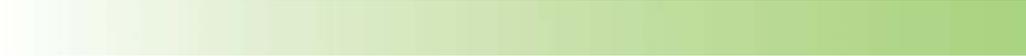




**Report on the outcomes of Stakeholder Workshops:  
May 17<sup>th</sup> - 19<sup>th</sup> 2011**

**Prepared by**

**GreenIssuesCommuniqué**



# 1. CONTENTS

1.	Contents	2
2.	Executive Summary	3
3.	Methodology	7
4.	Exeter Stakeholder Workshop	10
5.	Bristol Stakeholder Workshop	74
6.	Cardiff Stakeholder Workshop	135

## 2. EXECUTIVE SUMMARY

Western Power Distribution (WPD) carried out a significant amount of stakeholder engagement in support of its Business Plan for DPCR5, running from 2010 – 2015.

The company is now looking ahead to DPCR6, which runs from 2015 – 2023. WPD is committed to further engagement in order to inform its Business Plan for DPCR6. The purpose of the workshops was to consult ahead of this process in order to get an early indication of its stakeholders' views on current and future issues.

It was the intention of WPD to engage with a broad cross-section of stakeholders from a range of backgrounds and interests in order to identify how they viewed the company's priorities over the next five years and the next twenty years.

Following the success of the three phases of workshops on DPCR5, it was decided that the workshop format was the best way to engage with WPDs' stakeholders, identify the issues that are important to them, and endeavour to prioritise these issues according to importance.

The aim of the workshops was to ask stakeholders for views on which of WPD's current investment priorities should continue after 2015, and what are the investment priorities for the longer term future. Stakeholders were asked to take part in two separate workshop sessions to discuss priorities under the themes of delivering a low carbon sustainable future, themed "environment", networks and customer issues of the future themed "networks and customers".

The Environment Session asked stakeholders whether WPD should continue with its current priorities of reducing leaks from fluid filled cables and gas insulated switchgear, undergrounding schemes in National Parks/AONB, monitoring and reducing its carbon footprint, protecting habitats and species, flood mitigation plans, sustainability projects e.g. the low carbon network fund and climate change risk assessment. Then they were then asked to consider how proactive or reactive WPD should be in responding to the future challenges of climate change mitigation, electric vehicle charging infrastructure, renewable energy, renewable heat incentive and innovation projects. They were also asked to identify any issues that had been missed.

The Network and Customers Session overlapped in a number of areas with the Environment Session. This looked at the continuum of asset replacement to maintain business as usual,



installing equipment to enable local scheduling of customer generation and storage, installing equipment and systems to enable data exchanges and power control, and future proof asset replacement. For customer service, stakeholders were asked to discuss whether WPD should allocate additional investment to reducing power cuts or short dips, improving service further for worst served customers, being prepared for major incidents, improving new connections service and new methods of communication. They were also asked to identify any issues that had been missed.

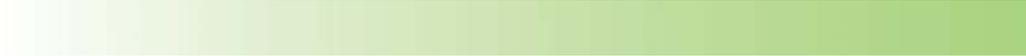
Stakeholders were asked to use a traffic light system of green for high priority, amber for medium and red for low priority to prioritise the issues and select the top three.

WPD instructed Green Issues Communiqué (GIC) to facilitate workshops at three locations within the company's network area. On each of the tables, a scribe was used to take note of all the comments raised as well as the outcomes of the prioritisation exercises. GIC has endeavoured to detail, faithfully, all of the comments made at these workshops. These comments and outcomes are shown in more detail in this document.

There was a good deal of debate around most of the issues at the workshops and it is clear that from reviewing the outcomes of each session, there are a number of areas where stakeholders' priorities differ. In this document, after each workshop report, there is a short conclusions section. Below is a broad summary of the comments received across all three workshops:

- In the initial discussions on Environmental Issues, the majority of stakeholders rated most of the Issues as being priorities for WPD both in the short and long-term. It was only when the workshop facilitators asked the stakeholders to rank each Issue, in the context of all the others, that stakeholders were able to state their preferences and the relative merits of each one
- Minimising Leaks from Fluid Filled Cables was widely seen as being a high priority for stakeholders, with many stating that it should be among WPDs' top three environmental priorities
- Continuing Undergrounding Schemes in National Parks AONBs was one Issue where there was no real consensus. Some stakeholders, particularly those with an interest in conservation and tourism, felt strongly that this should be a high priority whereas others ranked this as a low priority

- The Issue of WPD Reducing its Business Carbon Footprint was another Issue where there was little agreement across the workshops. Certain stakeholders felt that WPD should be leading the way on this Issue but not all were in agreement. This was generally seen as being a medium priority for the future
- Protecting Habitats and Species was also seen as being a medium priority for the future. A number of stakeholders cited WPDs' statutory obligations and felt that WPD did not need to go beyond these
- Stakeholders generally agreed that Flood Mitigation was a very important Issue. It was consistently among the highest ranked priorities and was, for some, the most important Environmental Issue facing WPD in the long-term
- Stakeholders were broadly in favour of Trialling Technology and Innovation to Facilitate Low Carbon Networks and this was consistently seen as being a high priority for stakeholders at all the workshops. Many linked this Issue with Innovation Projects and Facilitating the Connection of Local Renewable Energy Sources and ranked it as an important future priority for WPD
- In the discussions, stakeholders tended to link Climate Change Risk Assessment with Other Climate Change Mitigation, ranking both either medium to high priority for the future
- Most stakeholders did not consider Facilitating Electric Vehicle Charging Infrastructure as being a short-term priority for WPD. It was also the view of stakeholders that this should be a low priority for the future
- Most stakeholders felt that Facilitating the Connection of Local Renewable Energy Sources should be both a short and long-term priority for WPD. At two of the workshops, this was considered one of the most important Environmental Issues discussed and was ranked accordingly. However, stakeholders at one workshop did not agree, ranking it as low to medium priority for the future
- Facilitating the Renewable Heat Incentive was ranked highly by some, although across the three workshops, this Issue was broadly felt to be a medium priority for the future
- With regard to Issues relating to Improving the Network and Improving Customer Service, Asset Replacement to Maintain Business as Usual was widely viewed as being a high priority for WPD both now and in the future. For many, this was seen as one of WPDs' three most important priorities
- There was majority support for the view that Installing a 'Smart Network' should be a high priority for WPD in the future, although this was not unanimous

- 
- The vast majority of stakeholders were of the view that Installing Equipment to Enable Data Exchanges and Power Control should be a high priority for the future
  - Although this view was not unanimously held, the majority of stakeholders stated that Future Proofing Asset Replacement was a high priority for WPD in the short-term and should continue to be so in the future
  - There was no consensus on how highly Reducing Power Cuts should be ranked. Much discussion was based on personal experience so, for some, this was not an important Issue and for others this was deemed a high priority both in the short and long-term
  - The Issue of Improving Customer Service for New Connections was broadly seen as being a medium to low priority for the future
  - There was no consensus on the Issue of Reducing 'Dips'. Opinion was equally split between high medium and low priority for the future
  - The consensus across the three workshops was that Improving Reliability for Worst Served Customers was a medium priority for the future
  - Stakeholders were broadly of the view that Being Prepared for Major Emergencies should be a high priority for WPD both in the short and long-term
  - Although there was some debate on the Issue of New Methods of Communication, this was widely seen as being a medium to low priority for the future

### 3. METHODOLOGY

GIC was instructed by WPD in March 2011 to facilitate a series of workshops in order to ascertain its stakeholder views on its priorities for the coming 5 years and the coming 20 years.

The first task for GIC was to carry out a thorough audit of WPDs' existing databases of contacts and make recommendations on other relevant stakeholders who should be included in the process. GIC produced a comprehensive database of over 2,400 stakeholders falling in the following categories:

- Consumer Groups
- Business Groups
- Environmental Groups
- Conservation Groups
- Housing and commercial developers
- Major electricity users
- Local authority Leaders
- Local authority Chief Executives
- Relevant local authority Portfolio Holders
- Relevant local authority Officers
- Parish, town and community councils

This database was supplemented by the use of contacts at the relevant Associations of Local Councils and One Voice Wales. These organisations assisted us by inviting all of their members by email, ensuring that no parish, town or community councils were omitted from the invitation list.

All stakeholders were sent a written invitation five weeks prior to the first workshop, ensuring they had adequate notice ahead of each event. Stakeholders were also emailed at this time and, in the weeks leading up to the events, telephone calls by members of the GIC team were also used to maximise attendance.

It was the intention of WPD to get as high a turn-out at the workshops as possible. GIC was instructed to find the best locations possible for events of this nature in three key locations: Exeter, Bristol and Cardiff. These three major cities in WPDs' network area were chosen to make travel as convenient as possible for WPDs' stakeholders.



Sandy Park (Exeter Rugby Club) was chosen as the location for the Exeter workshop and Bristol Zoo and Wales Millennium Centre were chosen as the locations for the Bristol and Cardiff workshops, respectively. Lunch would be provided as a further way of encouraging attendance and, in the case of Bristol Zoo, all attendees would be given a free pass to visit the zoo after the event. It was decided that all stakeholders should be invited to all of the events, regardless of their location. This decision was made as a further way of encouraging attendance as, in the past, stakeholders who, for example, were located close to Exeter may be more amenable to attending a workshop in Bristol or Cardiff due to work diary constraints.

A number of meetings took place between WPD and GIC to discuss the format for the workshops as well as the presentation and display materials. As the emphasis was to be on prioritisation, it was decided to adopt a 'traffic light' approach to build consensus at the workshops and identify which Issues stakeholders deemed to be 'high', 'medium' or 'low' priority. This method of ranking certain issues had been used by Ofgem in a number of its previous consultations.

At the beginning of each workshop, there was a presentation by senior personnel from WPD, explaining the company's role, putting the engagement process into context and stating the objectives of each workshop session. It was decided that the workshops should be split into two sessions; the first dealing with Environmental Issues and the second dealing with Issues relating to Improving the Network and Improving Customer Service.

Stakeholders who attended the workshops were allocated places at one of five tables. In order to encourage debate and ensure a good mix of comments, stakeholders were split up in order to ensure a broad cross-section of organisations at each table. Each table had a maximum of ten stakeholders as well as a representative of WPD on hand to answer technical questions, a GIC workshop facilitator and a workshop scribe.

The sessions began with a brief explanation of all of the Issues facing WPD and stakeholders were initially asked to state whether each issue should be a priority for the coming five years and / or the coming twenty years. After this initial exercise, stakeholders were asked to consider which of these Issues should be ranked as 'high', 'medium' or 'low' priority. At the end of each session, stakeholders were also asked to pick their top three priorities. These top three priorities were discussed among the wider group at the workshops after each session. Notes were also taken of all of the comments made by stakeholders when discussing the merits of each issue.



Further to the collation of all of the comments received, an outcomes report was produced by GIC and was finalised by June 29<sup>th</sup> 2011. This report details all of the comments received at the workshops as well as the prioritisation of each issue. Every effort was made at the workshops to achieve consensus around each Issue. At times, this was not possible but notes have been taken of issues where certain stakeholders could not agree with the consensus view on the table.



