevent cyberattacks and share best practice

"As WPD provides power, I would expect them to be utterly cyber resilient otherwise it would be a disaster. As customers and businesses, we expect that this would be achieved." **Major connections customer** 

"What would you do in a situation where cyber security is breached? Do you have a plan for it?" **Local authority** 

"WPD needs to contact its customers about failures in cyber security. The biggest complaints are always about the lack of transparency." **Local authority** 

"There needs to be more knowledge sharing: if more knowledge is shared around, it can help prevent these issues in the first place." **Local authority** 

"Be 100% resistant to a cyberattack." Local authority

#### Priority 2: Incident recovery plans — Proposed Commitments

a) Keep a focus on testing your robust incident recovery plans in different scenarios

"You need to have incident recovery plans that are tested in various scenarios and ensure stakeholders are made aware of such things." **Major energy user** 

"Incident recovery plans for the healthcare sector. Consider healthcare scenarios." **Healthcare body** 

#### **Priority 3: Systems security – risk of data loss / access** — Proposed Commitments

- a) Focus on maintaining the security of customers' data from smart meters
- b) Split data into levels, such as separating personal information from bank details

"If there was an attack on a meter and data was taken, how would that affect customers and how would the data be retrieved? I think that WPD needs to focus on keeping its meters secure to ensure that the data isn't taken." **Local authority** 

"There are two levels of data: personal data and bank details. The data should be split." **Local authority** 

#### **Priority 4: Communication with customers** — Proposed Commitments

a) Use all forms of communication to keep customers and communities informed about cyberattacks

"One issue is that if your electrical power goes down, you lose all forms of communication. There needs to be more proactive thought given to analogue forms of contact too." **Local authority** 

"WPD needs to ensure that its communications are on point and keep communities aware of developments. Social media is good for that. It helps people to feel calm." **Utility** 

#### **Priority 5: Collaboration to share best practice approaches** — Proposed Commitments

a) Employ expert third-party support and advice

b) Share best practice across your networks and partners

"There needs to be more collaboration with third parties, such as councils." **Local authority** 

"I really like the collaboration aspect. As WPD moves towards a DSO, it is going to be talking to third parties more and sharing more knowledge. It seems good practice and I like good practice." **Local authority** 



## 8 | WHOLE SYSTEMS APPROACH TO NET ZERO

Delegates were asked to vote for their priorities under whole systems approach to net zero and the two most favoured priorities, with 16% each, were 'how best to enable retrofitting (working with local authorities / developers)' and 'facilitate local generation'. Both of these were new priorities identified during the discussions. The second two most popular were 'help local communities to achieve their net zero carbon targets' and 'coordinate network planning with other utilities to find best solutions' with 12%. Coming in third place was 'where reinforcement is required ensure it's "future-proofed", with 11% of the total vote.

As well as voting on ten different priorities, five of which were new, delegates created a further five new priorities which were not subject to a public vote: 'connecting new builds in an environmentally sensitive manner', 'ensure rural communities don't lose out', 'transformative investment', 'develop battery storage' and 'transport'.

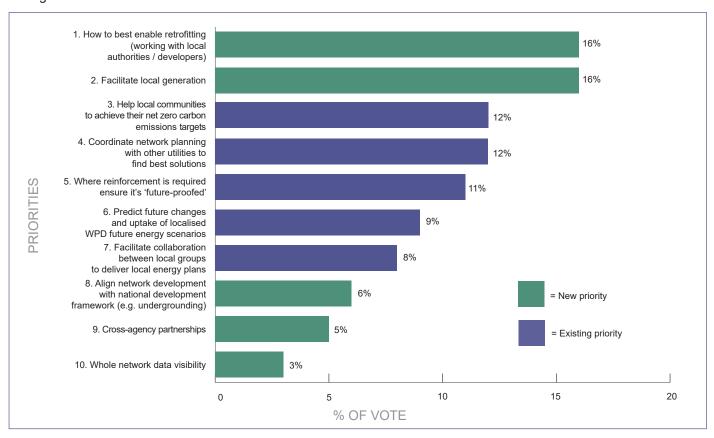
Retrofitting was on stakeholders' minds in Swansea, particularly as they considered the amount of old housing stock on the network and the Welsh Government's target of net zero by 2050. They recognised the capabilities of new builds to conform to carbon neutral standards but wanted to see more work done by WPD on enabling the entire housing network to participate. Investment in R&D projects, such as the Electric Nation project, was seen as a critical tool in encouraging investments and grants from central government and local authorities to roll out a wider retrofitting plan. Creating case studies of where, and how, retrofitting would work, would bolster confidence and create optimism.

Facilitating local generation was also a top priority. Delegates wanted to see WPD be able to invest ahead of need to increase capacity in places where constraint is high. Many saw high costs for reinforcement as best case, very off-putting, and worst case, disastrous for local energy projects. They also wanted to see WPD taking note of places where connections were more challenging, such as coastal areas, and working with government to create a national policy framework that incentivised and encouraged ambitious local generation, from large to small-scale projects.

A sense of the national and the centralised featured again and again in the discussions, with many of the view that net zero targets could only be reached with an overarching policy framework and imperative. This extended to the possibility of incentives for local communities to stimulate renewable energy projects, and for clear, transparent engagement by WPD with those communities. Stakeholders wanted WPD to be clear in their communications and advice for non-experts and experts alike. Many felt that WPD needed to take a clear leadership role in coordinating local and national projects and plans.

#### **PRIORITIES**

The graph below details the priorities for this topic ranked in order during the electronic voting. It includes those priorities that had been previously suggested by stakeholders, as well as some new priorities that were suggested during the table sessions.



#### WHOLE SYSTEMS APPROACH TO NET ZERO

The table below includes new priorities that were suggested by stakeholders during the table sessions but were not included in the electronic voting afterwards. These are numbered for reference purposes. The order does not imply prioritisation.

Additional stakeholder priorities (not voted on during the electronic vote)				
11. Connecting new builds in an environmentally sensitive manner	12. Ensure rural communities don't lose out	13. Transformative investment	14. Develop battery storage	15. Transport

#### PROPOSED COMMITMENTS

Stakeholders were then asked to start identifying commitments against these priorities. These have been set out under the priority headings below, which are in the order that stakeholders ranked the priorities in the electronic voting. Where no commitments were suggested against a given priority, this has been noted.

## Priority 1: How to best enable retrofitting (working with local authorities / developers) — Proposed Commitments

a) Invest in research projects that create case studies of retrofitted properties

"You need to look at how to best enable retrofitting and help assist local authorities with new residential housing. Invest in research." **Local authority** 

"Retrofitting is the answer. We have 13,600 council houses and we know decarbonisation of homes means retrofitting and how we connect that to the grid is our issue." **Local authority** 

Priority 2: Facilitate local generation — Proposed Commitments			
a) Lobby to invest ahead of need to increase capacity for local generation	b) Work closely with the national framework development proposal	c) Encourage all forms of local generation, large and small	

"One thing I have heard is that some places have more of a restriction to capacity. So, going back to trying to achieve targets, they're the places that are going to be penalised but it's not their fault because they can't get the capacity to generate." **Local authority** 

"Encourage small scale generation, which could be small-scale hydro. Back in the day they used water mills and they worked efficiently." **Emergency services** 

"There are big challenges connecting to coastal areas of new generation; you need to look and work with the national development framework proposal." **Local authority** 

"It is not just about connecting renewables, it is about connecting them in a satisfactory way and how will you respond to the national development framework." **Local authority** 

## Priority 3: Help local communities to achieve their net zero carbon emissions targets — Proposed Commitments

- a) Create a clear engagement strategy that educates and gives guidance to communities on reaching net zero
- b) Work
  collaboratively
  with local
  authorities,
  community
  councils
  and Welsh
  Government to
  facilitate net zero
- c) Consider
  differing
  authorities' net
  zero targets,
  offering
  incentives and
  advice to reach
  them
- d) Provide transparent options on connecting local communities to renewable generation
- e) Work with
  government to
  create a national
  policy framework
  that will enable
  all local
  communities to
  reach net zero

"We've tried to work with the local authorities in groups as more of a top-level approach to try to come up with a low-carbon plan. Getting together with people in geographical areas where they have common problems can help find common solutions." **Government** 

"It is sensible to facilitate collaboration between local groups. We were talking about district heating with new developments. It is about working together." **Local authority** 

"I would say that you need to incentivise local communities to get to net zero. Yes, some people are interested in the climate emergency and their social responsibility but half don't actually care about that side of things. You need to think of a way to engage that other half. The gas industries offer grants and free connections." **Local authority** 

"The starting point for this is the 2050 target. The Welsh Government have different aspirations [to the rest of the UK], though. It has declared a climate change emergency too, but I think WPD need to be mindful of the fact that it's not the same across all parts of the UK." **Government** 

"Education and transparency. I don't know, is it better for me to have a solar panel on my roof, or is biomass better, or district heating? I have no idea what's best for my house, and I'm informed in all this." **Utility** 

"You need a greater consideration of the national development framework in planning." **Local authority** 

#### Priority 4: Coordinate network planning with other utilities to find best solutions — Proposed Commitments

- a) Focus on sharing infrastructure across utilities, including Welsh Water, BT and Scottish Power (North Wales)
- b) Work with big energy users, such as schools and hospitals, on network planning

"Once again, WPD needs to play a bigger role in network planning, particularly if it involves big infrastructure. I want things to go smoothly and any disruption could hugely drive up the cost. WPD needs to involve other utilities in this planning." **Utility** 

"Trench sharing would be good but the way legislation is written means maybe that can't happen. They don't favour sharing but the person who opens it is always responsible for the guarantee period." **Local authority** 

"Some of the network is shared with BT too. The problem we have there is that BT's regulator treats them differently to WPD." **Emergency services** 

"Thinking of North Wales, we'd like to see Wales working together as opposed to just areas being left out." **Charity** 

"There should be greater emphasis on the council, health board and universities working closer together to come up with solutions. WPD should consider larger sectors." **Healthcare body** 

"If you are delivering a whole new community, you're putting in schools and hospitals as well as houses, which means you need engagement between those groups. You need to get on board way before the planning." **Local authority** 

#### Priority 5: Where reinforcement is required ensure it's 'future-proofed' — Proposed Commitments

- a) Work with local authorities to clearly identify where to reinforce for large growth in housing and EVs
- a) Lobby to invest ahead of need to increase capacity where needed
- c) Keep pace with the latest innovations and renewable technologies and ensure they are future-proofed

"I think ensuring the network is future-proofed is key. The pace of change of technology is breath-taking. Innovative solutions and close collaboration with DNOs is important." **Connections provider** 

"Is there a way of identifying areas with high renewable energy potential and doing a broadband-based model? In other words, investment ahead of need."