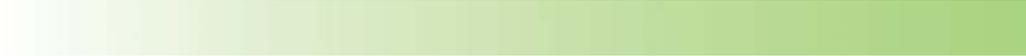
**Report on the outcomes of the Stakeholder Workshop**  
**Exeter: May 17<sup>th</sup> 2011**

**Prepared by**

**GreenIssuesCommuniqué**

## 4. CONTENTS

1.	Contents	11
2.	Exeter Stakeholder Workshop	13
2.1	Date and location	13
2.2	Attendees	13
2.3	Exeter stakeholder workshop: overall conclusions	15
2.4	Theme 1: Environmental Issues	17
2.4.1	Short and long-term priorities	17
2.4.2	Environmental Issue 1: Minimising leaks from fluid filled cables and gas insulated switchgear	18
2.4.3	Environmental Issue 2: Continuing undergrounding schemes in National Parks / AONB	21
2.4.4	Environmental Issue 3: Reducing our business carbon footprint	24
2.4.5	Environmental Issue 4: Protecting habitats and species	25
2.4.6	Environmental Issue 5: Flood mitigation	27
2.4.7	Environmental Issue 6: Trialling technology and innovation to facilitate low carbon networks	28
2.4.8	Environmental Issue 7: Climate change risk assessment	30
2.4.9	Environmental Issue 8: Other climate change mitigation (eg. taller poles now or later; larger conductors now or later)	30
2.4.10	Environmental Issue 9: Facilitating electric vehicle charging infrastructure. Should we install more LV network capacity now or later	33
2.4.11	Environmental Issue 10: Facilitating the connection of local renewable energy (local community and household generation). Should we install more LV network capacity now or later?	35
2.4.12	Environmental Issue 11: Facilitating the Renewable Heat Incentive (more heat pumps). Should we install more LV network capacity now or later	37
2.4.13	Environmental Issue 12: Innovation projects, eg. smart meters, storage, demand side management	39
2.5	Further Environmental Issues	40
2.6	Environmental Issues: Prioritisation	42
2.7	Theme 2: Improving the network / Improving customer service	47
2.7.1	Network / Customer Service Issue 1: Asset replacement to maintain business as usual	48
2.7.2	Network / Customer Service Issue 2: Installing equipment to enable local scheduling of customer generation and storage – ‘the smart network’	50
2.7.3	Network / Customer Service Issue 3: Installing equipment and systems to enable data exchanges and power control, eg. remote control switchgear	51
2.7.4	Network / Customer Service Issue 4: Future proof asset replacement	52
2.8	Theme 3: Improving customer service	53
2.8.1	Network / Customer Service Issue 5: Reducing power cuts	53
2.8.2	Network / Customer Service Issue 6: Improving customer service for new connections	55
2.8.3	Network / Customer Service Issue 7: Reducing short duration interruptions – ‘dips’	57
2.8.4	Network / Customer Service Issue 8: Improved reliability for worst-served customers	59



2.8.5	Network / Customer Service Issue 9: Being prepared for major emergencies	61
2.8.6	Network / Customer Service Issue 10: New methods of communication – email, text and other – website, online	62
2.9	Further Network / Customer Service Issues	64
2.10	Conclusions and top three priorities	66
2.11	Exeter stakeholder workshop: feedback	71
2.11.1	Question 1: Did you find the workshop useful?	71
2.11.2	Question 2: Was the venue conveniently located for you?	71
2.11.3	Did we provide you with enough information at the workshop?	72
2.11.4	Do you want to be kept informed of WPDs' plans in the future?	72
2.11.5	Do you have any other comments on the workshop or the venue?	72

## **5. EXETER STAKEHOLDER WORKSHOP**

### **5.1 Date and location**

The first WPD stakeholder workshop took place on May 17<sup>th</sup> 2011 at Sandy Park Rugby Club, Sandy Park Way, Exeter Way, Devon EX2 7NN

### **5.2 Attendees**

Cllr Richard Hosking – Ugborough Parish Council

Emma Woodhouse – NFU South West

Neil Blaney, Principal Planning Officer – Teignbridge and Torridge District Council

Cllr George Beattie – Tatworth and Forton Parish Council

Ray George – Maritime and Coastguard Agency

Neil Biddiscombe – Advantage SW

Michael Vickery, Chairman – Wayford Parish Council

Simon Wilkins, Emergency Planning Manager – Devon & Cornwall Constabulary

Christopher York – Ashton Parish Council

Glynn Laverack, Regional Health Emergency Planning Adviser – Health Protection Agency

John Milton, Clerk to the Council – Gidleigh Parish Meeting

Tracey Mallett, National Grid Company PLC

Ian Pugsley, Head of Planning – Cavanna Group

Cllr Howard Milton, Kenn Parish Council

Dr John Larkin, Minerals and Waste Adviser – CPRE Dorset

Diana Hill, Head of Property and Technical Services – North Devon District Council

Dave Edgcombe, North Devon AONB Project Officer – North Devon Coast AONB

Dianne Whilding – National Grid Company

Mrs G Hawkins, Parish Councillor – Talaton Parish Council

Mr B Kingdon, Parish Councillor – Talaton Parish Council

Cllr Robert Vint, Town Councillor – Totnes Town Council

Alex Webb, Climate Southwest Manager – Environment Agency

Peter Hearn, Spatial Planning Coordinator – Plymouth City Council

Chris Woodruff, – East Devon Area of Outstanding Natural Beauty

Cllr Roger Lane, – Wellington without Parish Council

Cllr Sandra Beattie, – Tatworth & Forton Parish Council

Alan Burgess, Energy Manager – South West Water

Cllr Stephen Purser, Chairman – Bridford Parish Council

Graham Quirk, Local Planning Team Leader – North Somerset District Councillor



Isobel Vickery – Wayford Parish Council  
Alan Gorman – Tiverton Town Councillor  
Cllr Ian Hasell – Wellington Without Parish Council  
Ken Browse – Halberton Parish Council  
Sarah Thorneycroft, Infrastructure Planner – Cornwall Council  
Steve Salter, Regional Operation Manager South West – Viridor  
Mike Evans – Burrington Parish Council  
James Paxman, Manager – Dartmoor Preservation

Kelly Edwards, Director – Green Issues Communiqué  
James Garland, Director – Green Issues Communiqué  
Ben Johnson, Account Manager – Green Issues Communiqué  
Martyn Williams, Senior Consultant – Green Issues Communiqué  
Amardeep Kainth, Consultant – Green Issues Communiqué  
Simon Powell, Account Manager – Green Issues Communiqué  
Alice James, Account Executive – Green Issues Communiqué  
Siobhan Lavelle, Senior Consultant – Green Issues Communiqué  
Amardeep Kainth, Consultant – Green Issues Communiqué  
Philip Bloomfield, Account Executive – Green Issues Communiqué

Alison Sleightholm, Regulation and Government Affairs Manager – WPD  
Nigel Turvey, Design and Development Manager – WPD  
Bob Parker, Regulatory Projects Manager – WPD  
Philip West, Policy Manager – WPD  
Natasha Richardson, Regulatory and Government Affairs Advisor – WPD  
David Wornell, Pricing Analyst – WPD

### 5.3 Exeter stakeholder workshop: overall conclusions

- 32 out of the 33 stakeholders who attended the Exeter workshop stated that it had been either '*useful*' or '*very useful*'
- The venue was conveniently located for the majority of stakeholders although two told us that they would prefer a venue closer to mainline train lines
- It was broadly felt that enough information had been provided and the majority of stakeholders told us they would like to be kept informed of WPDs' plans in the future
- Minimising Leaks from Fluid Filled Cables and Switchgear was seen as a priority for WPD both over the next five years and in the longer-term. Most stakeholders thought this was a high priority Issue and some felt that this should be one of WPDs' top three priorities
- All Exeter stakeholders thought Continuing Undergrounding Schemes in National Parks AONBs should be both a short and long-term priority for WPD. However, opinion was very much split as to how this should be ranked alongside the other Environmental Issues discussed. Two tables were of the view that this should be a high priority but, equally, two Tables considered this to be low priority
- There was also no consensus on WPD Reducing its Business Carbon Footprint. Although all Exeter stakeholders stated that this should be a priority for WPD in both the short and long-term, this Issue was generally considered to be medium to low priority when ranked alongside other Environmental Issues
- Although one Table ranked Protecting Habitats and Species as a high priority, the remainder took the view that this should be a medium to low priority, although, initially this was seen as being both a short and long-term priority for WPD
- The majority of stakeholders at the Exeter workshop stated that Flood Mitigation should be a high priority for WPD both in the short and long-term. A number of stakeholders discussed this Issue alongside Climate Change Risk Assessment and Other Climate Change Mitigation and considered this to be one of WPDs' top three priorities
- Although not all stakeholder groups agreed, the majority were of the view that Trialling Technology and Innovation to Facilitate Low Carbon Networks was a high priority for WPD. This Issue was often discussed alongside Innovation Projects and Facilitating the Connection of Local Renewable Sources and was considered by many to be the highest priority Issue for WPD in the future
- Other Climate Change Mitigation was seen as a medium to high priority for most stakeholders. When discussed alongside Flood Mitigation and Climate Change Risk Assessment, this was generally seen as high priority

- The majority of the stakeholders at the Exeter workshop told us that Facilitating Electric Vehicle Charging Infrastructure should not be a priority for WPD over the next five years. It was also considered by all of the stakeholder groups to be low priority in the longer-term
- Although one Table at the Exeter workshop did not agree, most felt that Facilitating the Connection of Local Renewable Energy Sources was a high priority. Three of the five Tables told us that this was one of the top three most pressing Issues facing WPD in the future
- This Issue was often discussed alongside Facilitating the Renewable Heat Incentive, which, for the majority of stakeholders, was a high priority for WPD
- The majority of stakeholders saw Innovation Projects as being a high priority, especially when discussed alongside Trialling Technology and innovation to Facilitate Low carbon Networks
- Asset Replacement to Maintain Business as Usual was generally considered to be one of WPDs' most important priorities. All stakeholders viewed this as being a priority in both the short and long-term
- Most stakeholders saw Installing a 'Smart Network' as being a high priority Issue for WPD in the future. However, two Tables viewed this as not being a priority for the short-term
- The unanimous view was that Installing Equipment to Enable Data Exchanges and Power Control should be priority for the future. When ranked alongside other Network Issues this was generally seen as a medium priority, although a number of stakeholders felt unable to give a considered opinion
- Most stakeholders saw Future Proofing Asset Replacement as being a high priority for WPD in the future and the majority saw this as a short-term priority
- It was generally viewed that Reducing Power Cuts should be both a short and long-term priority, although when stakeholders were asked to rank this Issue, opinion was split. Three Tables saw this as being a high priority for the future and two stated that this was a low priority
- Improving Service for New Connections was considered a high priority for one stakeholder group but the consensus across the workshop was that this should be a medium to low priority
- Reducing Dips was generally seen as a medium priority with the vast majority of stakeholders telling us that this was not a longer-term priority for WPD

- Improving Reliability for Worst Served Customers was broadly considered to be medium priority with only one stakeholder group telling us that this should be ranked as a high priority
- Opinion was split on the Issue of Being Prepared for Major Emergencies. The majority stated that this was a high priority and for some this was a top three Issue. However, for one group, this was deemed to be low priority. When this was initially discussed, however, all felt that this should be a priority both in the short and long term
- The Issue of New Methods of Communication was generally considered to be a medium to low priority for WPD

## 5.4 Theme 1: Environmental Issues

### 5.4.1 Short and long-term priorities

Stakeholders at the workshops were asked to state whether or not they saw a range of Issues relating to WPDs' environmental initiatives as being priorities for the next five years or in the longer-term. At all times, every effort was made by the workshop facilitator to take the consensus view of the Table. The outcomes of this initial discussion for all of the Exeter attendees are shown below:

THE ENVIRONMENT										
Environmental Issues	Is this a priority in the next 5 years?					Is this a longer term priority?				
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 1	Table 2	Table 3	Table 4	Table 5
Minimising leaks from fluid filled cables and switchgear	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Continuing undergrounding schemes in National Parks/AONBs	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Reducing our business carbon footprint	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

## THE ENVIRONMENT

Environmental Issues	Is this a priority in the next 5 years?					Is this a longer term priority?				
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 1	Table 2	Table 3	Table 4	Table 5
Protecting habitats and species	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Flood mitigation	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Trialling technology and innovation to facilitate low carbon networks	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Climate change risk assessment	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Other climate change mitigation	Y	Y	Y	Y	Y	Y/N	Y	Y	Y	N
Facilitating electric vehicle charging infrastructure	N	N	N	N	Y	Y/N	N	Y	Y	Y
Facilitating the connection of local renewable energy sources	Y	N	Y	Y	Y	Y	N	Y	Y	Y
Facilitating the renewable heat incentive	Y	N	Y	Y	Y	Y	N	Y	Y	Y
Innovation projects	Y	N	Y	Y	Y	Y	N	Y	Y	Y

### 5.4.2 Environmental Issue 1: Minimising leaks from fluid filled cables and gas insulated switchgear

**Table 1**

- A Parish Councillor queried what research had been done into finding alternative options
- A Parish Councillor asked how long it would take to replace leaking cables if they were only replaced as necessary

- The WPD representative informed the group that due to the 50+ year life span, it could potentially take up to 50 years
- A representative of a housing association felt that the urgency placed on replacing leaking equipment would depend entirely on the level of risk