Business customer

"Why are we going to reinforce? Have we got visibility of the system capacities that will allow us to have a system response? Are you sure you can make decisions that will allow you to do that most efficiently?" Major energy user

"Identifying plans for massive growth in light of network reinforcement is important." **Connections provider** 

## Priority 6: Predict future changes and uptake of localised WPD future energy scenarios — Proposed Commitments

- a) Invest ahead of need to keep pace with future energy changes on the network, increasing capacity in areas of predicted need and ensuring a reasonable cost of connection
- b) Conduct horizon scanning
- c) Participate in Welsh Government planning to better respond to future energy changes

"We suspect that there will be a hydrogen element and we don't know what that will look like. People's demands are increasing because of the need and use of electricity. WPD should be investing ahead of need." **Local authority** 

"My main concern is your capacity and ability to provide new connections. New developers need to easily know how much the increased capacity is going to cost. We're asked how much capacity we need but it depends on how much the connections will cost. It's a chicken and egg situation." **Local authority** 

"Participating in the Welsh Government for planning is crucial." **Government** 

"We want to put three-phase in but we're being told that the network isn't currently capable of taking it. This is very short-term thinking." **Major connections customer** 

"One thing we've already touched upon is horizon scanning, so looking ahead to see what unexpected things might come out. If you put in infrastructure, then change the goal posts, we need to future-proof innovation. Everyone's talking about charge points for EV but in Milton Keynes you've actually got wireless charging for buses. It could be that you strategically plan that, in terms of piloting something and waiting for the technology to catch up [prior to investment]. Otherwise you might invest massively and get something that comes out of nowhere." Major energy user

## Priority 7: Facilitate collaboration between local groups to deliver local energy plans — Proposed Commitments

- a) Aggregate local connections requests to facilitate, for example, district heating plans
- b) Work with local authorities to identify prime locations on the network for delivering local, low-carbon energy plans

"WPD needs to aggregate connection requests better and put people in contact to create a joined-up solution which can help things be rolled out more effectively." **Local authority**  "When looking at facilitating collaboration for local groups, maybe WPD could consider supporting some kind of collaborative approach for existing properties, as that can be tricky." **Local authority** 

"It is sensible to facilitate collaboration between local groups. We were talking about district heating with new developments. It is about working together." **Local authority** 

## Priority 8: Align network development with national development framework (e.g. undergrounding) — Proposed Commitments

- a) Take a leadership role in coordinating a national policy framework to enable net zero
- b) Align network development with national development to better facilitate large-scale renewable projects

"WPD should take a leadership role in helping inform central government and policy makers." **Major energy user** 

"People get very disillusioned by decisions taken by the central government. People see a massive project that could have provided cheap green energy for lots of people but they get disillusioned when they see money being spent on HS2." **Major connections customer**  "We did some studies looking at residential car parks. We then applied funding for the UK government on a Gwent level, so no one is 10 miles away from a charging point, which we did as a joint project and WPD were really involved. We've had five case officers, which is a little bit messy for a collaborative project, although there was also good communication. One should take the lead and coordinate within WPD so there's a single point of contact for us." **Local authority** 

#### **Priority 9: Cross-agency partnerships** — Proposed Commitments

a) Commit to a joint learning and investment plan across different agencies

"I would be delighted if we could have an agreed investment plan to deal with heat, transport and power in a joined-up fashion, where we've looked at solar, gas etc., so we can decide 'this is the best thing to do with the electricity' and avoid duplication." **Utility** 

#### **Priority 10: Whole network data visibility** — Proposed Commitments

a) Collaborate cross-network on data sharing

"We have started data sharing for vulnerable customers. Other utilities need to start rolling out stepped-up data sharing schemes." **Utility** 

"There is the opportunity for gas and electricity suppliers to collaborate. If we know there's going to be a spike in electricity demand, that could be useful to us and vice versa." **Utility** 

#### Priority 11: Connecting new builds in an environmentally sensitive manner — Proposed Commitments

a) Work with government to create a national policy framework for house building, mandating, for example, heat pumps and EV charge points in new builds

"With new builds and renewables, electric vehicle chargers need to be automatically placed."

Major connections customer

"Should there be more of a drive from government to approach more people for solar power? They want so much green energy to go back to the grid but they're not so willing to help people out." **Major energy users** 

"There are many homes that we are working with and we're looking to improve the energy performance over there. There will be a big commitment to ways in which those houses will perform in the future. There are issues on grants." **Major connections customer** 

#### **Priority 12: Ensure rural communities don't lose out** — Proposed Commitments

While this was established as a new priority, no formal commitments were articulated against this priority in the discussions.

#### Priority 13: Transformative investment — Proposed Commitments

a) Lobby government to be able to invest ahead of need and transform the existing network

"It's more than reinforcement that's required, it's investment. Reinforcement suggests you're just propping up the system we've got now. It's not about that, it's about transforming it into something else."

Government

#### **Priority 14: Develop battery storage** — Proposed Commitments

- a) Develop battery storage to support peak loads
- b) Commit to removing diesel generators

"We have had a new HV network and new transformers. It is about resilience of the future and increasing battery storage." **Major energy user** 

"WPD need to fit battery storage into the whole systems approach." **Local authority** 

"Flatlining the energy need is a challenge for us. Hopefully when the peaks come in, the houses will run from the batteries." **Major connections customer** 

#### Priority 15: Transport — Proposed Commitments

a) Make data on EV charging points easily available

"At the moment you're doing a lot of box ticking. We're putting in single-phase electric vehicle charging stations that will be obsolete soon. We need to only be working with three-phase developments."

Major connections customer

## 9 | INNOVATION AND NEW SERVICES

Stakeholders were invited to vote on their top priorities under innovation and new services, and the top priority was 'invest in development of new technologies', with 18% of the vote. In joint second place was 'lobby government / macro-level innovation strategy' and 'development of battery storage' with 14%. All of these were new priorities identified in the discussions. In fourth place was an already established priority, 'support community energy projects to connect to the network', with 13% of the vote.

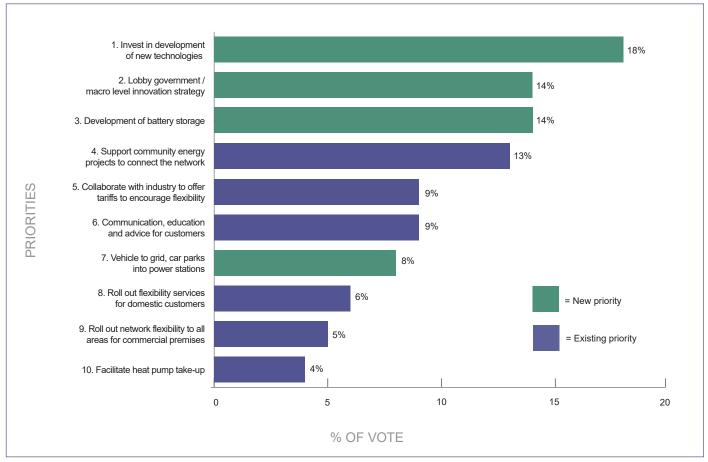
In addition to voting on ten priorities, half of which were newly identified in the discussions, delegates created a further five that were not voted on: 'facilitate retrofitting', 'share best practice', 'facilitate large-scale renewable projects', 'upgrade the grid' and 'look at product life cycles with industry'.

Stakeholders in Swansea were emphatic about the need for WPD to invest in the development of new technologies, urging a complete look at future energy scenarios to determine what technologies were going to be most needed in the push to carbon zero. Others pointed to the benefits of involving younger generations in the use of that technology, further paving the way for a carbon neutral future. In a similar vein, delegates wanted to see WPD publish a macrolevel innovation strategy that answers questions about sources of funding, along with what funding streams will be available for innovation projects and services. Many stakeholders, particularly those from local authorities and Welsh government, felt that a centralised approach from government was necessary to stimulate innovation and uptake of new technologies, via a combination of subsidy, incentive and regulation.

Battery storage was also seen as a critical tool for creating resilient, self-sufficient, green networks and communities. Attendees argued that there needed to be more support for communities to connect sources of storage and a greater focus on creating micro-grids with strategically placed storage to manage peaks in demand. This discussion fed into another interesting priority: 'vehicle to grid, car parks into power stations', where many saw the potential of using EVs and batteries as localised storage units in car parks with the ability to feed that power back into the grid when needed. Others, particularly those from the connections industry, pointed out that the successful removal of gas boilers from the energy network was going to be heavily reliant on the effective, nationwide implementation of battery storage.

#### **PRIORITIES**

The graph below details the priorities for this topic ranked in order during the electronic voting. It includes those priorities that had been previously suggested by stakeholders, as well as some new priorities that were suggested during the table sessions.



#### **INNOVATION AND NEW SERVICES**

The table below includes new priorities that were suggested by stakeholders during the table sessions but were not included in the electronic voting afterwards. These are numbered for reference purposes. The order does not imply prioritisation.

Additional stakeholder priorities (not voted on during the electronic vote)				
11. Facilitate retrofitting	12. Share best practice	13. Facilitate large-scale renewable projects	14. Upgrade the grid	15. Look at product life cycles with industry

#### PROPOSED COMMITMENTS

Stakeholders were then asked to start identifying commitments against these priorities. These have been set out under the priority headings below, which are in the order that stakeholders ranked the priorities in the electronic voting. Where no commitments were suggested against a given priority, this has been noted.

#### **Priority 1: Invest in development of new technologies** — Proposed Commitments

While this was established as a new priority, and received 18% of the vote from stakeholders, no formal commitments were articulated against this priority in the discussions. The following verbatim comments were, however, captured.

"WPD should be looking to support the technologies that best fit their goals for the future. You should yourselves be looking to invest and develop the most efficient technologies." **Government** 

"Young people love tech. Use that tech to help the environment." **Local authority** 

#### Priority 2: Lobby government / macro-level innovation strategy — Proposed Commitments

a) Publish a macro-level innovation strategy

'Is there an overall innovation strategy and have you looked into how that will be funded?" **Utility** 

"Maybe the commitment then is to publish an innovation strategy?" **Major energy user** 

#### Priority 3: Development of battery storage — Proposed Commitments

While this was established as a new priority, and received 14% of the vote from stakeholders, no formal commitments were articulated against this priority in the discussions. The following verbatim comments were, however, captured.

"By 2025 there will apparently be no gas boilers. Where will this come from? Making fabrics efficient? Battery development? Heat pumps? It's not long until it's going to hit us and we need to make some commitments about the direction we as an industry will take." Major connections customer

"We have been looking at batteries to cover schools during out of hours to reduce the load on the networks. The system involves solar panels during the day and battery storage for night-time." **Local authority** 

"Battery storage can be developed hugely. WPD needs to think about developing its capacity and placing them in the appropriate positions." **Local authority** 

"You need to support others to connect to energy storage much more easily. This can be done by developing a local energy grid and sharing this gained energy when not in use." **Local authority** 

"There needs to be increased focus on battery storage as a new priority." **Local authority** 

#### Priority 4: Support community energy projects to connect to the network — Proposed Commitments

- a) Offer free, clear advice to community energy projects to help them get off the ground: more knowledge creates greater understanding
- b) Encourage local generation through the sponsorship of community energy projects
- c) Develop local energy bands and prioritise connecting community energy projects

"I would support community projects to connect to the network. For example, local generation points." **Emergency services** 

"There used to be a lot of financial incentives to get community energy projects on the go. There used to be some great infrastructure for developing these but they're all gone and there are still a lot of isolated communities not getting proper support in generating the energy they desperately need." **Local authority**  "It's very difficult for community energy projects to keep up with policy changes in this sector. It's not just about the financing, it's about a lack of information about changing tariffs." **Local authority** 

"I think community energy should be a higher priority because the more people that are involved in it, the more knowledge people will have in general. It helps give people an understanding of the energy network as a whole." **Business customer** 

#### Priority 5: Collaborate with industry to offer tariffs to encourage flexibility — Proposed Commitments

- a) Engage more with suppliers to develop time of use tariffs
- b) Collaborate effectively with industry to roll out smart meters
- c) Work with manufacturers involved with innovation to help customers use energy flexibly

"We need a more sophisticated way of [implementing flexibility services]. Can we incentivise them with tariffs?" **Vulnerable customer representative** 

"You need to look at supplier engagements around tariffs. If you have an off peak tariff, it will incentivise people." **Major energy user** 

"Is it really going to happen until everyone's got a smart meter?" **Vulnerable customer representative** 

"WPD should be working directly with manufacturers involved with innovation and new services to facilitate network flexibility." **Connections provider** 