## **Table 2**

- A stakeholder from a Government agency with a particular interest in emergency planning suggested that answers to all questions would be conditioned by the level of risk posed to the local community or the country as a whole
- Generally, the Table agreed that the leakage of SF6, given how dangerous it is to the environment, was something that posed a high risk to the environment and needed to be dealt with
- A stakeholder representing a regional environmental organisation asked for clarification on the exact levels of oil and SF6 being released. A WPD representative responded, stating that leaks were hard to detect, and that the quantity of leakage was relatively small (around 100 litres per annum of oil), although the effects could be very harmful
- A local authority representative stated that WPDs' performance on this issue is considered better than certain other utilities' records. (S)he expressed concern that the public had not been aware of this problem previously and asked how large an issue it therefore was
- A stakeholder from a Government agency recognised the difficulties experienced by WPD in identifying and repairing leakage across the network
- A local authority representative asked whether WPD had been able to identify replacement coolants which were less environmentally damaging. A commercial development representative asked the same question
- An environmental representative asked about the exact properties of the oil. (S)he wanted to know what it was comparable to in terms of viscosity
- A representative of local emergency services asked whether the oil degraded rapidly once released
- A Government agency representative stated that 100 litres did not seem to be a huge amount to leak
- A local emergency service representative suggested that WPD look to replace, repair or upgrade equipment that had the highest risk of leakage and monitor the equipment which had a lower risk

- A local authority representative stated that, based on current expenditure, preventing leakage wasn't a huge priority for WPD
- Another local authority representative stated that as SF6 was 23,000 times more polluting than CO2, it should be considered a high priority and a high risk. This view was echoed by a Government agency representative
- A local authority representative stated that WPD could double its expenditure on combating leakage and still not really affect the overall budget
- Another local authority representative suggested that, given the low cost of solving this problem, and the scale of damage currently caused, it is definitely an area that WPD should devote more resource to

### **Table 3**

- Representatives of parish councils around the Table felt that reducing leakage should be a very high priority
- A representative of a local authority stated that improving leakage is an on-going maintenance issue - so must be a future priority for WPD
- After the Table discussed the topic, the stakeholders came to a consensus that it must be a priority for WPD now and in the future but should be at a medium priority level

### **Table 4**

- There was consensus across the group that this was an essential activity that should be part of WPD's business plan
- WPD was asked to share further details about how the company was addressing this problem, and associated cost implications
- There was discussion as to whether this work would continue to be essential after five years, and the group agreed that as it was an issue that needed to be fixed, it should remain a priority for the company until WPD reaches this point

### **Table 5**

- A supplier representative questioned whether this was not a legal requirement anyway, and as such, should remain a high priority
- A Parish Councillor didn't think he had enough qualitative information or expertise to have a view, but if the technology was fit for purpose, then it should remain a high priority

- There was general agreement that any reduction in pollution was a key issue, but one councillor thought that any new technology would be cost prohibitive. However, there was general consensus that pollution control and detection had to be a high priority

### 5.4.3 Environmental Issue 2: Continuing undergrounding schemes in National Parks / AONB

#### Table 1

- A Parish Councillor questioned what the cost would be to implement undergrounding
- The WPD representative commented that even if WPD were to continue undergrounding at their current rate for the next 20 years, there would still be overhead lines
- A representative of an environmental group stated his / her concern about *'lifting and shifting'* lines; in particular (s)he raised an issue about the rights of the landowners as it may render an area of land *'sterile'*
- The WPD representative on the Table stressed that the process would not, and could not, happen without the consent of landowners. WPD has a policy to seek permission at all times
- A Parish Councillor agreed that undergrounding is essential to preserve Areas of Outstanding Natural Beauty, although (s)he questioned whether it was really worth the cost
- A local authority representative questioned *'what the difference is other than aesthetic'*
- Although the Table could see the advantages, such a great cost purely for aesthetic reasons was not considered to be a high priority

#### Table 2

- A stakeholder representing a local environmental organisation was of the opinion that undergrounding was very important indeed. However, (s)he was curious to know exactly how many kilometres of undergrounded cable could be funded by £3 million.
- A representative of a local authority couldn't see the point in devoting funding to undergrounding when wind turbines are being erected across the country. (S)he gave the example of Fullbrook Down, a designated AONB, which is proposed to be the location of several new wind turbines
- A local authority representative stated that wind turbines shouldn't affect the decision about undergrounding electricity pylons

- An environmental representative was extremely critical of the effect wind turbines have on the environment. (S)he made the point that they don't generate sufficient electricity to be profitable and are only a commercial proposition because the taxpayer funds them
- A representative of a government agency asked if the benefits of undergrounding were solely cosmetic
- This prompted a representative of a local emergency service to ask whether more electricity was lost through undergrounded cables than overground pylons
- A local authority representative stated that (s)he was in favour of undergrounding, but wouldn't necessarily prioritise it above other Issues
- Another local authority representative was of the opinion that £3m was a small amount to spend on undergrounding and suggested that WPD didn't consider undergrounding a big issue. (S)he suggested that the replacement of assets was clearly a higher priority judging by the budget provided and that WPD should double its budget for undergrounding
- Another local authority representative countered this point by reminding the Table that anything suggested would have to be paid for by the consumer
- A representative of the energy industry asked whether the undergrounding programme was confined to replacing existing infrastructure or whether it also incorporated new infrastructure developments
- A local authority representative asked how many kilometres of overground pylon there were in comparison to the amount of underground cable
- An environmental representative asked what the relative cost per kilometre was of undergrounding a cable. A WPD representative suggested that it would on average equate to around £30,000 per kilometre

### **Table 3**

- Table 3 stakeholders felt that underground cabling is a priority but raised concerns over the costs this would incur
- One stakeholder felt that there will be a rise in demand for underground cabling in the future
- A parish council representative questioned whether micro-gen could be used alongside underground cabling
- A representative of an environmental organisation stated that the group had to think about what the issues are surrounding underground cabling and question whether they create more issues than overhead cabling. The representative went on to state

that we are aware of the Issues of overhead cabling but underground cabling is *'entering the unknown'*

- A representative of a local authority made the point that underground cabling is more about improving the aesthetics of electricity. The representative added that arguably there are more important issues than aesthetics when discussing WPD investment
- The stakeholders concluded that underground cabling should be a priority for WPD investment but one that should not be very high on the priority list

#### **Table 4**

- A representative of an environmental organisation acknowledged WPDs' inclusion of this activity in its work programme after feedback from a previous workshop and felt that this was to the company's credit. (S)he acknowledged that while the financial commitment from the company to this activity was minimal, the impact was potentially huge and (s)he was very keen that this should continue as a priority for the future
- The group asked the WPD representative for further details about financial implications, and discussed the involvement of other third parties, such as landowners and other agencies. It was agreed that WPD did not have sole responsibility for this
- A stakeholder representing a local authority had seen this process in action and recognised that it had made a significant difference to the area involved. While (s)he appreciated that financially there were other priorities, (s)he would like to see the company continuing with this as high priority
- A representative of an environmental organisation suggested that this ties in with environmental and habitat Issues. Many sites where undergrounding needs consideration are iconic and a high priority from a habitat point of view. (S)he felt that these two areas should be looked at together and should definitely be a high priority
- A representative of a local authority questioned whether, once the company has dealt with one area, more money would then become available for other priorities. (S)he agreed that starting the process of investment is important
- A representative of an environmental organisation questioned whether this ties in with the issue of installing taller poles, and questioned the dual strategy of considering placing cables underground in one area while making them more visible elsewhere
- A WPD representative explained the rationale behind higher poles (and the group discussed financial, legal and statutory requirements around this) and the various

considerations the company took into account when deciding which option was appropriate in any particular situation. The group as a whole appreciated the complexities involved

- The group agreed that this should be a high priority for WPD, but that it was at the lower end of the priority spectrum

#### **Table 5**

- There was broad consensus that the underground initiatives were welcomed. *'Anything that could be done to take away the ghastly pylons'* was the opinion of an environmental group representative, though (s)he added that this had not been implemented in his / her area – as yet. However (s)he questioned the evaluation process, since one could not 'evaluate' a priceless asset such as a National Park or AONB

### **5.4.4 Environmental Issue 3: Reducing our business carbon footprint**

#### **Table 1**

- A representative of a Government agency asked whether there was an obligation to do this
- A representative of a housing association commented that if WPD really concentrate on this as a priority for the next five years, then they will not need to focus on it in the longer term
- A Parish Councillor asked whether WPD publish details of its business footprint.
- The WPD representative informed the group that the details are published on the company's website
- If there is no requirement to do this, then it does not need to be a high priority. As the cost implications are low however, WPD can do this steadily

#### **Table 2**

- All stakeholders agreed that this was an important issue and something which WPD should focus on but there was little discussion concerning the issue. Several stakeholders suggested that reducing the business carbon footprint would have knock-on benefits for WPDs' cost efficiency and budget

### Table 3

- A parish council representative made the point that WPDs' carbon footprint as a company is minimal compared the carbon footprint of the network. The representative further added that WPD should be discussing losses in the network as that is more important than the company's internal carbon footprint
- One stakeholder stated that improving WPDs' carbon footprint as company is a moral priority. The company has a duty to improving its internal carbon footprint and this shouldn't be the subject of discussion in terms of changing the amount of investment
- The stakeholders were in consensus that reducing WPDs' business carbon footprint should be something that WPD work on but it is not high in priority in terms of increasing investment. The group felt that it should be part of normal business practice

### Table 4

- There was consensus at Table 3 that this is a mandatory activity for a responsible business. Stakeholders agreed that it should be ranked as low priority because it shouldn't be considered in the context of whether or not customers should be asked to pay extra towards this activity
- The group discussed various specific options that WPD had for reducing its carbon footprint, including heat recapture and daily activities. A representative of a local authority agreed that decisions had to make good business sense, which would include activities aimed at reducing mileage or reducing costs. (S)he also suggested that this would become more important in the future

### Table 5

- Stakeholders on Table 5 felt that awareness of this issue was already in place and various initiatives such as monitoring policies were effective. All agreed that awareness, and being vigilant of various problems, especially in heavy industrial areas should continue, but since much of it was self regulated, it was not a high priority

## 5.4.5 Environmental Issue 4: Protecting habitats and species

### Table 1

- A representative of a housing association asked the WPD representative to provide him / her with examples of the types of work included under the banner of 'habitats and species'

- A council representative stated that this is a statutory requirement
- The WPD representative informed the group that there is a requirement to do this, but WPD would like to know whether they should prioritise going above and beyond this statutory requirement
- The group felt that as long as WPD is adhering to existing regulations it doesn't need to be a specific priority

#### **Table 2**

- All stakeholders agreed that this was an important issue but there were no real points for discussion around the table

#### **Table 3**

- A local authority representative stated that WPD should be proactive as a company rather than reactive when it comes to protecting species and habitats
- A parish council representative stated that WPDs' impact on habitats and species is minimal so this should not be very high on the list of priorities
- One stakeholder stated that reviewing WPDs' impact on habitats and species could be an opportunity for the company to create new habitats within WPD infrastructure and that this would be of low cost to the company
- Table 3 stakeholders stated that protecting habitats and species is important but should be common practice for WPD. Therefore, the stakeholders listed it as medium to low priority

#### **Table 4**

- The group had discussed this point while considering issues around undergrounding. There was limited further discussion at this point and it was broadly felt that WPD had to meet various mandatory and statutory requirements here, so the company was already compelled to deal with this Issue correctly and follow appropriate legislation

#### **Table 5**

- Though deemed by most not to be a high priority, councillors from rural areas considered that each issue had to be considered on merit. It was impractical, said one councillor, to have a *'blanket policy'* and each case or issue should be considered with care, with alternative solutions to specific issues taken on board

## 5.4.6 Environmental Issue 5: Flood mitigation

**Table 1**

- A local authority representative felt that with rising sea levels, flood mitigation was an essential priority
- A representative of a housing association commented that the specific location of assets was an essential consideration
- A Parish Councillor queried exactly how much existing infrastructure is at risk; to which the WPD representative responded that the number of assets at risk is significant. WPD can take some mitigation measures if there are forecasts
- The group felt that this was an immediate and essential priority

**Table 2**

- A representative of a local emergency service noted the impact of the Pitt Review on this area and stated that WPD has been pivotal in moving this forward. However, (s)he felt that more needed to be done to consider how WPD can assist when infrastructure '*downstream*' of it's network is affected by flooding
- A representative of a commercial development firm noted that in the South West, this was an important Issue due to the local topography
- An representative of a Government agency, with a particular interest in emergency planning, felt that the impact of the Gloucestershire floods of a few years ago meant that WPD '*would be mad*' not to invest in flood mitigation
- Generally, stakeholders considered this a very important Issue. As a result, it did not require a great deal of discussion to achieve consensus

**Table 3**

- A parish council representative queried whether WPD could use '*micro-hydro*' nationally to reduce risk of flooding
- One stakeholder stated that it is in WPDs' interest to look at ways to reduce flood risk above simply protecting facilities
- One stakeholder asked whether WPDs' substations are close to rivers or coast lines
- A representative of an environmental agency stated that WPD need to be proactive rather than reactive but flood mitigation is a continuous path. (S)he added that future needs will mean that the priority list will always be changing
- A local authority representative stated that at risk stations should be prioritised and WPD should work down the list over the years

- There was a broad consensus that flood mitigation should be a high priority. However, parish council representatives didn't feel that it needed such high prioritisation

#### **Table 4**

- A representative of the water industry acknowledged that this was an optional activity for WPD but that the company risked creating dissatisfaction for customers if they did not take appropriate steps
- A WPD representative outlined the liaison the company does with third parties, such as the Environment Agency, to mitigate flood risks
- A representative of the water supply industry stated that regulated businesses are expected to undertake activities like this, although they are unlikely to get all the money necessary to do this to the appropriate level

#### **Table 5**

- There was agreement that in areas where floods were common and seasonal this was a high priority and that the issue depended largely on risk assessment. This, according to an environmental representative would not be a high priority in his area (Devon) but would be elsewhere. Investment would vary according to vulnerable areas. Consensus around the Table was that this would be as a very high priority issue for some but not so for others

### **5.4.7 Environmental Issue 6: Trialling technology and innovation to facilitate low carbon networks**

#### **Table 1**

- A representative of a housing association stated that this was an absolute priority. This representative also commented that research into flickering and harmonics (and finding ways to mitigate this) would be *'ideal'*,
- A local authority representative commented that this issue has to be a priority if WPD is to meet Government environmental targets
- A representative of a housing association stated that innovation should not be restricted to low carbon technologies. It is also essential for improvements to basic services

## Table 2

- A representative of a Government agency was of the opinion that this was a necessary investment but warned that *'we don't know what will be effective in the future'*
- A representative of a commercial developer felt that much of the technology was still very expensive and relatively untested, mentioning photovoltaic cells as an example
- A representative of a local emergency service was of the opinion that a consortium of all suppliers, manufacturers and distributors, potentially led by National Grid, would be the best vehicle through which to fund research and development and trial new technology
- A local authority representative suggested that whilst the technology involved in producing electricity was the remit of producers, WPD had a role to play in working out how to efficiently distribute and integrate the electricity generated into their network. Another local authority representative echoed this point, which the majority of stakeholders agreed should be focus of WPD's efforts in this area

## Table 3

- A parish council representative stated that if WPD does not trial new technology then it will never know what works and whether people will adopt it
- A local authority representative made the point that if WPD is aiming to reduce their carbon footprint then WPD is going to have to innovate
- One stakeholder stated that it has to be a priority that WPD trial new technology and innovation to facilitate low carbon networks as the company needs to plan for the future
- Another stakeholder stated *'you have to start sometime so why wait'*
- A representative of an environmental organisation stated that trialling technology and innovation to facilitate low carbon networks has to be a long-term priority

## Table 4

- There was agreement that the company *'had to do this to survive'* but the group agreed that WPD may not yet know what options were available here
- The WPD representative explained how the company currently trials options, including management and monitoring technology. (S)he was asked whether or not the company intended to insulate overhead cables and (s)he explained that this was not currently being considered for higher voltage networks

## Table 5

- This was generally accepted by all as a priority issue and essential for future energy use

### 5.4.8 Environmental Issue 7: Climate change risk assessment

## Table 1

- A representative of a housing association thought that it is something that needs to be dealt with, but it is a process that can be built in over time

## Table 2

- Stakeholders on Table 2 felt that this was an important Issue, but suggested that it was something WPD should already be doing on a continuous rolling basis as part of its business planning

## Table 3

- Stakeholders were in agreement that climate change risk assessment should be a high priority both now and in the future

## Table 4

- Stakeholders were of the view that this issue was very much linked to flood mitigation

## Table 5

- This was deemed to be a low priority, since there did not appear to be an agreed consensus on climate change and its implications
- One councillor said that the cost and implications of *'crystal ball gazing'* could be prohibitive, and that short-term assessments would probably produce greater accuracy

### 5.4.9 Environmental Issue 8: Other climate change mitigation (eg. taller poles now or later; larger conductors now or later)

## Table 1

- A representative of a housing association asked how much taller poles must be in order to mitigate sagging from temperature changes
- The WPD representative responded that they do not need to be much taller than existing lines

- A Parish Councillor asked whether a necessary replacement policy would be more cost effective
- The WPD representative responded that as WPD only replace in the region of 1% of existing lines a year, it would take some time if only replacement schemes were relied upon
- A representative of a housing association commented that whether this is a priority or not depends on when and how drastically the temperature will change. It is preferable to be proactive, it was felt, but if it will be 20 years before it is necessary then other Issues are more important
- The Table felt there would need additional research before the expense is justifiable. This should be a long-term, ongoing aim, rather than a current high priority

## **Table 2**

- An emergency services representative felt that the increasingly extreme weather being experienced meant that WPD should be working on this now to prevent supply interruptions
- A local authority representative felt that WPD should up their investment in this area as it would be cheaper to do it now than have to go back later
- A Government agency representative felt that the threat of climate change was not something which WPD could afford to ignore
- An environmental representative asked whether making the poles taller would raise the likelihood of them falling over in high wind or similar inclement weather
- A local authority representative felt that if an increase of half a metre was what was required, this would not have a great impact on the surrounding environment
- Another local authority representative asked if WPD intended to work on increasing security of supply, for example by ensuring no trees were in vicinity of overhead lines or likely to damage them in the case of inclement weather
- Generally the Table was extremely supportive of WPD pursuing more mitigation projects, especially if they could be carried out in conjunction with existing replacement and maintenance

## **Table 3**

- One stakeholder stated that (s)he would like WPD to have a programme in place for climate change mitigation and that this should be a long-term priority. (S)he also stated that WPD needs to proactively target problem areas

- Another stakeholder added that it is a '*balance of economics*'. For example, does WPD put something in that's costly but reaps rewards in the long-term or fix it as it becomes an issue?
- A parish council representative stated that anything that you can do to reduce environmental impact is important
- The stakeholders found it difficult to reach a group consensus. Some stakeholders felt that the Issue was a low to medium priority while others felt that medium to high. It was decided that it was of medium priority

#### **Table 4**

- A WPD representative outlined the challenge the company is facing: does it wait until the climate changes then react, or start adapting now, making, for example, every pole half a metre taller?
- There was much discussion about the pros, cons and cost implications of the options faced by WPD
- A representative of a water company asked if WPD could create pricing structures, metering options and variable tariffs for customers, as well as providing information on levels of demand on the network. Discussion followed on the merits and feasibility of such systems. A representative of an environmental group acknowledged the complexities of working with suppliers to implement such systems
- A representative of a water supply company confirmed that larger customers have full exposure to charges. (S)he suggested that it would be helpful to create more awareness for smaller customers, giving them the same opportunity to influence different elements of their bills as larger customers

#### **Table 5**

- Stakeholders on Table 5 questioned why there was a need for taller poles. The WPD representative explained that raising the height would provide greater efficiency, though it would have a cost implication, and it was a debate for priorities. The stakeholders thought that efficiency measures should be given high priorities

#### **5.4.10 Environmental Issue 9: Facilitating electric vehicle charging infrastructure. Should we install more LV network capacity now or later**

**Table 1**

- A representative of a Government agency commented that the technology is so new and it is very expensive
- A representative of a housing association queried the long-term life of the product and the likelihood that the general public will be using them in 20 years
- A Parish Councillor didn't think that electrical cars are practical; the time taken to recharge the batteries is not feasible. Replacement batteries would make more sense.
- A Parish Councillor felt that although electric vehicles are a good idea, in practice they are not user friendly
- A local authority representative informed the Table that the Highways Agency has a duty to provide the infrastructure for electric vehicles. WPD building capacity for electric vehicles depends entirely on the rate of uptake by the public. The cost of fuel will have a big impact on this

**Table 2**

- A representative of a local authority felt that WPD needed to consider this on an area by area basis as usage would be dependent on whether the area was urban or rural in composition. A representative of the emergency services concurred and stated that WPD should focus on installing more charging points in urban areas, rather than trying to roll out to rural areas
- A local authority representative felt that charging points should be rolled out to encourage the uptake of electric vehicles
- A local authority representative asked whether petrol suppliers were investing in research in this area. (S)he felt that as the car manufacturers weren't moving fast enough on this issue adding that, perhaps, WPD should be leading innovation
- Another local authority representative disagreed, stating that WPD should not lead, but instead support manufacturers when the technology was rolled out
- Some stakeholders asked who would be responsible for producing and creating a charging infrastructure, wondering whether it would be for individual networks or Government policy to decide

- Several stakeholders expressed concern over the current battery life and charging requirements of electric vehicles. An energy industry representative noted that his / her company had just carried out a trial and had been dissatisfied with the short range of these vehicles along with their unreliability in colder weather. Another local authority representative expressed concern at the long charging time which would preclude constant usage throughout the day
- A representative of a commercial developer felt that it was the responsibility of the motor industry to lead on this and create demand, and that WPD may well need to provide more infrastructure, but not in advance of that demand manifesting itself. A local authority representative concurred on this point. Generally, this represented the feelings around the Table on the subject

### **Table 3**

- Parish council representatives stated that in order to facilitate electric vehicle charging, WPD would need to increase the number of power point supplies. They also stated that the introduction of electric vehicles would result in increased cost of distribution
- One stakeholder stated that scheme doesn't seem feasible
- Stakeholders on Table 3 were of the view that WPD should be reactive to demand
- Stakeholders felt that this question related to the issue of innovation and trialling technology
- The stakeholders raised the point of whether the scheme could be trialled in different areas such as urban versus rural and see where it works best
- The stakeholders felt that it was not a priority for now but was something that should be looked into for the future

### **Table 4**

- A representative of an environmental group suggested that there should be some infrastructure for this within urban areas, but within rural areas there would probably be a slow take up
- A representative of a local authority questioned how closely WPD works with the Government on this issue
- A member of a local authority suggested that until electric cars have a greater range, people won't commit to this technology as they won't trust that there'll be charging points where they need them. (S)he suggested that this should not be a priority for the next 5 years, but perhaps it could become one at a later date

- A representative of an environmental group highlighted that, while take up of this technology is dictated by available technologies such as being able to recharge overnight at home, it is still a draw on the network
- Consensus across Table 3 was that no single party can do this in isolation – everything is interlinked, with Government, manufacturers and suppliers all involved

#### Table 5

- Some stakeholders believed that strategic usage of electric vehicle infrastructures might be possible, though generally this would be driven by Government strategy
- A council representative said the ‘pooling’ of public sector owned vehicles might be a possibility
- Most of the stakeholder group thought that fuel prices would be the strongest catalyst, and there were questions as to who would be responsible for the storage facility. WPD?
- It would not be a business decision according to one council representative. It would be a Government initiative and it could be driven by an enlarged public sector LV strategy

### 5.4.11 Environmental Issue 10: Facilitating the connection of local renewable energy (local community and household generation). Should we install more LV network capacity now or later?