#### Priority 6: Communication, education and advice for customers — Proposed Commitments

- a) Provide education and advice for all customers (including future ones) on lowcarbon technologies
- b) Lead on coordination and advice for businesses on how to take up low-carbon technologies and new services
- c) Report on and monitor your education and advice services for customers
- d) Create a bespoke project that builds trust in smart meters

"Especially with the climate emergency it's important that your education system is not just about safety." **Major connections customer** 

"I think the work with business needs to be included somewhere. The cost of energy, especially in Wales, can make or break a business. I get lots of questions about this so it's about reducing energy demand. When the cost of energy is affecting the viability of businesses, there needs to be more advice and coordination on this from WPD." **Government** 

"Build trust in smart meters." Healthcare body

"A way to measure success on communication and education. How do we understand what the costs and benefits are?" **Utility** 

"I've had my smart meters. But we've had real issues. People are still nervous about smart meters." **Charity** 

"In terms of education for customers, you need to get hold of future customers within the comprehensive schools and work on projects with them. They will be the drivers and they can educate their parents. That generation is on board with climate change." Local authority

#### Priority 7: Vehicle to grid, car parks into power stations — Proposed Commitments

a) Collaborate with developers to design car parks that can function as power stations

"We need to turn car parks into power stations." **Local authority** 

"We have led hydro and heat pumps, and we are driving this forward in order to get to net zero as well. Our challenge is car parks and battery storage and how to turn them into potential power stations." **Local authority** 

#### **Priority 8: Roll out flexibility services for domestic customers** — Proposed Commitments

- a) Educate and engage with customers on demystifying flexibility services and time of use tariffs
- b) Ensure customers are not hit by big, unexpected charges if they participate in flexibility services
- c) Focus on incorporating battery storage into the flexibility picture
- d) Learn from existing projects and data to roll out flexibility most effectively

"You need to be engaging with local communities on how to deliver flexibility." **Local authority** 

"Flexibility services for domestic customers – is that really going to happen? I just wonder whether flexibility is realistic at the domestic scale." **Government** 

"Make the data available. If you were to have a particular network, how would it charge?" **Local authority** 

"Demand flatlining comes with the end user and requires them to be intelligent. Storage and using storage when peak demands is needed. This demand flatlining could be used with flexibility." **Major connections customer** 

"In terms of the idea of homes as power stations, every home will have EV battery electric vehicles and if they are not using all the power they generate then this can be put back into the grid."

Major connections customer

#### Priority 9: Roll out network flexibility to all areas for commercial customers — Proposed Commitments

- a) Proactively reach out to large and small businesses to engage them on the benefits of flexibility
- b) Coordinate with businesses and explain to them how changing working patterns might affect flexibility
- c) Focus on incorporating battery storage and CHP units into the commercial flexibility picture

"I think it's about information and education and working with suppliers to understand flexibility and the options for businesses. We don't want businesses just thinking that energy is too expensive in Wales and then deciding to relocate abroad." **Government** 

"Flexibility for commercial customers, it's a great idea, but when you have someone with big demand, and then they need to change, it's how do you react. For example, if a business changes their working patterns, that flexibility is gone. So there's a risk you'll have to reinforce at a later point." **Local authority** 

"CHP units can make quite big savings for businesses. We've had difficulty with the main one, but it can give us returns of £6-8,000 per year in savings and electricity generated." **Academic institution** 

#### Priority 10: Facilitate heat pump take-up — Proposed Commitments

- a) Educate customers
   on the benefits of heat
   pumps and provide
   a point of contact for
   installers and local
   authorities
- b) Lobby government for incentives to stimulate take up and establish timelines and expectations nationwide
- c) Lobby to invest ahead of need to strengthen the network in anticipation of greater demand
- d) Work in partnership with relevant parties to create heat pump trials and models, along with accompanying intelligent tariffs

"When I start a development, I need a point of contact and a meeting with a WPD representative. We're developing a large site in West Wales for employment. We started discussions with WPD and the quote that came back was huge which just stopped it in its tracks. We eventually managed to get the price down with lots of back and forth. It's taken us eight months just to get to this point and we need more support early on, in terms of whether schemes and locations are viable." Government

"You have to have incentives because of the outlay. For example, with the insulation, the incentives were there and everyone took it up. Same with solar panels." **Local authority** 

"Can WPD still influence local authorities by sharing the information that it has about the network structure? There needs to be further joined-up thinking to tackle future energy scenarios. I understand that there is a huge capacity for power generation, but this cannot be achieved because the infrastructure isn't there." **Local authority** 

"Your guys need exact models and with any development you aren't providing that. We know there are grid constraints and it's measuring that against the outputs." **Major energy user** 

#### **Priority 11: Facilitate retrofitting** — Proposed Commitments

a) Collaborate with government and relevant agencies to review building standards

"Retrofitting houses for energy efficiency. If energy consumption is going up, we need to try to reduce it." **Local authority** 

"There needs to be a review of standards, including building standards. It's mind-boggling that there's no collaboration at the top." **Major energy user** 

#### **Priority 12: Share best practice** — Proposed Commitments

While this was established as a new priority, no formal commitments were articulated against this priority in the discussions. The following verbatim comment was, however, captured.

"I want to see more knowledge sharing with communities about renewables to help mainstream these technologies further. Best practices really need to be shared." **Local authority** 

#### Priority 13: Facilitate large-scale renewable projects — Proposed Commitments

a) Facilitate collaboration across government and industry

"Facilitate mega projects and renewables"

Major connections customer

#### **Priority 14: Upgrade the grid** — Proposed Commitments

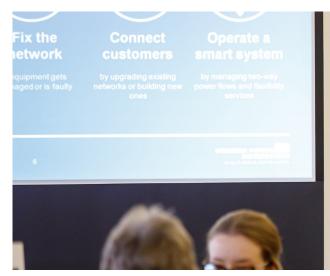
While this was established as a new priority, no formal commitments were articulated against this priority in the discussions. The following verbatim comment was, however, captured.

"Western Power needs to upgrade the network." **Major energy user** 

#### **Priority 15: Look at product life cycles with industry** — Proposed Commitments

While this was established as a new priority, no formal commitments were articulated against this priority in the discussions. The following verbatim comment was, however, captured.

"Are WPD looking at product life cycle? Such as how recyclable products are, or is it just about bottom-line cost?" **Connections provider** 





## 10 | ENVIRONMENT

Delegates were asked to vote on their top priorities under environment, and the clear winner was 'WPD align to (or exceed) local net zero targets', with 23% of the vote. Next was 'work with suppliers aligned with WPD's carbon targets and use of renewal energy' with 19%, and in third place was 'impact on local environment and impact on biodiversity' with 12% of the vote. The top two were newly identified priorities that emerged through the discussion session.

As well as voting on ten priorities, delegates also created an additional three that were not put to a public vote: 'work smartly', 'align to Welsh Government's Well-being of Future Generations Act and 'help WPD staff to lower personal carbon footprint'.

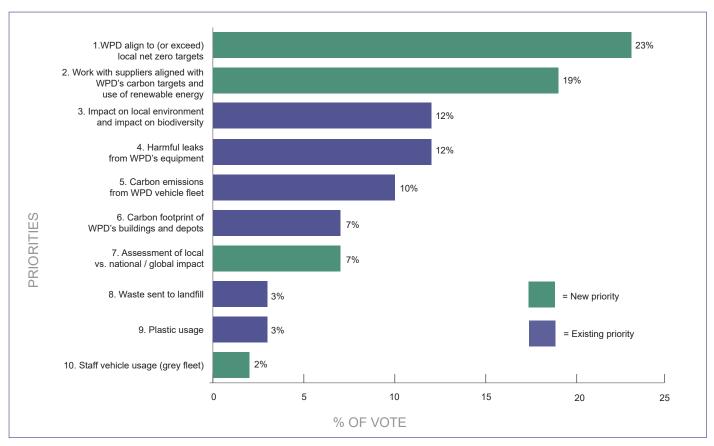
Stakeholders felt that WPD needed to announce and commit to a net zero target, and most felt that aligning with the government and opting for 2050 wasn't ambitious enough. Perhaps unsurprisingly, those from local authorities wanted WPD to aim for local authority-set net zero targets, with the most offered example being 2030. This would allow for closer partnership working to achieve net zero. However, others were careful to point out that there was, by necessity, a distinction to be drawn between WPD's business achieving net zero and the processes inherent in supporting its network areas to do the same. Most agreed that there was a need for WPD to use its market and political influence to hit its carbon zero targets.

WPD's influence emerged again in the discussions over working with suppliers and procurement chains to achieve net zero, with many pointing out that WPD could mandate sustainable and environmentally sustainable practices through their supply chain. Despite the higher costs that might arise from such a shift, delegates urged a more holistic approach to any cost-benefit analysis, with an incorporation of a social and environmental benefit to justify paying more to ensure a sustainable supply chain. A commitment to sustainable procurement arose under several other priority headings, particularly in 'waste sent to landfill' and 'plastic usage'.

Delegates wanted to see WPD take an ambitious approach to tree planting on their land, and additionally commit to initiatives such as repurposing land for bog and peatland, as this increases carbon capture in the landscape. They wanted to see WPD have zero impact on biodiversity, and commit to funding nature reserves and AONBs as part of a published wider environmental strategy.

#### **PRIORITIES**

The graph below details the priorities for this topic ranked in order during the electronic voting. It includes those priorities that had been previously suggested by stakeholders, as well as some new priorities that were suggested during the table sessions.



#### **ENVIRONMENT**

The table below includes new priorities that were suggested by stakeholders during the table sessions but were not included in the electronic voting afterwards. These are numbered for reference purposes. The order does not imply prioritisation.

Additional stakeholder priorities (not voted on during the electronic vote)			
11. Work smartly	12. Align to Welsh Government's Well-being of Future Generations Act	13. Help WPD staff to lower personal carbon footprint	

Stakeholders were then asked to start identifying commitments against these priorities. These have been set out under the priority headings below, which are in the order that stakeholders ranked the priorities in the electronic voting. Where no commitments were suggested against a given priority, this has been noted.

## Priority 1: WPD align to (or exceed) local net zero targets — Proposed Commitments a) Address practical and technical challenges of meeting 2030 net zero target b) Use political and market influence to reach net zero target

"Perhaps targets should be brought forward according to LA targets." **Local authority** 

"Aside from the political aspects, these targets involve a lot of technical and practical challenges and may require some rigour." **Government** 

"There's a difference between WPD's own business and enabling the service areas to achieve zero carbon targets, which needs to be addressed as part of an overarching commitment." **Government** 

## Priority 2: Work with suppliers aligned with WPD's carbon targets and use of renewal energy — Proposed Commitments

- a) Create a cost-benefit analysis that measures wider social value
- b) Use influence to ensure suppliers use sustainable practices
- "There needs to be a cost-benefit analysis done when working with suppliers." **Major connections customer**
- "Consider embedded carbon on your products and suppliers." Local authority
- "Shouldn't there be a priority on there about improving environmental credentials on the supply chain?" **Utility**
- "How does WPD measure social value to justify some of this expenditure?" **Local authority**
- "You need to take on board that there are other benefits, such as health benefits, that need to be prioritised." **Local authority**

# Priority 3: Impact on local environment and impact on biodiversity — Proposed Commitments a) Enact tree planting and bog land schemes on WPD land b) Ensure zero impact on biodiversity c) Fund nature reserves and AONBs d) Publish the results of environmental investments and initiatives

"With owning significant areas of land, could more trees be planted? We've got a lot of land; how can we make it a carbon sink? Encourage biodiversity as well with producers and suppliers. Everyone you're working with or supply chain purchases need to follow." Local authority

"WPD needs to have an ambitious tree-planting programme and look to continue cutting down as few as possible." **Consumer body** 

"Could you look into creating peat and bog land on WPD-owned land? It's a way of removing your carbon emissions." **Local authority** 

"Have zero impact on biodiversity." **Connections developer** 

"I mentioned earlier that environmentally friendly companies are planting trees with their investment. Is there something WPD can do to improve investment in nature reserves, where a lot of these are underfunded? To have their name associated with these places would be good symbolically. If they are doing it already it should be publicised more, or do more of it. Welsh Water are good at this. Ultimately people want affordable electricity but in relation to environmental impact, more can always be done."