#### Table 1

- A representative of a housing association stated that if it is a commercial venture, then it should be paying for itself. Having taken a look at domestic PV and multi / single site installation, then maybe WPD should be doing more there
- A representative of the farming community told the group that many farmers are actively looking at local renewable energy. Planning can sometimes be an issue, but the primary problem is that connection comes at a high cost. The questions were asked: ‘*what can WPD do to make this easier?*’ and ‘*can WPD influence / reduce the cost to increase uptake?*’
- A representative of a housing association stated that more work into the funding is needed. Independent people / community groups are often not charged for connection, whereas housing associations are charged upgraded costs. Housing associations often represent the poorest members of society so the high cost is not equitable. The question was asked: ‘*what can WPD do to change this?*’

- The group had many comments on the cost of connection, and the fact that this is very off-putting for many who genuinely do have an interest in switching to local renewable energy
- Ease and cost of connection were the key Issues on the Table

### **Table 2**

- An emergency service representative felt that this was the responsibility of housebuilders and developers
- A representative of a commercial developer stated that most developers were increasingly becoming aware of the need to take the importance of suitable infrastructure for microgeneration into account
- A local authority representative asked if the network was currently well enough equipped to deal with microgeneration and other demands
- A representative of an environmental organisation felt that WPD should be reactive to developers and to Government policy, rather than proactive

### **Table 3**

- A parish council representative stated that WPD should be doing everything possible to facilitate the connection of local renewable energy within the existing network and that this should be a priority
- One stakeholder stated that WPD have got to have a way to make small scale initiatives viable
- It was added that WPD needs to make sure that the network is designed in a way that renewable sources of energy can be included and used easily
- It was felt that it will become inevitable that communities will rely on renewables with the decline of fossil fuels. Facilitating the connection of local renewable energy is important now and for the future
- However, other stakeholders did not feel as strongly. It was an important issue but not the most important for the Table as a whole

### **Table 4**

- The group agreed that this should sit between the high and medium categories
- The group had detailed discussion around the potential problems involved with installing photovoltaic panels. The WPD representative explained some of the considerations involved, with the group showing a great interest in complexities

around higher volume installation areas, and the cost implications of creating a network than can manage high levels of local energy generation

- A representative of a water company suggested that the incremental cost of adapting the network would be small if WPD started to do this now, rather than have to carry out whole-scale restructuring later
- A representative of an environmental group suggested that it was likely to be difficult to predict where the needs are in advance, so selecting areas to adapt the network now would be difficult. (S)he also felt that developers should bear cost implications, referencing Section 106 agreements for new developments
- A representative of a local authority agreed, and also added that by installing renewable energy, developers were providing cheaper longer term options

#### **Table 5**

- There was general agreement that this was a desirable objective, though one stakeholder thought it unlikely and unachievable
- The majority of the stakeholder group thought it a high priority in the longer term, especially when more precise and achievable targets were known about solar and wind energy
- One stakeholder argued that there was, at present, insufficient data to encourage large scale investment

### **5.4.12 Environmental Issue 11: Facilitating the Renewable Heat Incentive (more heat pumps). Should we install more LV network capacity now or later**

#### **Table 1**

- The Table felt the response for this is the same as the response for the previous question

#### **Table 2**

- A representative of a Government agency asked for an explanation of exactly what LV network was. The WPD representative on the Table explained this
- An emergency services representative made the point that many people might not be able to afford a heat pump due to the increased cost of their electricity bill. However, (s)he recognised that the network would potentially need reinforcing in advance

- A commercial development representative stated that his / her company had already begun to incorporate this technology into some of their developments, notably for housing association and public housing projects. (S)he was of the opinion that the technology wasn't quite there yet and that the current pumps are unreliable and hard to maintain as well as very bulky and noisy
- This was echoed by a local authority representative who stated that air source heat pumps aren't terribly reliable and don't last very long
- An energy industry representative asked whether it was common practice for housing associations to require heat pump installations for new projects
- A commercial development representative replied, stating that it was often a necessary condition for new developments as it *'ticked a box'*
- Overall, stakeholders were of the opinion that it was hard to tell whether technology will develop or not and, as such, WPD should display caution before investing significantly

### **Table 3**

- Stakeholders discussed the inclusion of heat pumps in new developments
- Stakeholders felt that if there are plans for a new development, WPD should be involved from the beginning. It was added that WPD should make renewable heat a viable option from the beginning for new development
- Stakeholders were asked where WPD should focus out of Issues 9, 10, and 11. The stakeholders made the point that electric cars are not a necessity but it is a basic human need to *'keep the lights on'*
- Stakeholders felt that the facilitation of the Renewable Heat Incentive was a high priority but not the most important

### **Table 4**

- The Table felt that facilitating the Renewable Heat Incentive should be ranked between high and medium in terms of priority
- The group was unclear about specific initiatives where energy was recovered and returned to the network, such as heat generation. The WPD representative gave examples, and also explained the need for electrical back-up to gas-driven heat pumps
- A representative of a water supply company suggested that people would need to pay for any installation costs for back-up systems

- A representative of a local authority felt that this should be led by Government strategy, and that the issue of feed-in tariffs needed to be addressed
- A representative of a local environmental group stated that renewable energy strategy should focus on local generation

#### **Table 5**

- There was some enthusiasm within the group for this issue, although one member, a local council representative was of the view that it might cause noise irritation.
- This issue was not deemed to be a high priority

### **5.4.13 Environmental Issue 12: Innovation projects, eg. smart meters, storage, demand side management**

#### **Table 1**

- The group linked this response to Q6 (trailing new technology and innovation) so some of the comments relating to this issue are detailed in section 2.3.6

#### **Table 2**

- The majority of stakeholders on Table 2 felt that smart meter rollout should fall under the remit of suppliers
- However, a local authority representative noted that there would be a financial advantage as one would be able to collect data remotely
- A local authority representative expressed doubts about the efficiency of smart meters as *'no-one knows how to deal with them'*, and there are questions about their reliability
- A local authority representative asked about the future potential for developments in energy storage, in particular regarding hydro electricity generation in remote areas. (S)he asked if there was any possibility of large scale lithium ion storage units being developed
- An energy industry representative asked where these large batteries would be sited
- A local authority representative suggested that potentially remote storage (such as 'Electric Mountain' in Wales) was not as realistic as might have been suggested? (S)he asked whether WPD had investigated the possibility of using remote areas like Dartmoor for storage
- In general, stakeholders were of the view that innovative projects needed to focus more on electricity generation rather than distribution and as a result that there was a lesser role for WPD

### **Table 3**

- A parish council representative felt that smart metering would be perfect for the elderly
- Stakeholders felt that innovation projects were high in priority but not the highest in the priority list

### **Table 4**

- There was consensus across the group that WPD should look at smart metering and local storage options. For example, if a customer has PV panels on their roof, could they have a battery in the house to store energy locally and use it later?

### **Table 5**

- Though some of the stakeholder group wanted clarification, which was given by the WPD representative, there was general agreement that WPD needed such equipment in order to improve connections, and how to distribute and plan the storage infrastructure
- One councillor said there were several local 'plans' but connection Issues required a structure of local hubs. That was not going to be cheap, and ultimately it would be a decision as to who should foot the bill

## **5.5 Further Environmental Issues**

### **Table 1**

- Stakeholders wished to discuss energy wastage as a further environmental issue
- A parish council representative queried whether it would be beneficial to look into reducing energy wastage
- The WPD representative responded that reducing energy wastage was not cost effective at the last assessment, but the company would look into assessing it again

### **Table 2**

- One stakeholder asked what WPD was looking to do to reduce the loss of electricity during the transmission and distribution process, in particular relating to technological advances

### **Table 3**

- Stakeholders on Table 3 wanted to raise the issue of generator resilience

- One stakeholder stated that it is important to reduce the influence of generators in terms of the vulnerability such as during Middle Eastern conflict when geopolitical issues increase energy vulnerability
- It was added that it will be of benefit to everyone to have a more reliable and sustainable supply of energy
- One stakeholder felt that diversification will reduce vulnerability of energy supply
- Stakeholders stated that it is an issue that is of great importance for now
- Another issue that stakeholders felt that should be included in the priority listing was WPDs' ability to help developers do things differently
- The stakeholders stated that new homes could be built to much higher standards with regard to energy generation
- It was concluded that working in partnership with developers should be a very high priority

#### **Table 4**

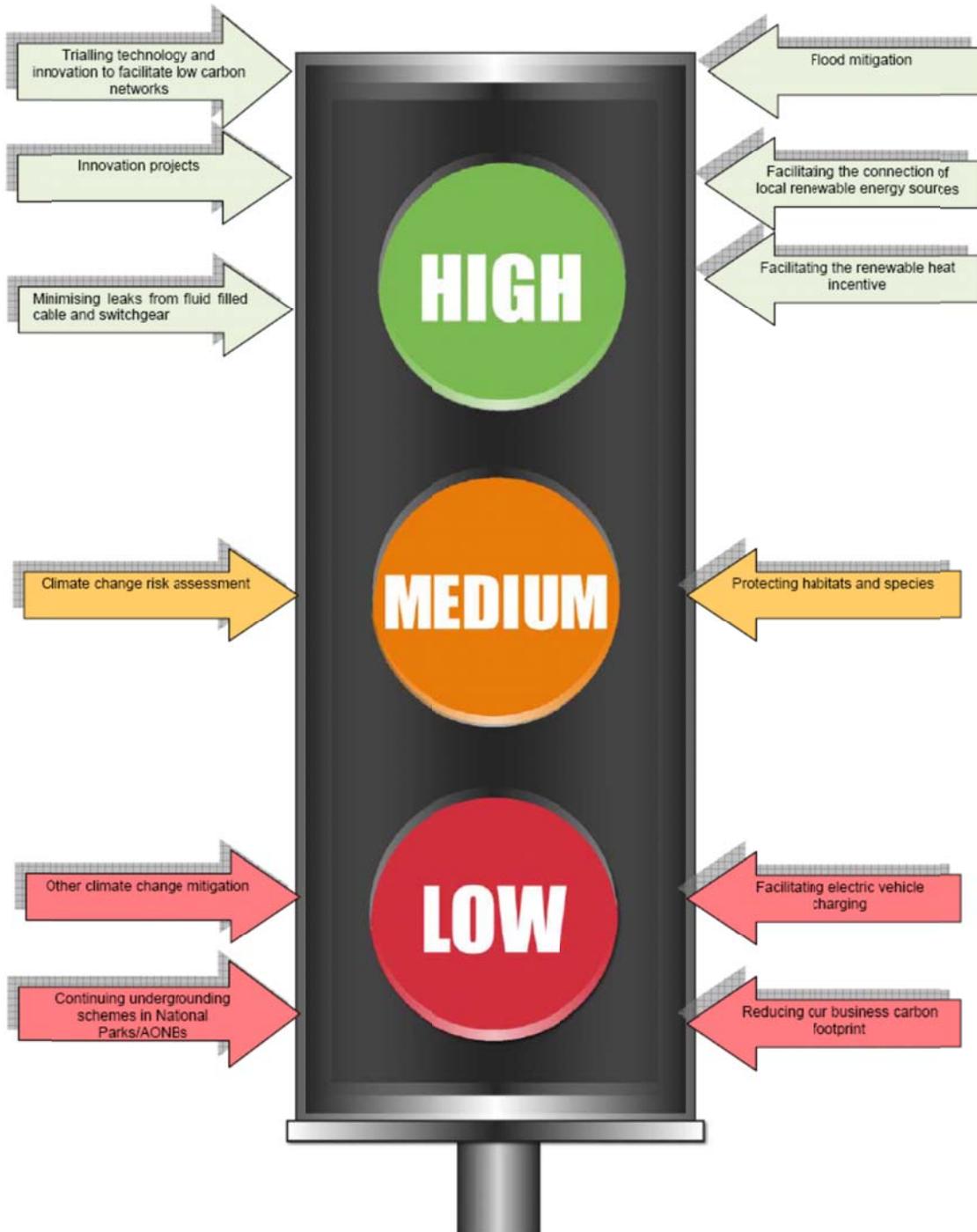
- The Table agreed that WPD should prioritise reliability within the supply system, investing continually in network stability
- Stakeholders also agreed that working with Government was essential to many of the Issues being discussed

#### **Table 5**

- One stakeholder made the point that innovation was absolutely key and that WPD should invest as much money as possible in research and development
- The stakeholder raised the issue of increased interest in alternative energy generation particularly in Devon and Cornwall. It was stated that, that more discussion on these issues would be welcome
- Again though, it was stressed that it would be a costly exercise, and ultimately the question would be – who would pay for it?

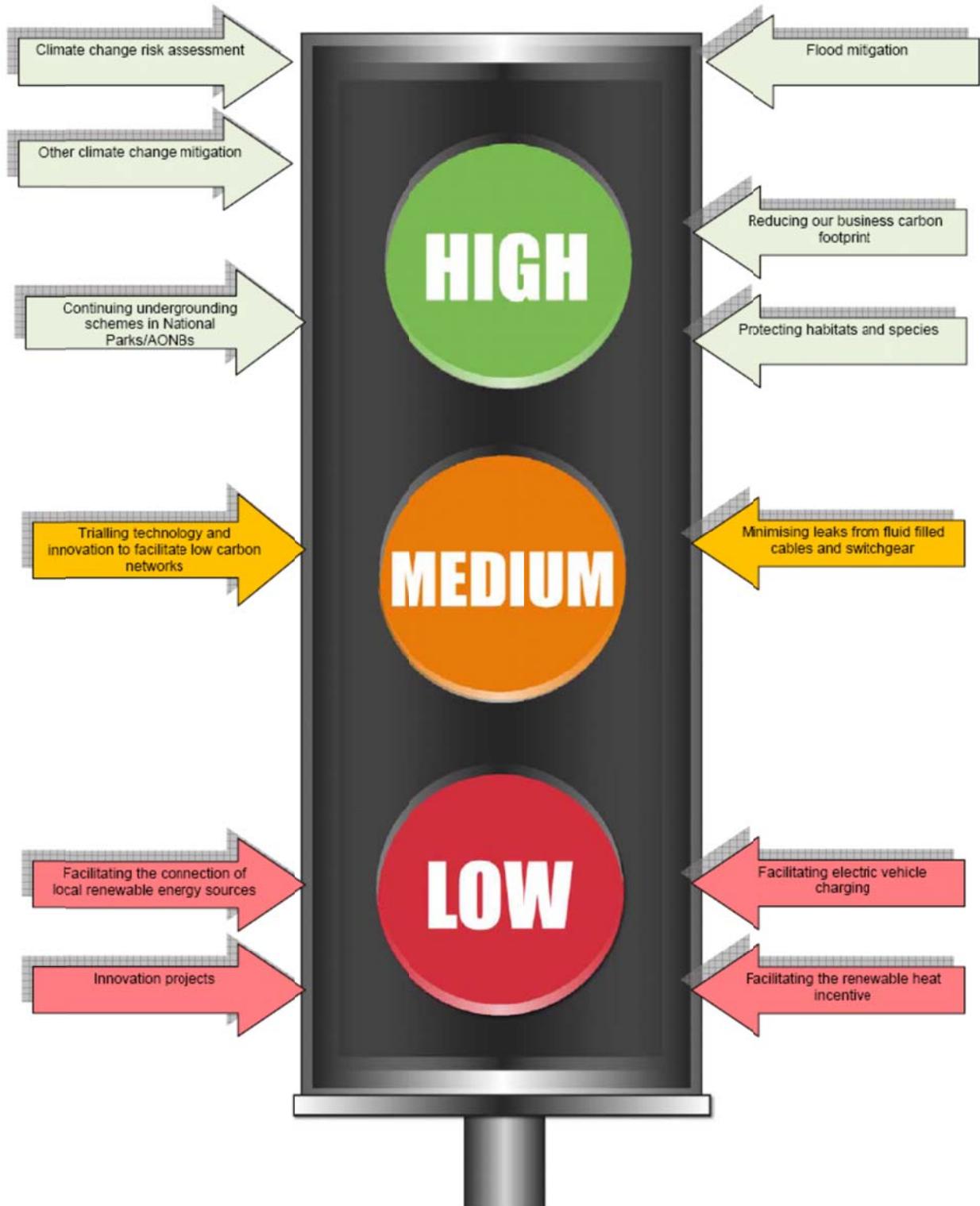
## 5.6 Environmental Issues: Prioritisation

Table 1



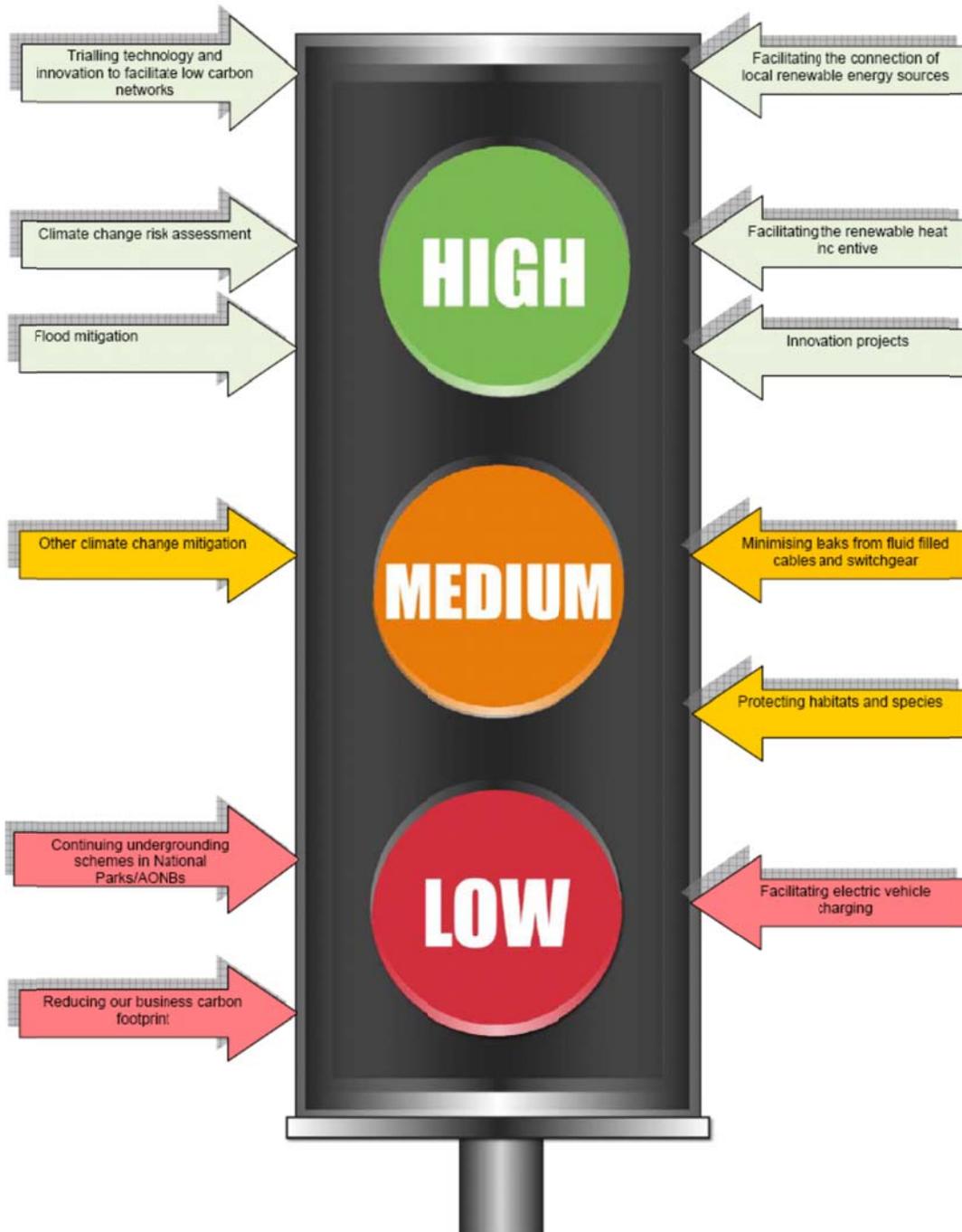
- The top three priorities for Table 1 were: Innovation Projects (in which the group wanted to include Trialling Technology); Flood mitigation; and Facilitating the Connection of Local Renewable Energy / Facilitating the Renewable Heat Incentive (the latter two Issues were also linked together)

Table 2



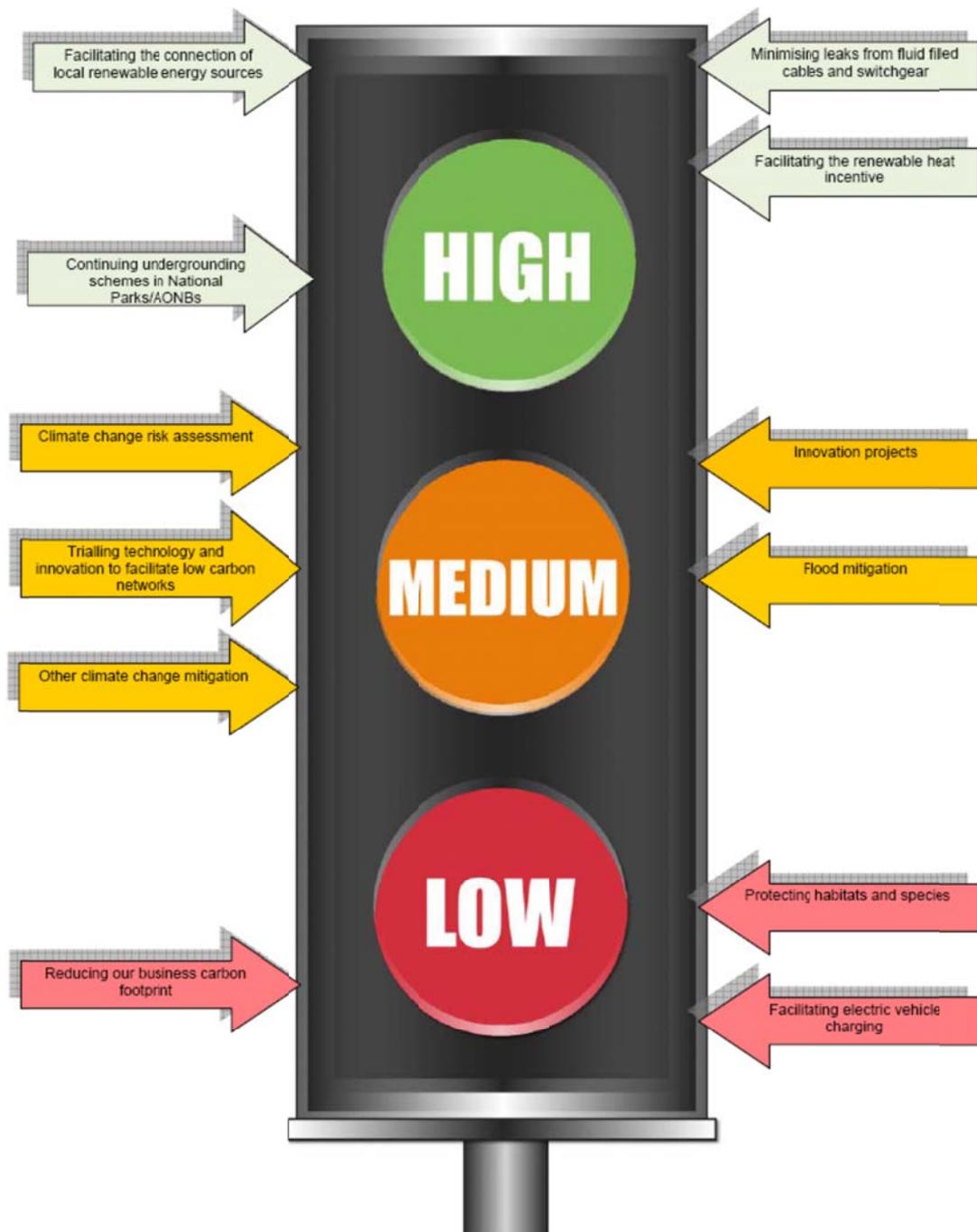
- The top three priorities for Table 2 were: Flood Mitigation; Climate Change Risk Assessment and Other Climate Change Mitigation