Major connections customer

"WPD should publish their progression." **Local authority** 

#### Priority 4: Harmful leaks from WPD's equipment — Proposed Commitments

- a) Change equipment and assets susceptible to leaks where possible
- b) Collaborate across industry to develop alternatives to SF6
- c) Monitor impact of leaks in the environment and create contingency plans for affected areas

"Do you still have oil-filled cables? It could be that you start phasing out these assets." **Local authority** 

"I would like to see WPD stop using SF6. They should find an alternative. When it leaks it stays in the atmosphere for about 3,000 years and it is irreversible." **Local authority** 

"Looking at innovation, you're currently using harmful chemicals, but can't you look into more intelligent alternatives? Work with manufacturers to inform and influence what they produce." **Local authority** 

"I think carbon emissions shouldn't be the top priority. They don't cause so much damage locally whereas with leaks you've got huge immediate effects to a local area. Think about the impact on a particular wildlife species, for example. In contrast, carbon emissions are harmful over a longer period of time. That said, I don't think you can stop the leaks but it's a question of whether you can increase your contingency planning or cater to those communities." **Business customer** 

Priority 5: Carbon emissions from WPD vehicle fleet — Proposed Commitments				
a) Switch lighter vehicles to electric and brand WPD EVs	b) Invest in hydrogen / biomass technology for heavier vehicles	c) Aim for a 2030 target for zero carbon emissions from WPD fleet	d) Use telematics and incentives to monitor routes and driving practices	

"Does WPD have its own electric vehicle fleet? I appreciate that it would be easier to electrify the smaller vehicles in your fleet, though, compared to the bigger vans that carry kit." **Local authority** 

"On the argument between EV and hydrogen vehicles, I assume you have long-range vehicles. Shorter trips could be done with electric and the lorry fleet could be powered by hydrogen." **Local authority** 

"Could you be involved in EV at the innovation stage so that when you come to electrify parts of your fleet it is actually fit for purpose and meets all your needs? Make use of the innovation in EV technology." **Government** 

"WPD workers must use the most efficient routes and stick to speed limits in order to reduce emissions when travelling to and from jobs." **Local authority**  "With the top priorities listed here, it's about leading by example. The more the public sees that you've got an all-EV fleet, the more it encourages others to switch to EV." **Local authority** 

"The other thing is that 2050 might be too late if you read the science. Why aim for something that's too late? 2030 has to be the absolute latest for me. We've had 40 years and have done nothing." **Local authority** 

"WPD should promote good driving practices and create local league tables between depots with incentives for safe driving. That would encourage employees to drive safely." **Local authority** 

#### Priority 6: Carbon footprint of WPD's buildings and depots — Proposed Commitments c) Ensure all energy d) Consider a) Achieve the b) Reach the target e) Publish highest EPC of zero home working environmental powering rating across all emissions from buildings and assessment of your buildings buildings by depots comes WPD's sites and from renewables 2030 demonstrate progression

"Push LED lighting as much as possible." **Connections representative** 

"In WPD buildings, there must be heating systems that use efficient technology." **Local authority** 

"Have a hierarchy of energy efficiency, followed by renewable, followed by anything that you can't get rid of and have it offset." **Connections representative** 

"Could WPD consider promoting working from home more?" **Local authority** 

"The ability to be advanced and setting your own KPI is a part of this, including having commitments to achieve. You probably have a database with every building operating on a depot. Environmental analysis on each one of these and where they stand at the moment on their environmental rating would be great. It's always good to have a baseline at 2020 so it can be reviewed in 2050. An environmental assessment of every WPD building will tell customers that WPD are making the step. The next step is finding out what WPD are doing to improve this and the cost." Major connections customer

"Carbon net zero by 2030." Local authority

#### **Priority 7: Assessment of local vs. national / global impact** — Proposed Commitments

a) Use a local vs. national impact metric to determine investment

While this was articulated as a commitment, no verbatim comments were captured on it during the discussions.

#### Priority 8: Waste sent to landfill — Proposed Commitments

- a) Recycle all used asset materials, such as cables and metal
- b) Exceed all current recycling standards
- c) Focus on procurement and circular economies

"Eliminate waste sent to landfill." **Connections developer** 

"Procure things that have higher recycling content." **Local authority** 

"Exceed all current standards. Demonstrating that you're going beyond the current standards would encourage everyone to refocus." Connections developer

"Recycle cables or metal." Local authority

#### **Priority 9: Plastic usage** — Proposed Commitments

- a) Recycle and reuse plastics where possible
- b) Commit to zero single-use plastics
- c) Focus on plastics in the procurement process

"Plastic is probably one the most important materials in the 21st century, but single-use plastic is the problem. WPD needs to home in on reducing how much singleuse plastic it uses." **Local authority** 

"WPD should commit to distinguishing between plastic and single-use plastic products." **Local authority** 

"WPD should look into some kind of innovation scheme involving getting plastic from non-fossil-fuel products." **Local authority** 

"The people that need to look into this more than anybody are the procurement teams." Large energy user

#### Priority 10: Staff vehicle usage (grey fleet) — Proposed Commitments

a) Incentivise staff to buy EVs

b) Encourage car-sharing schemes

"Encourage staff to change to low-carbon emissions." **Local authority** 

"Some places have car-sharing schemes and initiatives involving minibuses bringing people to the site. Maybe WPD could explore these avenues." **Local authority** 

#### Priority 11: Work smartly — Proposed Commitments

a) Plan smarter infrastructure upgrades to minimise carbon output

"Looking at your infrastructure of cabling, how much money is saved by digging up a road to put in a ducting system rather than a cable, which makes it easier to upgrade and means that you don't have to dig the road? It causes traffic and pollution issues." Academic institution

#### Priority 12: Align to Welsh Government's Well-being of Future Generations Act — Proposed Commitments

While this was established as a new priority, no formal commitments were articulated against this priority in the discussions. The following verbatim comment was, however, captured.

"There's a bit of legislation called the 'Well-being of Future Generations Act'. It's an all-encompassing piece of legislation and you should look at how WPD are aligned with it and can learn from that." **Major connections customer** 

#### Priority 13: Help WPD staff to lower personal carbon footprint — Proposed Commitments

a) Commit to an overarching net zero target to incentivise staff

It's about reaching out to encourage good behaviour, helping staff to decrease their personal carbon footprints; it starts from the company and then spreads throughout." **Local authority** 



## 11 | ELECTRIC VEHICLES

Delegates voted on their top priorities under the heading of electric vehicles, and the most popular priority was 'innovation (e.g. inductive charging)' with 18% of the vote. In second place, with 17%, was 'future investments, lobby government', followed by 'home and on-street charging (easy access)' with 13% of the vote. All of these were newly identified priorities.

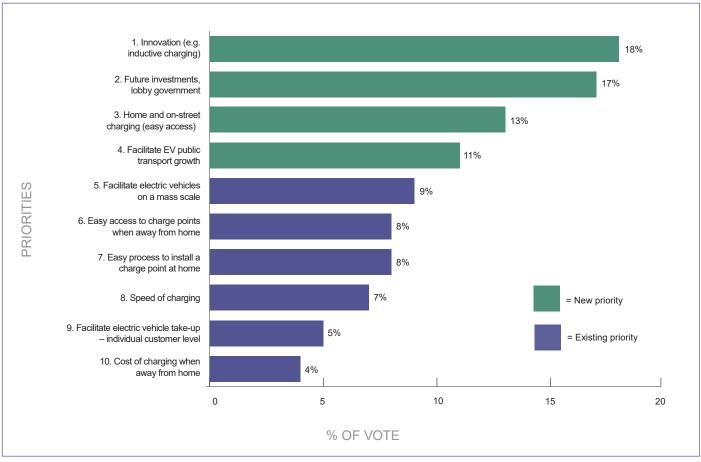
As well as voting on ten priorities, four of which arose as a result of the discussions, delegates created a further four priorities that were not voted on: 'consider electric and hydrogen vehicles', 'partnerships', 'electrify WPD's fleet where possible' and '100% renewable energy for EV charging points'.

Many stakeholders, witnessing advances in charging around the world, were keen to see WPD commit more to innovation around EV charging, particularly with regard to inductive, wireless charging. Another stream of innovation they wanted to see WPD commit to was in vehicle to grid technology, where a two-way flow of energy could enable EV users to sell energy back to the network. In both of these cases, delegates accepted that a major level of investment was needed, which precipitated the second priority: 'future investments, lobby government'. Many saw that lobbying government was key to changing the way that WPD were able to reinforce the network and invest in new technology and the infrastructure to support it. However, the salient point was made that WPD needs to build a robust, properly forecasted case for investment, as the risk of stranded assets in a poorly planned reinforcement strategy remained high.

There was considerable debate around the issue of home and on-street charging. For many, the problems lay in capacity, and they urged WPD to upgrade the network to facilitate quicker, cheaper connections for customers wanting to install charge points at home. Others saw the challenge inherent in providing public charge points on streets with terraced housing and were concerned about the disruption any large-scale infrastructure project of that nature would bring. In a crossover with the priority 'facilitate electric vehicle take-up – individual customer level', some delegates wondered whether encouraging individual car ownership was the right approach, and whether car sharing, carpooling and greater investment in electric public transport was actually the right way forward. Stakeholders representing major energy users questioned whether it was WPD's role at all to facilitate easy access to charge points at home.

#### **PRIORITIES**

The graph below details the priorities for this topic ranked in order during the electronic voting. It includes those priorities that had been previously suggested by stakeholders, as well as some new priorities that were suggested during the table sessions.



#### **ELECTRIC VEHICLES**

The table below includes new priorities that were suggested by stakeholders during the table sessions but were not included in the electronic voting afterwards. These are numbered for reference purposes. The order does not imply prioritisation.

Additional stakeholder priorities (not voted on during the electronic vote)			
11. Consider electric and hydrogen vehicles	12. Partnerships	13. Electrify WPD's fleet where possible	14. 100% renewable energy for EV charging points

#### PROPOSED COMMITMENTS

Stakeholders were then asked to start identifying commitments against these priorities. These have been set out under the priority headings below, which are in the order that stakeholders ranked the priorities in the electronic voting. Where no commitments were suggested against a given priority, this has been noted.