**Table 3**



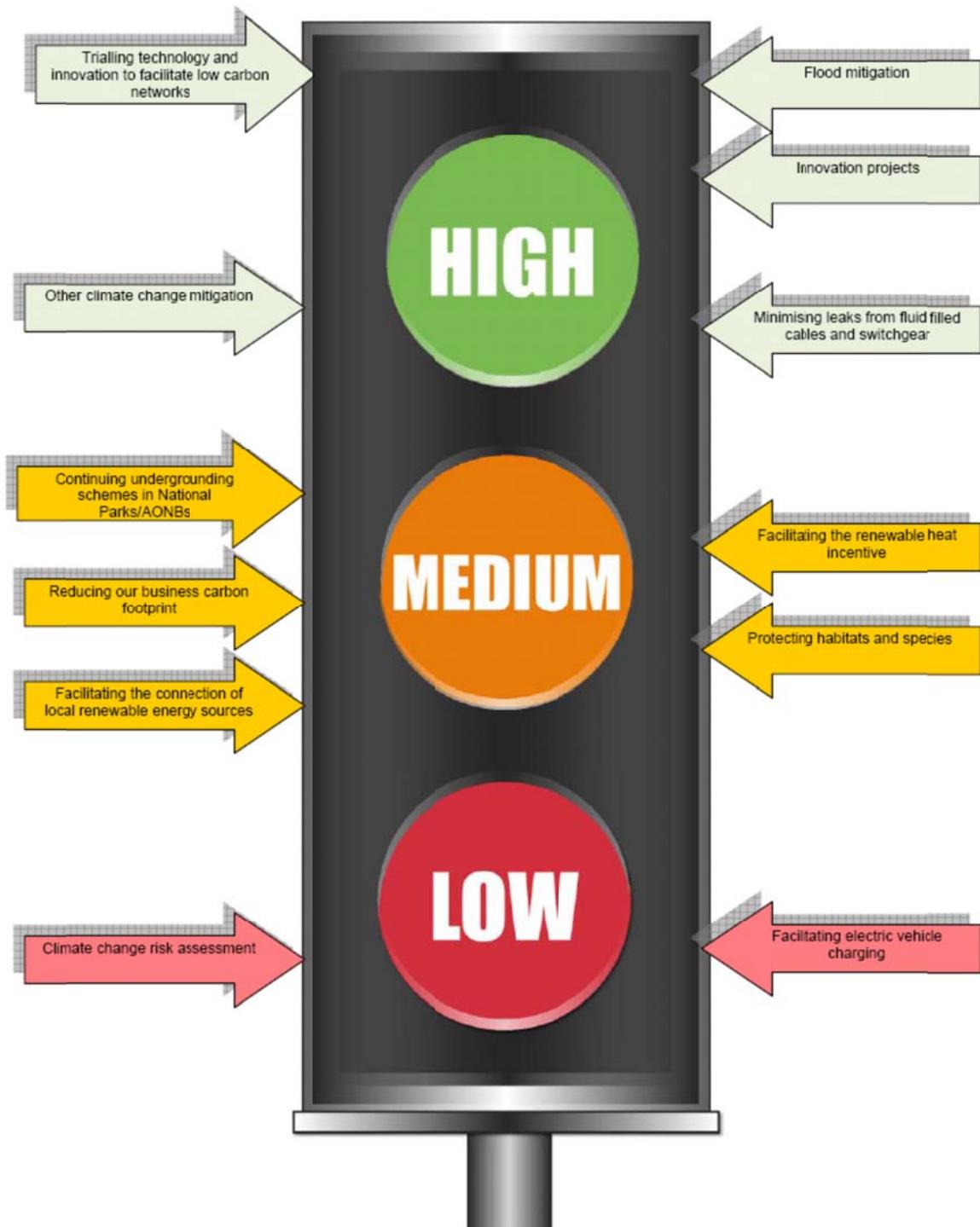
- Stakeholders on Table 3 were in agreement that Facilitating the Connection of Local Renewable Energy and Trialling Technology and Innovation to Facilitate Low Carbon Networks were the two most important Issues but were unable to pick a third
- After some debate, it was agreed that Flood Mitigation and Climate Change Risk Assessment be linked together as the group's joint third highest priority

**Table 4**



- Minimising Leaks and Continuing Undergrounding Schemes were Table 4's top two priorities
- The group requested that the Issues of Facilitating the Connection of Local Renewable Energy Sources and Facilitating the Renewable Heat Incentive be linked as the groups third highest priority

**Table 5**



- Trialling Technology and Innovation and Innovation Projects were Table 5's top priorities, followed by Flood Mitigation
- Those from rural areas stated that Undergrounding Schemes should be a high priority but this was not the consensus on the Table

## 5.7 Theme 2: Improving the network / Improving customer service

The Issues of Improving the Network and Improving Customer Service were discussed together.

The session began with stakeholders discussing which Issues relating to these two topics should be WPDs' priorities for the next five years and which should be longer-term priorities.

The outcomes of this exercise are shown in the table below:

IMPROVING THE NETWORK										
Network Improvements	Is this a priority in the next 5 years?					Is this a longer term priority?				
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 1	Table 2	Table 3	Table 4	Table 5
Asset replacement to maintain business as usual	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Installing a "smart network"	Y	Y/N	N	Y	Y	Y	Y	Y	Y	Y
Installing equipment to enable data exchanges and power control	Y	Y/N	N	Y	Y	Y	Y	Y	Y	Y
Future proofing asset replacement	Y	Y	N	Y	N	Y	Y	N	Y	N

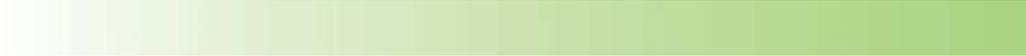


IMPROVING CUSTOMER SERVICE										
Customer Service Improvements	Is this a priority in the next 5 years?					Is this a longer term priority?				
	Reducing power cuts	Y	Y	N	Y	Y	Y	Y	N	Y
Improving service for new connections	Y/N	Y	N	Y	Y	Y/N	Y	N	Y	N
Reducing "dips"	Y	N	N	Y	Y	Y/N	N	N	N	N
Improving reliability for worst-served customers	Y	Y	N	Y	N	Y	N	Y	Y	N
Being prepared for major emergencies	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
New methods of communication	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

### 5.7.1 Network / Customer Service Issue 1: Asset replacement to maintain business as usual

Table 1

- A parish council representative raised a concern that if 50 year old technology is being used now, and WPD replace like for like, then when these cables are finally replaced at the end of life, the technology would be 100 years old. Surely WPD should be going further to advance the technology being used
- A parish council representative asked about fiber optics

- 
- A representative of a housing association asked whether there is a requirement to capacity build when they replace
  - The WPD representative responded that unless there is a clear defined need, capacity building is not necessary

#### **Table 2**

- Stakeholders generally felt that this was a *'no-brainer'* and that as WPD had a duty to carry this out as part of its service, it was not an issue which required a large amount of discussion

#### **Table 3**

- Stakeholders were in agreement that WPD should be replacing assets to maintain business as usual as a matter of course

#### **Table 4**

- Representatives of both local authorities and environmental groups suggested that WPD has to keep up with business as usual, and asked whether this is a mandatory requirement which could result in the regulator fining the company if service deteriorated as a result of this not being done
- A representative of a local authority suggested that WPD could choose to save on capital investment here, but that this would result in an increase in complaints from customers

#### **Table 5**

- According to one stakeholder representing a community council, anything to sustain and improve service reliability should be given top priority. This was agreed by all since continuity of service was essential to all
- It was generally felt, that 'business as usual' should be given greater importance than improving the network

## 5.7.2 Network / Customer Service Issue 2: Installing equipment to enable local scheduling of customer generation and storage – ‘the smart network’

### Table 1

- The Table saw this Issue as a ‘essential’

### Table 2

- A stakeholder representing a local emergency service felt that this was not an immediate priority for WPD but it would become more a priority in the future
- A representative of a commercial developer stated that, from his / her point of view, it would be welcome to have advance knowledge of any major addition to network capacity

### Table 3

- A parish council representative discussed the use of UPS and having storage in the home. It was added that regional storage could be an alternative to house by house storage
- An environmental organisation representative stated that storage is not such an issue at the moment but it could become a future priority as long-term structure will change
- One stakeholder stated that local self reliance should be a priority for the future
- When asked when WPD should start investing in this type of technology a few stakeholders were in disagreement. One stakeholder felt that investment should be within the next five years, whilst another stakeholder felt that it was for the ‘nearer future of the long-term’

### Table 4

- A representative of an environmental group suggested that this needed to be linked to the Government ‘s own agenda
- A representative of a local authority thought that people would think more about the energy they were using if they were aware of what they were doing, and what they could do to change their energy usage

## Table 5

- According to the stakeholder group, this was more relevant to this part of the world (the South West) than most of the country, adding that this might mean a regional shift in priorities

### 5.7.3 Network / Customer Service Issue 3: Installing equipment and systems to enable data exchanges and power control, eg. remote control switchgear

## Table 1

- After some explanation from the WPD representative, the Table saw this as a an important future priority for WPD

## Table 2

- A representative of a local emergency service felt that remote switchgear would be a great asset from an emergency planning point of view as it would enable equipment to be operated in remote areas without the need to send resource out in case of emergency situations. (S)he did however stress the importance of retaining manual controls

## Table 3

- Stakeholders were generally of the view that they do not know enough about the Issue
- A parish council representative stated that if it is going to make the system more efficient, then it has to be a 'yes'
- There was some confusion over this issue but it was decided that it would be a priority for the long-term rather than in the next five years

## Table 4

- A representative of an environmental group felt that this was an efficiency measure that could improve processes but could also lead to unemployment and a reduction in the need for certain employees

## Table 5

- This, according to the stakeholder group, was desirable but needed wider discussion in the order of priorities. It would be given high priority by most, if the data exchanges provided consistency of service and synchronisation between distributor and supplier

## 5.7.4 Network / Customer Service Issue 4: Future proof asset replacement

### Table 1

- A representative of a Government agency questioned how useful it is to monitor existing assets
- The WPD representative commented that replacement used to be driven by age alone; now it is driven by age and condition
- A local authority representative felt that this Issue is 'essential' if WPD '*wants to be proactive*'

### Table 2

- Several stakeholders felt that the process of future proofing should be bound up with asset maintenance / replacement at present. Stakeholders around the Table agreed with this point

### Table 3

- The stakeholders asked for clarification on what was meant by future proof asset replacement. WPD representative provided clarification for the Table
- One stakeholder made the point that it would make economic sense to proof for the long-term
- A parish council representative felt that it would be cheaper in the future if WPD installs a system that will last for the long-term
- One stakeholder raised the point that if technology is not improving very fast now then why WPD does have to invest in new technology at present. This factor means the Issue is not a high investment priority yet
- It was felt that future proofing asset replacement was not a priority but something that WPD should monitor

### Table 4

- A representative of an environmental group suggested that this Issue could be compared to the debate on nuclear energy: there are short term cost implications, but longer-term, this approach would be more cost effective
- Linked to this, stakeholders felt network reliability was essential and extremely important for rural areas and worst-served customers

## Table 5

- This was a difficult subject for the stakeholder group, since they, as predominantly non-technical people, had little knowledge of what the future held, let alone any knowledge of what a 'future proofed' asset might be. There was agreement that this Issue should be given high priority, since that it ensure cost-effectiveness

## 5.8 Theme 3: Improving customer service

### 5.8.1 Network / Customer Service Issue 5: Reducing power cuts

#### Table 1

- A Parish Councillor commented that a power cut for even a second is massively inconvenient for all of his / her constituents
- A representative of a Government agency stated that (s)he suffered a power cut at 4am on New Years Day. It was resolved relatively quickly by WPD, and very few people noticed
- The group agreed this is a basic part of what WPD does, so it is essential

#### Table 2

- Several stakeholders, including representatives of local authorities and emergency services, felt that WPD should look at minimising the effect of power cuts as well as minimising power cuts themselves
- A stakeholder from an environmental organisation noted that (s)he personally suffered a power cut several times a year, for three seconds or so. (S)he asked exactly what caused these minor outages
- A local authority representative said that short power cuts were mostly an irritation, rather than a severe issue
- A representative of a commercial developer made the point that unless all cabling was put underground, tree falls and bird strikes would continue to cause short power cuts
- An emergency services representative stated that even undergrounding wouldn't solve the problem, as people would still accidentally cut power cables during maintenance works and DIY
- A local authority representative note the problem of customers who are away from home during a power cut and the issues it causes with trip switches and sensitive appliances such as refrigerators and freezers

- An emergency services representative agreed that this was an issue but felt that the onus should be on the customer, stating that there was technology available such as storage batteries and HGS boxes (for computers and servers) that was commercially available
- A local authority representative noted that, compared to other European countries, in particular Spain, the UK has a good record on power cuts
- An environmental representative noted an occasion when there had been a heath fire near to him which had caused the wooden poles to burn down, leaving the nearest town without electricity for several days. (S)he asked about the possibility of using metal and concrete poles to prevent this
- A local authority stakeholder made that point that wooden poles are recyclable and less environmentally damaging