#### Priority 1: Innovation (e.g. inductive charging) — Proposed Commitments

a) Invest in research into induction plates

b) Enable vehicle to grid capability

"Induction chargers drive over in the road with induction plates. Keep an eye on emersion tech." **Local authority** 

"Vehicle to grid. Economic charging, a two-way flow. Selling energy back into the grid." **Local authority** 

"From an innovation point of view, I'd like to see onthe-move wireless charging so that you charge while the vehicle's moving. However, there's massive investment." **Major energy user** 

#### Priority 2: Future investments, lobby government — Proposed Commitments

a) Invest ahead of need to upgrade the network for predicted future demand

"WPD should lobby government with regard to planning and development policy to prepare for an electric vehicle future." **Major connections customer** 

"It's all about investing in infrastructure to suit people's needs." **Emergency services** 

"All the regulator will be worried about is people paying too much money to overinvest and then that infrastructure never being used. How do you get to a point where you get a fairly good view of the size of the challenge?" **Utility** 

#### Priority 3: Home and on-street charging (easy access) — Proposed Commitments

- a) Ensure the capacity and infrastructure is in place for expansion of on-street charge points
- b) Hold expert-level workshops for relevant partners to work towards implementation of public charge points

"From a valleys point of view, there's not off-street parking, there are terraced streets. I don't have confidence in private undertakers wanting to dig up the road. That has huge implications for us. However, it's not WPD's responsibility to facilitate it." Major energy user

"The big priority is how to charge at home especially for existing homes. This needs a major focus group. One hundred homes can't share just one or two charge points." **Major connections customer** 

"Looking to bridge the capacity issue is crucial for meeting EV targets and WPD must fulfil this by putting infrastructure in place." **Local authority** 

#### **Priority 4: Facilitate EV public transport growth** — Proposed Commitments

- a) Support public transport grid setup and set goals that support grid utilisation
- b) Build an evidence base for investment and lobby government for the ability to invest ahead of need

"It is also about educating people about flexibility. There should be fewer cars on the road and more on public transport. In rural areas the transport is bad so this is where it needs to start." **Connections provider** 

"At the moment the journey times for buses is a barrier though. The difference between travelling by bus and by car is huge. Park and rides don't always solve the problem. Central government has a big role to play here. It's about joined-up thinking with the government."

Major energy user

"From a local authority point of view I think it would be good to help facilitate any public transport. For example, Cardiff council is increasing the number of electric buses so is there any way this can be facilitated by WPD? If you can help with public transport that might allow more people to use public transport and then there's less people buying EV and putting individual strains on the network. This is a separate priority in terms of facilitating wider public transport." Local authority

#### **Priority 5: Facilitate electric vehicles on a mass scale** — Proposed Commitments

- a) Collaborate with manufacturers, local and central government and industry
- b) Focus on longterm strategies to reduce charging costs for the consumer
- c) Develop battery storage technology
- d) Focus on network reinforcement based on uptake forecasting
- e) Provide clear information on connection, capacity and charging costs

"An overall strategy is required from the government-down. This will help all of us." **Connections provider** 

"Facilitating collaboration and knowledge exchange between LAs could be led by WPD." **Local authority** 

"WPD can play a role by lowering the cost of electricity if it wishes to facilitate the mass roll-out of EVs." **Local authority** 

"Make it really cheap. Have a longer burn in order to get money back. To get people engaged. Influence the people that have the ability to get the charging to make people get into electric charging." Connections representative

"Developing low-carbon battery technology would be a great key to the door. We will reach a point where everyone is using EVs and the batteries will cover the same distance as a tank of petrol. That's when peak demand will be reached." **Local authority** 

"Ask the government for some money to upgrade infrastructure." **Local authority** 

"Advise on capacity. Say get rid of parking charges." **Local authority** 

"There needs to be more information put out there about charging points." **Local authority** 

#### Priority 6: Easy access to charge points when away from home — Proposed Commitments

- a) Lobby government for a cohesive national charging strategy
- b) Ensure the capacity for multiple new charge points
- c) Build consumer confidence in viability of charge points away from home

"People are concerned about motorway service station charging points. They are worried that there isn't enough infrastructure and capacity for fast charging." **Local authority** 

"The most anxious thing for people with electric vehicles is when chargers are not working and it is important to build that consumer confidence in the fact that the infrastructure is robust." **Local authority** 

#### **Priority 7: Easy process to install a charge point at home** — Proposed Commitments

- a) Improve communications: create a 'dummies' guide' document
- b) Lead on upgrading infrastructure and designing smart networks
- c) Focus on areas such as rural communities and terraced streets

"One of the projects being looked involves upgrading houses as well as street mains, hoping to plug electric chargers to the street lights, but there are issues with where the cable runs. WPD could be explorative with us." Major connections customer

"I think easy access to charge points when you're away from home is good, but can you add when you're at home as a priority? You've got a massive infrastructure problem. The physical landscape is a challenge for you guys." Major energy user

"Currently these rural places we've discussed don't have a good broadband connection, so they definitely don't expect to have an EV connection."

Business customer

#### **Priority 8: Speed of charging** — Proposed Commitments

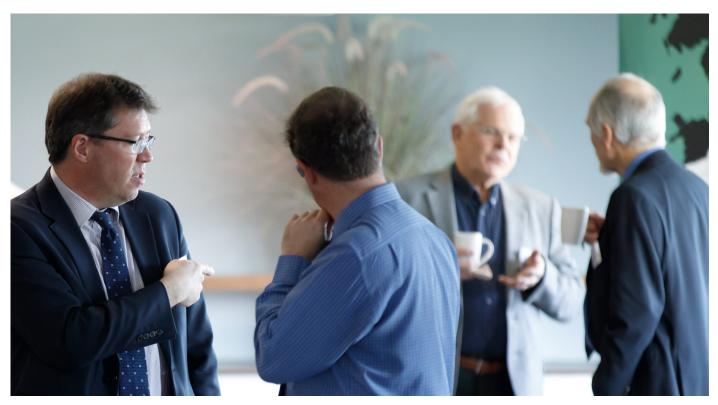
- a) Upgrade capacity and infrastructure to enable rapid charging
- b) Collaborate with EV manufacturers and technology companies

"Infrastructure is all to do with speed of charging. The network needs to be able to facilitate fast charging." **Connections representative** 

"Speed of charging is down to the network at the moment. You simply need to make sure the capacity is available and the market will develop technology to meet that opportunity." **Local authority** 

"How much of a relationship is there between WPD and technology developers? There's no point in creating advanced speed charging if the grid won't be able to handle the extra demand." **Local authority** 

"In terms of speed of charging, it depends on the vehicle too because some use more than others." **Connections provider** 



#### Priority 9: Facilitate electric vehicle take-up — Proposed Commitments

- a) Develop a network that is ready for large-scale EV take-up
- b) Liaise with local authorities and private sector: help everyone meet their targets
- c) Provide innovative solutions for customers without driveways and in rural areas
- d) Educate customers on EVs and car club initiatives

"Local authorities are required to deliver this infrastructure, but WPD could try and encourage the private sector to look into rolling out chargers themselves. WPD could liaise with local authorities and private companies as part of its strategy to help local authorities hit their required targets." Local authority

"Where there are more people and more vehicles, there is going to be more infrastructure. But then how are we going to make sure there's a consistent level playing field for anyone who wants to own and charge an EV, even in more rural areas?" **Utility** 

"Pool cars and educating people on car sharing. You could do this via a website. That's particularly relevant nowadays because subsidies in fuel make it cheaper than it should be by about a third so it could become a lot more expensive very quickly, along with energy in general." **Local authority** 

"Upgrading the network." Local authority

#### Priority 10: Cost of charging when away from home — Proposed Commitments

- a) Accept that this is not in WPD's sphere of influence
- a) Ensure that fast chargers are not inaccessible for those less able to pay

"These companies make a commercial decisions based on the cost, so I don't think that cost of charging when away from home is an appropriate priority for WPD to focus on." **Local authority** 

"Are fast chargers cost prohibitive though? Is that fair on those who are less able to pay?" **Local authority** 

"I think that the cost of charging away from home is determined by the charger supplier, so I don't think that WPD can influence it. Does WPD intend to enter that market?" **Local authority** 

#### Priority 11: Consider electric and hydrogen vehicles — Proposed Commitments

While this was established as a new priority, no formal commitments were articulated against this priority in the discussions. The following verbatim comment was, however, captured.

"There should be electric and hydrogen vehicles. There has to be a mix of the both and that WPD should engage with wider manufacturers and have a commitment to looking into this a lot more." **Local authority** 

#### **Priority 12: Partnerships** — Proposed Commitments

While this was established as a new priority, no formal commitments were articulated against this priority in the discussions. The following verbatim comment was, however, captured.

"Partnerships with manufacturers such as for EVs is crucial." **Connections provider** 

#### Priority 13: Electrify WPD's fleet where possible — Proposed Commitments

While this was established as a new priority, no formal commitments were articulated against this priority in the discussions. The following verbatim comment was, however, captured.

"WPD's fleet should move to all electric." **Major connections customer** 

#### **Priority 14: 100% renewable energy for EV charging points** — Proposed Commitments

While this was established as a new priority, no formal commitments were articulated against this priority in the discussions. The following verbatim comment was, however, captured.

"I agree that WPD should look to provide 100% renewable energy to electric vehicle charging points". **Major connections customer** 



### 12 | VULNERABILITY AND FUEL POVERTY

Delegates were asked to vote on their most important priorities under the heading of vulnerability and fuel poverty. The most popular priority was 'communication / collaboration with others raising the profile of WPD services (e.g. work with WLGA)', with 19% of the vote. In joint second place was 'match local ambitions and needs (e.g. targeted renewables in a specific area with fuel poverty)' and 'protect the interests of vulnerable customers in the switch to a smarter network', both garnering 15% of the vote. The first two priorities outlined above were new priorities that emerged through the discussions.

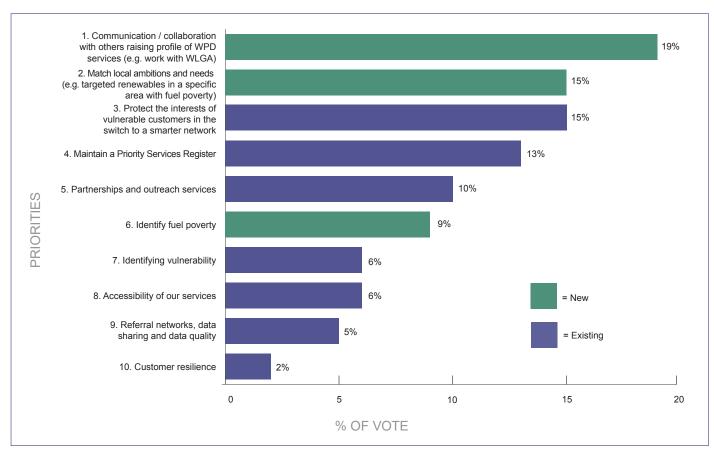
Communication and collaboration was high on the agenda under this topic, with delegates, particularly from local authorities and Welsh Government, keen to see WPD engaging with them more deeply on promoting the various services offered to vulnerable and fuel-poor customers. As a specific example, stakeholders highlighted smart meters as an area where WPD could work collaboratively to both promote and demystify their value to customers. Some pointed out that smart meters were having a negative effect on vulnerable customers, with some customers 'sitting in the cold because they're terrified about the numbers', and advocated cohesive education and support to mitigate this.

Delegates wanted to see WPD able to provide a much more targeted strategy to support vulnerability and fuel-poor customers, pointing out that Wales was a very diverse region with different approaches needed for different areas. Some suggested facilitating renewables such as PV in places with high cases of fuel poverty, or providing extra support for increasing energy efficiency. Another targeted initiative was suggested in retrofitting housing stock in areas where insulation and EPC ratings were particularly low.

Protecting the interests of the vulnerable in the switch to a smarter network was also a high priority for stakeholders in Swansea, with many advocating effective partnership working to assist communities with greater technological complexity in the home. Ongoing support for vulnerable customers was seen to be key in that regard. Others saw the opportunity for usage monitoring of technologies to better tailor services for vulnerable customers in the future. Stakeholders representing local authorities and connections saw the potential value in involving the vulnerable in EV car sharing schemes to increase mobility and tackle loneliness, and others posited a potential EV charging discount to expand accessibility for the fuel-poor.

#### **PRIORITIES**

The graph below details the priorities for this topic ranked in order during the electronic voting. It includes those priorities that had been previously suggested by stakeholders, as well as some new priorities that were suggested during the table sessions.



#### **VULNERABILITY AND FUEL POVERTY**

The table below includes new priorities that were suggested by stakeholders during the table sessions but were not included in the electronic voting afterwards. These are numbered for reference purposes. The order does not imply prioritisation.

#### Additional stakeholder priorities (not voted on during the electronic vote)

11. Work with government and suppliers on standing charges issue

#### PROPOSED COMMITMENTS

Stakeholders were then asked to start identifying commitments against these priorities. These have been set out under the priority headings below, which are in the order that stakeholders ranked the priorities in the electronic voting. Where no commitments were suggested against a given priority, this has been noted.

# Priority 1: Communication / collaboration with others raising profile of WPD services (e.g. work with WLGA) — Proposed Commitments

- a) Work cross-agency to publicise and deliver vulnerability services
- b) Do more to demystify smart meters
- "You need to channel these priorities through the Welsh Local Government Association (WLGA) and work with them." **Local authority**
- "Could you look into working more with local authorities to create partnerships and tap into shared knowledge?" **Local authority**
- "It is about engagement through various outlets and collaborating with the council to inform people about the priority services and how WPD can help others." **Local authority**

"We need to support people as we move towards smart meters. Some people may not have access to the Internet and may not understand smart meters. More information needs to be supplied." **Local authority** 

"I worry that smart meters are having a negative effect on vulnerable customers, as they can see how much energy they are using. Vulnerable customers are sitting in the cold because they're terrified about the numbers." **Utility** 

# Priority 2: Match local ambitions and needs (e.g. targeted renewables in a specific area with fuel poverty) — Proposed Commitments

- a) Facilitate retrofitting in areas with poorly insulated housing stock
- b) Facilitate renewables and efficiency savings in areas of fuel poverty
- "Wales is so diverse that there are different issues within different regions." **Charity**
- "Match the level of ambition with the specific needs of this region. If vulnerability and fuel poverty is a bigger issue for this region than others, wouldn't the ambition be bigger?" **Utility**
- "With retrofitting houses, the idea is to get everyone to the same level. Could you start with a register of all the worst insulated houses and work your way through those? In doing so you would be increasing fuel efficiency and helping those who are potentially less able to pay." **Local authority**
- "What do WPD do in terms of putting in solar panels? It will help make things cheaper by using solar panels." **Local authority**
- "People need to be made clear on the savings they could make by improving fuel efficiency for example." **Local authority**
- "I think people will trust in WPD more than the government in terms of how to improve the efficiency of their homes and manage costs." Connections provider

#### Priority 3: Protect the interests of vulnerable customers in the switch to a smarter network — Proposed Commitments b) Promote community a) Take a long-term c) Learn from net zero d) Create trust and work view to assess both cost EV schemes projects and models with partners to deliver and accessibility of new and monitor usage and support and accurate technology behaviour advice

"A lot of people who are older experience loneliness and can't get out to do things. From WPD's social conscience point of view, this would be an extremely helpful and welcomed initiative." Major connections customer

"As we move to all electric vehicles, these vulnerable people need options for discounted charging points. A discounted provision of supply would be great. If these terraced street charge point ideas are being talked about, there could be a way of giving discounts." **Local authority** 

"If we are already engaged with those people, we as local authorities could help; we could endorse it." **Local authority** 

"New systems that will be put in will need to be taught to some of these people. But if we could use technology and systems to keep energy bills low, we could also monitor usage which could lead to a more tailored service to those who are vulnerable."

Major connections customer

"It's almost having the support there for the first few months of having new renewable technology installed. We have to accept that even if people have been trained, they might still have queries and use it incorrectly, so ongoing support is key." **Government** 

"Kick starting a community car scheme would help vulnerable people. If WPD had a budget to support this it would be great." **Local authority** 

"Consider the more long-term basis, whether that be about cost or the usability." **Local authority** 

Priority 4: Maintain a Priority Services Register — Proposed Commitments					
a) Continue to maintain and promote the PSR	b) Use trusted partners and work cross-utility to increase referrals	c) Focus on creating one cross-utility PSR	d) Continue to cleanse PSR data regularly	e) Offer advice for vulnerable customers outside of power cuts	

"People move and pass on, so you need to keep the PSR maintained." **Major connections customer** 

"Advertising the PSR directly through councils and councillors should be the priority." **Local authority** 

"Why not integrate your data with other utility companies?" **Vulnerable customer representative** 

"I think you should offer advice really. You are the experts and should be in the position to offer support for vulnerable customers." **Healthcare body** 

# Priority 5: Partnerships and outreach services — Proposed Commitments a) Continue to work in partnership with third parties including local authorities, Welsh government and housing associations b) Join the Public Services Boards c) Identify partnership leaders and coordinators

"With housing standards for new build associations, there needs to be a whole host of partnerships that help the reduction of fuel poverty overall." **Local authority** 

"I think that there's been a big spike in fuel debt and you can't get people onto better rates if they're in debt. WPD needs to work more with partnerships that help these vulnerable people." **Consumer body** 

"The Public Services Board are a fantastic body to work with. As a council they give us access to a large number of institutions and bodies we previously thought inaccessible." **Local authority** 

"I think partnership working is vital because there are lots of different strands and you need a coordinator. Wales is small enough to be able to do this as a model for others. It's very easy to do with providing social housing and it would be easy to gather data from that and use it in an energy context." **Government** 

Priority 6: Identify fuel poverty — Proposed Commitments				
a) Conduct a regional analysis     of fuel poverty	b) Create a fuel poverty register	c) Refer fuel-poor customers to third parties for support		

"Is there a register of people who are experiencing fuel poverty? In a mid-terraced house with little or no possibility of being insulated? This is one method of identifying vulnerability. I imagine someone in fuel poverty might not have the ability to use the Internet." **Major connections customer** 

"On fuel poverty, I suggested a register purely because your social conscience means you want to help." **Major connections customer** 

"I don't think the responsibility for fuel poverty lies with WPD, but if you're made aware of it you can signpost those fuel-poor customers." **Academic institution** 

"I don't think you can do any more than refer to bodes like Citizens Advice." **Local authority** 

"You have a moral responsibility [in this priority area]." Local authority

# Priority 7: Identifying vulnerability — Proposed Commitments a) Share vulnerability data with emergency services b) Identify the right source of help for vulnerable customers c) Continue to expand networks and work in partnerships to identify vulnerability

"Continue to share data surrounding vulnerable people to the emergency service corresponding to policy. We can pull it up when there is an emergency to find those that need the help." **Connections representative** 

"Do you work with the DSOs in identifying the vulnerable? Do you work together to provide the services to support them? I hope that you're asking these vulnerable people how they need to be supported as opposed to deciding for them. Vulnerability can be very specific." **Government** 

"You need to make sure you're utilising local councils to access parts of the community that aren't engaged with new technologies, particularly the elderly." **Local authority** 

"There's a lot of people that don't have access to computers and you need to utilise word-of-mouth avenues such as community groups." **Local authority** 

# Priority 8: Accessibility of our services — Proposed Commitments a) Educate all customers on energy efficiency and flexibility: outline the difference between b) Communicate using variety of online, letter, and telephone: don't leave digitally excluded c) Collaborate to improve accessibility possible to register for the PSR

"Focus on the disengaged." Charity

tariffs and costs

"Publish educational leaflets telling people how they can use their power." **Major energy user** 

customers behind

- "I think it's the more vulnerable people that won't have the accessibility because most of it is webbased. You mustn't lose sight of the people that don't have computers. Focus on the digitally excluded." **Healthcare body**
- "I was just wondering about whether there is an issue about regional areas being digitally excluded, but then again that's not an issue for WPD to deal with. It's something you should be aware of but then not your responsibility." **Emergency services**

"WPD needs to understand vulnerable customer needs, because they will be different. It needs to communicate in different ways and provide different types of information." **Utility** 

"It would be nice to see the various monopoly providers promoting accessibility services and registers to individuals." **Government** 

"There needs to be more collaboration between suppliers and distributors to get better knowledge available." **Consumer body** 

Priority 9: Referral networks, data sharing and data quality — Proposed Commitments				
a) Continue working with LAs, care line services and health authorities to expand referral networks	b) Continue signposting to Citizens Advice and other third parties	c) Sign up to the JIGSO project	d) Integrate utility data sharing and use data sharing clauses to access new data sets	

"Careline services could be integrated to find out who is vulnerable and then they could refer people to be put onto the Priority Services Register." **Local authority** 

"Do you collaborate with the health authority on identifying vulnerable customers? I know they're quite difficult to work with but I think it's essential." **Local authority** 

"It might be better to work with the Public Services Board. That way you would get a similar engagement across the board and although it's indirect you can utilise their strong relationship with institutions like the health authority." **Local authority** 

"The JIGSO project is being done on behalf of the emergency services in Wales; there is an individual that is managing to get the data. Sign up to the JIGSO project, allowing people to maintain their health and well-being." **Charity** 

"Maybe the issue is communicating to the customer what the purpose of that data sharing is. I think as long as people understand why their data is being shared they will be more receptive to it." **Local authority** 

"Data sharing should be rolled out across the board and through collaboration you could offer other referral services." **Major connections customer** 

"WPD needs to get people's consent for their information being passed on to other people to provide support. Some kind of approval clause for new sign-ups should be added and existing members of the register should be asked retrospectively." **Local authority** 

#### **Priority 10: Customer resilience** — Proposed Commitments

- a) Consider customers' increased reliance on technology
- b) Inform and educate on resilience through partnership networks
- c) Focus on vulnerable properties, such as care homes

"Going forward we're becoming more dependent on smart technologies. More and more vital devices are reliant on electricity. I think that making strong links in with partnerships and outreach services should be a priority." **Local authority** 

"Local authorities and other fire services and police should get together to form a local resilience forum to reach people." **Local authority** 

"Look at vulnerable properties, for example, care homes, etc." **Local authority** 

#### Priority 11: Work with government and suppliers on standing charges issue — Proposed Commitments

While this was established as a new priority, no formal commitments were articulated against this priority in the discussions. The following verbatim comment was, however, captured.

"WPD could offer lower standing charges to older users who are likely to use less energy anyway. Those who can afford to pay more should pay more." **Connections provider** 



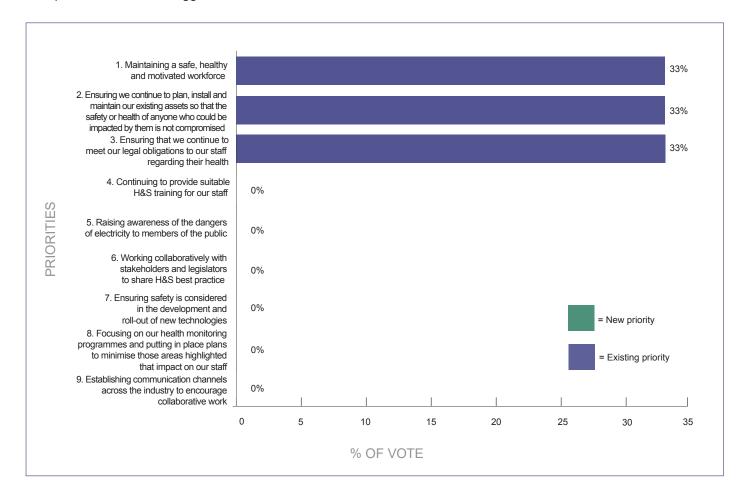
### 13 | SAFETY AND HEALTH (AFTERNOON SESSION)

Only one stakeholder ranked the priorities in this session, but they identified, 'maintaining a safe, healthy and motivated workforce', 'ensuring we continue to plan, install and maintain our existing assets so that the safety of anyone who could be impacted by them is not compromised', and 'ensuring that we continue to meet our legal obligations to staff regarding their health' as top.

Stakeholders suggested a range of new commitments for the next business plan. These were aimed at improving the workforce's competency on safety measures such as logging key information, as well as educating them on the potential health and safety hazards surrounding Sulphur Hexafluoride (SF6). Stakeholders also wanted to see more schools outreach to ensure children were aware of the health and safety hazards that surround WPD assets, and better communication between stakeholders to spread health and safety best practice and foster greater collaboration.

#### **PRIORITIES**

The graph below details the priorities for this topic ranked in order as part of a written feedback form completed at the end of the session. It includes those priorities that had been previously suggested by stakeholders, as well as some new priorities that were suggested on the feedback form.



#### **SAFETY AND HEALTH (AFTERNOON SESSION)**

#### **PROPOSED COMMITMENTS**

Stakeholders were then asked to start identifying commitments against these priorities. These have been set out under the priority headings below, which are in the order that stakeholders ranked the priorities in the electronic voting. Those priorities that did not have any suggested commitments or were not commented on by stakeholders have not been included below.

#### Priority 1: Maintaining a safe, healthy and motivated workforce — Proposed Commitments

a) Ensure the mental health needs of the workforce are being properly met

"What I've found over the years within the health service is that well-being has become a major focus. Mental health issues have come to the fore and that's important."

# Priority 2: Ensuring we continue to plan, install and maintain our existing assets so that the safety or health of anyone who could be impacted by them is not compromised — Proposed Commitments

- a) Educate relevant workforce members on the health and safety threats posed by Sulphur Hexafluoride (SF6) across the network
- b) Safeguard existing assets from the implications of an increased grid capacity
- "The SF6 issue needs to be a priority in your health and safety discussions."
- "From a health and safety point of view the increased capacity is a fire hazard."

"SF6 should be a major priority for WPD."

#### Priority 4: Continuing to provide suitable H&S training for our staff — Proposed Commitments

a) Train relevant staff members on logging key information to support other stakeholders

"We have logbooks for our substations but WPD workers don't seem to be filling them in."

"The only issue we have is about access to substations. It's a little bit of a cause for concern that we don't know the exact details of your men's comings and goings."

### Priority 5: Raising awareness of the dangers of electricity to members of the public

— Proposed Commitments

a) Reach out to schools to inform children about the health and safety hazards that surround WPD assets

"Have you done much work in going into schools and talking about the dangers of substations?"

"We don't get problems there but the close proximity of a comprehensive school to our main intake substation is certainly worth considering just in case." "People probably don't understand that fetching a football from the substation is free and that they won't get in trouble."

# Priority 6: Working collaboratively with stakeholders and legislators to share H&S best practice — Proposed Commitments

No formal commitments were articulated against this priority in the discussions, but the following comments were made.

"In general, sharing all this information makes everyone on the supply chain aware of each other's roles, which is only positive." "This is the first one of these workshops I've been to and I think it's good practice. It's good that you guys are listening to what the users think. I think you should keep it up as I've found it hugely beneficial."

# Priority 9: Establishing communication channels across the industry to encourage collaborative work — Proposed Commitments

While this was established as a new priority, no formal commitments were articulated against this priority in the discussions. The following verbatim comments were, however, captured.

"Another main issue for me is communication with regard to health and safety."

"A big issue on our table and from what I've heard collectively is communication, not just with regard to health and safety but across the whole industry."

"If we're going to even attempt to tackle the Welsh Government's unrealistic 2030 targets we need to have far more communication as an industry."



## 14 | CONNECTIONS (AFTERNOON SESSION)

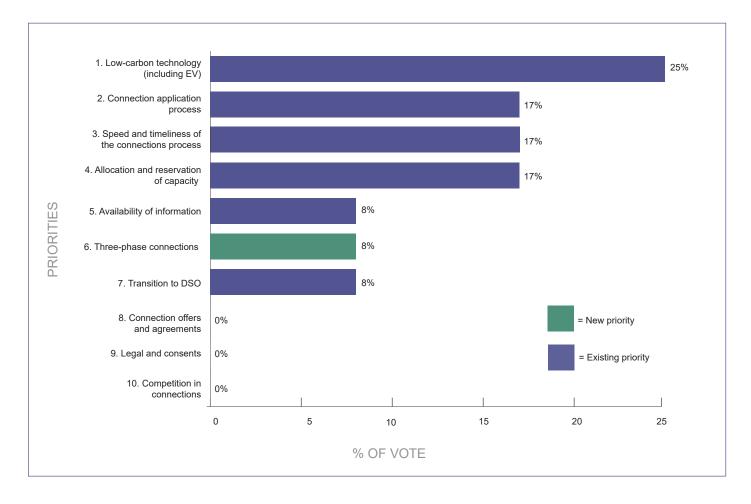
This session covered priorities and commitments for both the upcoming business plan as well as the 2020/21 ICE work plan.

When stakeholders were asked to rank their priorities for connections in the next business plan (via feedback form), the highest ranked was: 'low-carbon technology (including EV), with 25%. This was followed by 'connection application process', 'speed and timeliness of the connections process' and 'allocation and reservation of capacity' all with 17% of the vote. Delegates created one new priority, 'three-phase connections', which won 8% of the vote. Some of the suggested commitments included forecasting 5–10 years ahead with regard to EVs and the EV charging network, reserving capacity in rural areas suitable for generation, and greater collaboration and information sharing between community energy groups, local authorities and WPD.

In terms of the current ICE plan, 'low-carbon technology', 'network capacity allocation and reservation', 'transition to DSO' and 'communication' were the top four priorities, scoring 22% each. Stakeholders suggested one new priority, 'early engagement with planners', that garnered 11% of the vote. Stakeholders proposed two commitments to include as part of this year's ICE plan, corresponding to 'communications' and 'competition in connections'. They wanted WPD to provide a continuous point of contact during the connections process and for the connections process to be less expensive and more transparent, particularly for those customers who might know relatively little about the field.

#### **PRIORITIES (BUSINESS PLAN)**

Stakeholders were given three votes each to allocate to their choice of priorities below by way of a written feedback form completed at the end of the session. The list of priorities was those that had been previously suggested by stakeholders, although there was space to write down new suggested priorities at the bottom. The graph below details the priorities for this topic ranked in order. In total, four stakeholders completed these feedback forms.



#### PROPOSED COMMITMENTS (BUSINESS PLAN)

Stakeholders were then asked to start identifying commitments against these priorities for the business plan. These have been set out under the priority headings below, which are in the order that stakeholders ranked the priorities when individually ranking via written feedback forms. Those priorities that did not have any suggested commitments or were not commented on by stakeholders have not been included below.

#### Priority 1: Low-carbon technology (including EV) — Proposed Commitments

- a) Forecast 5–10 years ahead to account for new vehicles connecting to existing charging network
- b) Establish a communities team at WPD to promote opportunities for flexibility with community groups

"We're talking about EV charging now but when that arrives in 5 or 10 years' time, they won't be the same vehicles as we have today, so you need to do some forecasting around this."

"We were told that we'd have to restrict the size of the PV and battery storage. If we limited it to 16 amps, could you still put in a larger installation? We've had a bit of conflicting information here."

"One of the issues that community groups will find, for example with windfarms, is that they're so slow reacting that they miss the opportunities coming through with the flexibility window. Is there a way this could be smoothed out? There's a lot of interest and community value in WPD facilitating that. I noticed you've got an event coming up with Regen but is there a defined communities team within WPD?"

#### Priority 4: Allocation and reservation of capacity — Proposed Commitments

a) Reserve capacity in rural areas suitable for generation

"One of the best things to do for a rural capacity is buy out capacity in an area you know is good for generation."

#### Priority 5: Availability of information — Proposed Commitments

- a) Facilitate multi-party collaboration and exchange of information
- b) Consider approaching customers with capacity information

"Your relationship with local authorities is fundamentally important, and you could maybe extend that out to local communities. Where I'm based—which is on a peninsula—we have one line running through to us and we're hampered by the size of the pipe. It's as if multi-party collaboration or exchange of information is needed because I don't think all community groups speak to all local authorities. Sometimes community groups drop projects because they see that the network is constrained, but if there was better collaboration with local authorities, they might see that there are other opportunities."

"If you had a library of resources, that could be a good way of sharing information."

"From a local authority point of view on non-domestic buildings, say if the connection is 300kV and we only need 50kV, would WPD consider approaching the customer on this?"

#### Priority 6: Three-phase connections — Proposed Commitments

While this was established as a new priority, and it received 8% of the vote, no formal commitments were articulated against this priority in the discussions. The following verbatim comment was, however, captured.

Can you see there being a move to three-phase connections at the domestic level?"

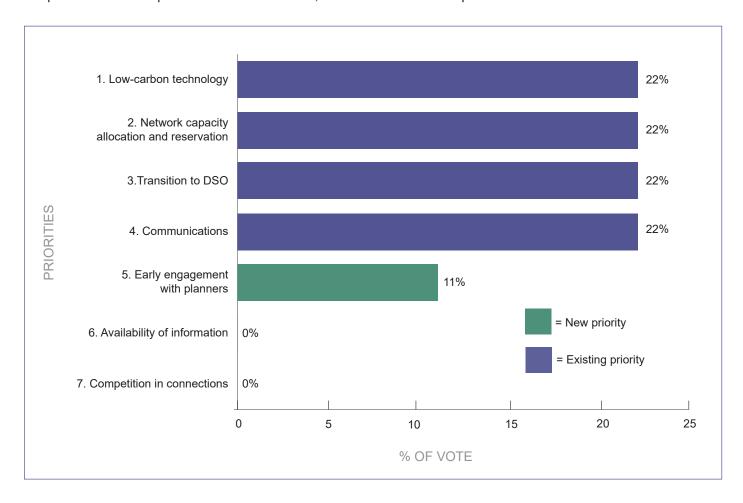
#### Priority 7: Transition to DSO — Proposed Commitments

a) Distinguish between distributed storage and storage on the networks on the flexibility tool

"With the transition to DSO, the flexibility tool you mentioned is quite interesting. It's a good user-friendly way of seeing where your hot spots are but I don't know if it's looking at distributed storage or storage on the networks?"

#### **PRIORITIES (ICE PLAN)**

Stakeholders were given three votes each to allocate to their choice of priorities below by way of a written feedback form completed at the end of the session. The list of priorities was those that had been previously suggested by stakeholders, although there was space to write down new suggested priorities at the bottom. The graph below details the priorities for this topic ranked in order. In total, three stakeholders completed these feedback forms.



#### **CONNECTIONS (AFTERNOON SESSION)**

#### PROPOSED COMMITMENTS (ICE PLAN)

Stakeholders were then asked to start identifying commitments against these priorities. These have been set out under the priority headings below, which are in the order that stakeholders ranked the priorities when individually ranking via written feedback forms. The afternoon sessions were more informal and were not led by facilitators. Those priorities that did not have any suggested commitments or were not commented on by stakeholders have not been included below.

#### **Priority 1: Low-carbon technology** — Proposed Commitments

While this priority received 22% of the vote, no formal commitments were articulated against it in the discussions. The following verbatim comment was, however, captured.

"The low-carbon focus here seems to be key."

#### **Priority 4: Communication** — Proposed Commitments

a) Provide a named contact during the connections process

"With this potential priority area, you sometimes lose established contacts [within WPD] when they change jobs. It always helps to have a named person or a named title so that you can chase up the new employee."

#### **Priority 7: Competition in connections** — Proposed Commitments

a) Keep the cost of connections low

"From the CLA's point of view, we want to create connections for local businesses, and creating a financially feasible market in rural areas would be a priority. At the moment, if you're a beef farmer in rural Wales, it's costing a huge amount just to build another shed, so you can't expand. I was asked to bring up one thing today, which is that we want costs for connection projects stay low. For example, one of our members was saying that if they build an extra shed with a connection extension, it was counted as a new business in the connections process and so they had to pay again."

## 15 | WORKFORCE RESILIENCE (AFTERNOON SESSION)

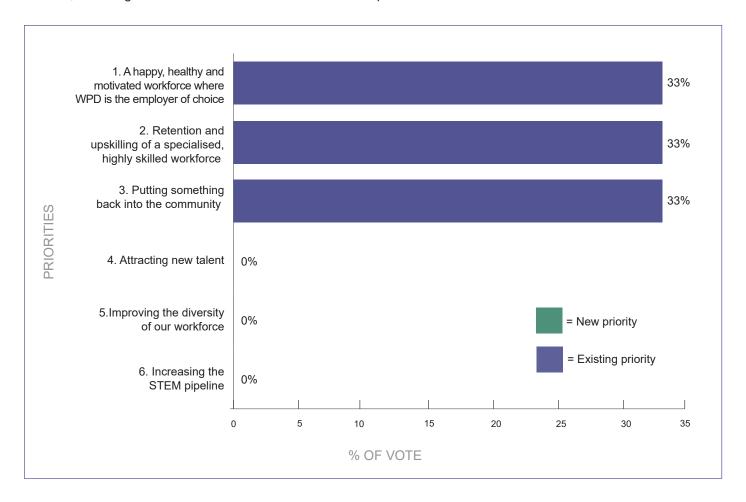
Only one stakeholder ranked the priorities in this session, but they identified 'a happy, healthy and motivated workforce where WPD is the employer of choice', 'retention and upskilling of a specialised, highly skilled workforce' and 'putting something back into the community' as top.

The discussion centred around several key themes including improving workforce diversity in terms of race, gender and geography, and exploring trade-offs between hiring external managers with less industry experience to inject new ideas into the business versus a longer-term integration and promotion of staff internally. On the latter point it was felt important to integrate external management without alienating the workforce. Equipping newly promoted managers with the right training was also discussed to ensure continuity across the business.

The discussions identified a number of commitments to include in the business plan. As well as including commitments against the themes and priorities highlighted above, a series of commitments were suggested for how to attract new talent which included a drive to change perceptions of manual work as 'dirty', closer engagement with schools and partnership working with higher education institutions through sandwich courses.

#### **PRIORITIES**

Stakeholders were given three votes each to allocate to their choice of priorities below by way of a written feedback form completed at the end of the session. The list of priorities was those that had been previously suggested by stakeholders, although there was space to write down new suggested priorities at the bottom. The graph below details the priorities for this topic ranked in order. It should be noted that one stakeholder completed the feedback form for this session, awarding one of their three votes to three different priorities.



#### **WORKFORCE RESILIENCE (AFTERNOON SESSION)**

#### **PROPOSED COMMITMENTS**

Stakeholders were then asked to start identifying commitments against these priorities. These have been set out under the priority headings below, which are in the order that stakeholders ranked the priorities when individually ranking via written feedback forms. The afternoon sessions were more informal and were not led by facilitators. Owing to the unconstructed nature of these discussions, in some instance priorities included on the written feedback forms had no specific commitments or comments attached to them and are therefore not included below.

## Priority 1: A happy, healthy and motivated workforce where WPD is the employer of choice — Proposed Commitments

- a) Provide stronger middle management training to help bridge staff with senior management
- b) Engender trust across the workforce

"Soft skills are hugely important to becoming a manager. I've only been a team manager since July. I enjoy working with my team, but there's a fine line between being someone's friend and someone's boss. You're not taught that. WPD needs to provide middle managers more support to help whole teams flourish."

"If your team is happy, you will work effectively. If you have trust in your team, their output will be better because they'll work for you."

"Trust among members is key. You need to find ways to build up trust among your workers."

#### Priority 2: Retention and upskilling of a specialised, highly skilled workforce — Proposed Commitments

- a) Resource external managerial expertise
- b) Ensure managers brought from outside the business do not alienate the workforce
- c) Provide clear development pathways for staff

"We're bringing in managers from the outside and they bring a fresh set of eyes to the team, as well as new expertise. They can bring some of their old job with them and can provide other skills." "Do you think that it creates a sense of resentment that people come in who are not experts in the field but can manage someone well? That's always a difficult area to explore."

"You need to emphasise a development path for people. At my old local authority, people couldn't see a way forward professionally and left as a result."

#### **Priority 3: Putting something back into the community** — Proposed Commitments

a) Explore community outreach opportunities

"The community outreach is key to your local perception."

"Communities need to feel that companies give something back. If they feel that they take, take, take, they will get hassle from the community."

#### **Priority 4: Attracting new talent** — Proposed Commitments

- a) Create sandwich courses in partnership with universities
- b) Consider flexible working packages to attract younger people
- c) Invest in a school engagement programme
- d) Change cultural perceptions of WPD representing a 'dirty' industry

"Planning has taken a bit of a dip in recent years. You used to be able to go straight into a job from university, but now there are fewer jobs available. The sandwich course that I benefited from is no longer there because they can't find the placements. If WPD committed to these kinds of sandwich courses, you could find slightly different types of worker."

"You need to emphasise how you intend to reach young people better. They're a tough nut to crack. Flexible working packages for them are an obvious avenue for me."

"We don't get into schools very much in my department. It's something that we need to look at more. We do consultations and have work experience people, but it could be expanded. This is an initiative that can be applied to all industries."

"There needs to be a change in perception towards manual skills, as they are not seen as sexy."

"Perceptions of manual work need to be improved."

#### **Priority 5: Improving the diversity of our workforce** — Proposed Commitments

- a) Improve gender diversity at senior management level
- b) Build in geographical diversity across England and Wales through the apprenticeship programme
- c) Create meaningful schemes to achieve better racial diversity

"The lack of senior females will cause the skew, so maybe commit to getting towards equality right at the top?"

"WPD should make sure that it achieves a sense of diversity in its apprenticeship programme by getting an even split between England and Wales."

"Achieving better racial diversity will take time but can happen with the right schemes in place."

#### **Priority 6: Increasing the STEM pipeline** — Proposed Commitments

No commitments were made against this priority, although the following verbatim comment was made in the discussion.

"I think that we focus way too much on degrees. In the manual skills industry, you can build up skills to the same level taking a different pathway."

## 16 | <u>DIGITALISATION</u>, <u>DATA AND DSO</u> (<u>AFTERNOON SESSION</u>)

This session followed a different format from the other sessions. There was a short presentation summarising WPD's digitalisation strategy followed by some open questions asking stakeholders for feedback on what they'd heard.

Stakeholders wanted to know more about the range of data that WPD held, from cable sizes to capacity and energy used. The question was raised over whether, as a private customer, stakeholders could approach WPD for this data as it pertained to them, and it was consequently suggested that WPD needs to make clear that this customer data is available on request. A similar point was made regarding LV data maps.

Data as a critical tool in managing and mitigating emergencies was discussed. Delegates wanted to know if WPD was considering sharing its emergency response planning information with local authorities. They also saw the sharing of business continuity plans, including energy supply, as vital. One stakeholder representing a local authority commented that, for LA data teams, any and all data WPD can share is useful. However, the point was also made that data is not infallible, and has the capacity to be flawed in some cases.

In closing, stakeholders asked whether the information shared and discussed during the day's sessions would be compiled and accessible to all, which emphasised the continued relevance and importance of the data generated from the workshops.

"What's the range of data you're looking at? Cable sizes? Capacities? The amount of energy used?"

"If we came to you as a private customer, you could give us our actual data, yes?"

"With LV, is that in your private agreement? We see it when we do street work applications."

"Are you thinking of sharing your emergency response planning information with local authorities?"

"Business continuity plans are critical; this includes energy supply as we only supply with energy supply. All I have at the moment is six numbers, so this would be something of interest in the future."

"Each local authority has a data team. Any data that you have is useful, as we live by data and die by data!"

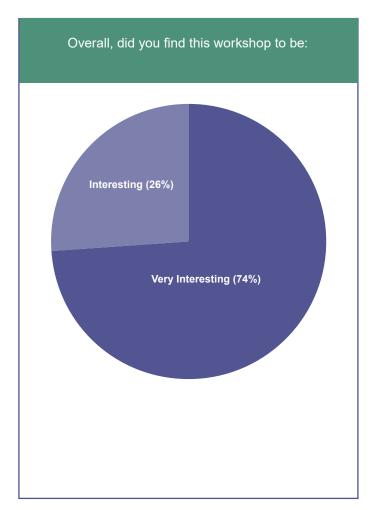
"I got the name of one of your plans was wrong, but it was supposedly from OS maps, so data can be wrong!"

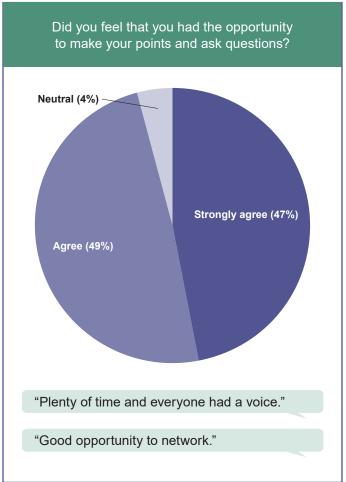
"Is there a portal planned for the future where the information you've discussed today is held?"



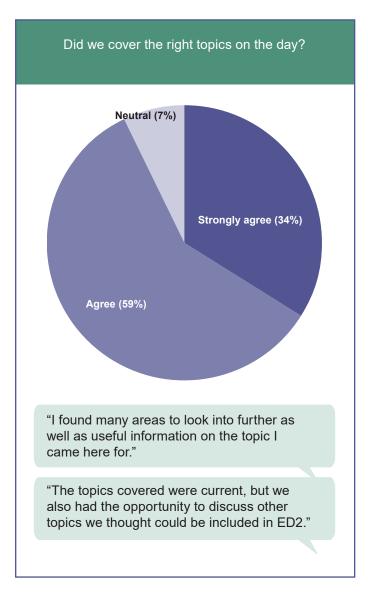
## 17 | WORKSHOP FEEDBACK

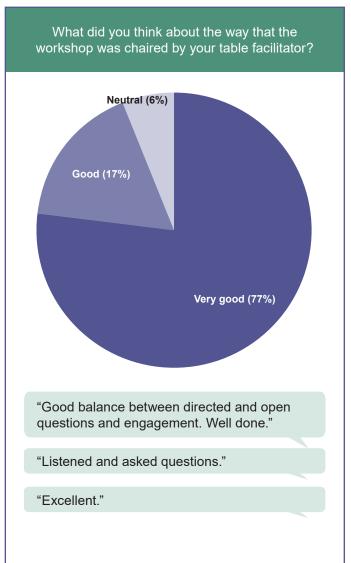
After the workshop, stakeholders were asked to complete a short feedback form. The feedback was as follows:



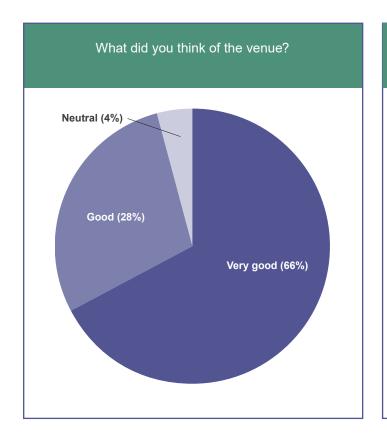












#### Any other comments?

"Generally I'm really impressed by WPD engagement (and customer service as a customer!). Looking forward to continued leadership from WPD."

"Excellent workshop. A lot of ground covered in a very short time."

"Excellent, really enjoyed the event and thought it very worthwhile – greatly encouraged about the overall commitment to a zero carbon Britain in the room."

"WPD seem to be taking their responsibilities very seriously, well done."