### Table 3

- A representative of a parish council stated that WPD can't control all the factors that lead to a power cut. (S)he felt that the current level was acceptable
- The Table stated that their own experience of power cuts was minimal
- One stakeholder raised the point that local storage could be a way of reducing power cuts
- Another stakeholder stated that there is only so far that WPD can go to reduce the number of power cuts that people experience
- A parish council representative questioned whether WPD could target those areas that cause problems
- One stakeholder stated that the impact on public buildings is more of an issue than individual homes
- It was added that power cuts are a '*personal experience*' that should be of low priority in terms of investment

### Table 4

- A representative of a local council suggested that the lengths of power cuts have dramatically reduced. (S)he felt that this was an irritation but nothing more: everything switches back on eventually, and there's no need to worry about freezer contents etc. That said, WPD should be aiming for no cuts at all
- A representative of a water company agreed that power cuts are '*few and far between*' and this needs to be maintained. However, (s)he put forward that '*dips*' are more of an issue: they are unpredictable and cause industrial processes to cease

- (S)he continued that, within a domestic setting, lights might dim but at a water treatment plant, motors will stop completely, and for an unforeseeable duration. (S)he felt there was a need for more resilience in the system to minimise these dips, and gave a recent example where a large transformer was damaged by a lightning strike which caused a dip. There were significant repair costs after this incident. (S)he questioned whether greater initial investment when installing the network would have address this
- Stakeholders agreed that dips had a different level of impact from a residential or business perspective, and that this came down to the difference between resetting costs and interrupting business
- A local authority representative suggested that WPD needs to make technological improvements in this area focusing on a system that can reduce the length of the dip
- Stakeholders discussed the option of protecting local supplies for businesses, using small-scale uninterrupted power supplies. The need for business continuity plans was also discussed, and stakeholders questioned whether water supply customers had to bear the costs of installing such systems. The question of who pays for which measures was debated and the water company representative explained the measures the company currently takes to maintain supply and protect sensitive equipment from voltage disturbance

#### **Table 5**

- This was seen as an obvious priority though the stakeholder group expressed overall satisfaction with the current service. It was felt that the supply was generally good, though a representative of a large energy user thought that better communication and synchronisation was required between the distributor and supplier sectors

### **5.8.2 Network / Customer Service Issue 6: Improving customer service for new connections**

#### **Table 1**

- A representative of a housing association commented that time is the biggest factor with building work. As long as planning has taken place there shouldn't be an issue – the customer should know in advance if they are going to need a new connection
- A representative of the farming community felt that the cost of new connection is a key issue
- The WPD representative responded that the cost is usually justified due to requested services and that WPD is not permitted to subsidise this due to the regulatory regime

- A representative of the farming community stated that changes to these costs would show we are serious about meeting targets for renewable energy. *'Regardless of why the cost is high, the cost is preventing uptake'*, (s)he added
- A parish council representative asked what the spread cost of new connections would be per customer
- The WPD representative responded using solar farms in Cornwall as an example. These take hundreds of millions of pounds worth of work. Absorbing this into overall cost would not be viable, and connecting everyone would not be possible without significant investment. WPD needs to encourage efficient connection to the renewable source and somebody has to pay for the service
- In conclusion, the cost of connection was a key issue for stakeholders on Table 1

### **Table 2**

- A representative of a commercial developer noted that WPD was one of the best as regards customer service, especially when compared to other regional utilities companies, but that WPD should, of course, seek to continue to improve its level of service
- The general consensus was that WPD needed to maintain present levels of service but seek to continue gradual improvement

### **Table 3**

- There was a consensus that improving customer service for new connections was a low priority both for now and in the long-term

### **Table 4**

- Stakeholders discussed current concerns with regard to this Issue, including the rigid process; time taken to receive information or make decisions; and complexities involving suppliers. Examples were given from both a domestic and business perspective and the WPD representative outlined some of the complexities involved in the process including regulations, permissions and procedures
- A representative of a local authority felt that WPD could do more to explain the process and any Issues involved to customers so that they could have a better understanding of what is involved

## Table 5

- It was claimed by one industry representative that customer service for new connections was an area to be improved. From application to installation the process was consistently 'slow', mainly due to administration / coordination and there was a need for improvement
- A parish council representative said a simplified approach to administration would be welcomed
- A representative of an environmental group made the point that the diversity of the market made response difficult in certain sectors, though most appeared to be satisfied

### 5.8.3 Network / Customer Service Issue 7: Reducing short duration interruptions – 'dips'

#### Table 1

- A representative of a housing association felt that if these dips are caused by bigger problems, then surely it would make more sense to target the root cause
- A representative of the farming community had experienced around 15 power cuts in the past 3 years but did not find this to be '*massively inconvenient*'
- A representative of a housing association agreed that while dips are not an inconvenience for most, some, such as the elderly, are not able to reset their heating systems
- A representative of a government agency asked whether it would be worth investing in specific work for vulnerable customers
- This was not deemed to be a high priority issue aside from areas where there are members of society at risk

#### Table 2

- A local authority representative recommended that WPD should carry out a cost / benefit analysis. (S)he was concerned that it would cost millions of pounds to deal with an irritation factor. This view was echoed by an environmental representative
- An emergency services representative noted that WPD needed to prioritise where appropriate, using the example of dialysis patients and those dependent on electrical equipment, although (s)he noted that often in-house solutions were preferable to external ones with regard to this Issue

- An energy industry stakeholder stated that dips were inevitable. (S)he said that the more WPD reduced long outages, the greater the number of short dips experienced by customers would be
- A local authority stakeholder commented that short dips were more manageable than long outages
- A local authority stakeholder asked if WPD had an '*acceptable level of power cuts*', for example one per year
- Another local authority stakeholder felt that regardless of network issues, WPD should still seek to reduce 'dips'
- An emergency services representative was of the opinion that the current standard for a worst served customer – 15 times over three years – actually seemed quite a low number and wondered if the standard should be revised accordingly
- A local authority representative stated that short-term interruptions don't affect the reliability of his / her service, whereas a four hour interruption did
- Another local authority representative wanted to see want fewer occasions when his / her trip switches tripped out
- A local authority representative agreed but still felt that the customer has to take some personal responsibility in instances of power cuts
- A government agency representative asked whether the short-term dip would effect a trip switch as it only lasted 3 minutes maximum
- An environmental representative stated that whilst (s)he had experienced a number of short or long term power cuts, (s)he had never had an issue with his / her fuse box or trip switch

### **Table 3**

- A representative of an environmental organisation stated that (s)he would rather experience a '*mini dip*' rather than an hour-long power cut
- There was a consensus that reducing dips should be a low priority for now and in the long-term

### **Table 4**

- Stakeholders felt this had been discussed at length earlier in the session and there were no further comments

### **Table 5**

- Generally, there was agreement that the level of service was good at present

- It was felt that priority should be given to hospitals, industry, business and commerce, when these 'dips' occurred

#### 5.8.4 Network / Customer Service Issue 8: Improved reliability for worst-served customers

##### Table 1

- The Table felt this issue had been discussed earlier and so the discussion moved quickly to the next issue

##### Table 2

- A local authority representative asked whether worst served customers included those who suffered multiple short-term 'dips'
- An emergency service representative felt that WPD needed to ascribe significance to areas and locations when looking at volumes of cuts. (S)he felt that the customer had to take some initiative if they were in a remote location, potentially by investing in a back up generator, for example
- Several stakeholders encouraged WPD to focus on groups of worst served customers, rather than individuals, and that WPD should look to do the greatest good for the greatest number, performing a '*cost benefit calculation*'
- A local authority representative was of the opinion that this issue should be a very high priority for WPD
- Another local authority representative asked how much could be done for worst served customers, given that the budget was only £1million a year

##### Table 3

- Stakeholders felt that improving reliability for worst-served customers was of low importance
- One stakeholder queried whether there was compensation attached to worst-served customers
- Stakeholders felt that WPD should not improve the entire network for the benefit of worst-served customers
- One stakeholder asked whether WPD know who, out of its worst-served customers, were '*vulnerable*'
- A parish council representative stated that it would make more sense that WPD focus on the needs of 99% of the population rather than focus on a small percentage of worst-served customers. It was felt that the cost would not be worth it

- 
- It was added that it would be cheaper to compensate worst-served customers rather than improving the whole service
  - Stakeholders wanted to know whether the number of worst-served customers had improved or worsened
  - It was felt that this Issue was not a priority for now
  - However, it was stated that if any of the stakeholders were amongst the worst-served customers, their opinion on the Issue would probably change
  - The stakeholders felt that the issue wasn't insignificant but, equally, was not a high priority

#### **Table 4**

- Stakeholders agreed that this should be a high priority but that it was not a *'burning Issue*
- A representative of a water company made clear that other customers should not bear increased costs for dealing with the problems of a small group of 3000 people. Other stakeholders agreed

#### **Table 5**

- This was a lively issue, since a number of the stakeholder group were either from, or represented rural areas
- There was some debate as to whether worst served customers should pay a lower tariff
- The point was made that the expense of delivery to isolated farming customers would generate a higher charge. Those 'worst-served' probably had invested in self maintained generators. However, the point was made that due to rising diesel and oil costs, such customers would probably want a reliable and cost effective energy supply. This situation, the stakeholder group agreed, should be monitored, though the priority compared to other Issues was low

## 5.8.5 Network / Customer Service Issue 9: Being prepared for major emergencies

### Table 1

- The group all felt it was essential for WPD *'to think about the unthinkable'*

### Table 2

- An emergency services representative suggested that WPD should try to integrate their work with that of other services and businesses. (S)he stated that WPD was one of the better organisations in terms of understanding risks and planning for emergencies, but that they needed to improve their business continuity measures and their recovery process. (S)he felt that WPD was excellent at planning for, and responding to, contingencies that directly affected assets, but needed to work on mutual aid when the problem was not caused by (or did not directly affect) WPD
- It was noted that best way to deal with this was through local forums and working with national bodies such as Ofgem
- There was some discussion concerning the potential of a malicious attack using EMP. A representative of a government agency felt that preparation for an EMP was of great importance given the potential effects of such an attack, but accepted that any initiatives should be run through national government
- Other stakeholders, particularly those from local authorities, felt that the expense of proofing against such an attack might preclude investment in other more important areas
- A local authority representative asked if WPD currently had resources in place to deal with emergencies. It was explained by a WPD representative that at present WPD spends a considerable amount of money on this across all areas of the business
- A representative of a government agency was of the opinion that Issues such as this required WPD to be able to get customers back on power rapidly and rectify faults as quickly as possible. This was echoed by a local emergency service representative
- A local authority representative stated that WPD could technically spend a limitless amount on mitigating the effects of emergency situation as it was an issue which ran across the whole of their budget. (S)he felt that WPD should seek to perform a risk assessment based on surrounding environment and likelihood of events occurring
- A local authority stakeholder asked how this was a different issue to reducing power cuts, as (s)he felt that there were many overlapping areas between the two

### Table 3

- One stakeholder asked *'why wouldn't WPD want to be prepared for a major emergency?'*
- A representative of a parish council queried whether there are particular emergencies that are increasing in occurrence
- A representative of a local authority stated that *'prepared'* is the word that WPD should be focusing on. Spending should be low but being prepared should be a high priority
- The stakeholders stated that being prepared for major emergencies should be a high priority. It was added that it does not have to be a priority across the whole network

### Table 4

- A representative of a local authority emphasised that, in view of recent harsh winters, flooding etc, WPD seems to have done well and there has been no major long-term loss of supply. (S)he suggested that it is good business practice to be prepared and WPD seems to be in a good position, which it needs to maintain
- A representative of a water company questioned whether emergency planning concerns were different in summer and winter
- A representative of a local environmental group suggested that WPD should undertake a risk assessment

### Table 5

- There was general agreement that emergency strategies were sufficient and adequate at present. One environmental group representative said *'there is no end of nonsense from certain Government directives'*
- The stakeholder group agreed that emergency responses were adequate, though there was a discussion as to what had been learnt following the 'Foot and Mouth' outbreak, where access had been denied to land

## 5.8.6 Network / Customer Service Issue 10: New methods of communication – email, text and other – website, online

### Table 1

- A representative of a housing association stated that using a variety of communication methods is essential for all customers
- A representative of a Government agency felt that there will always be a customer who needs to be in touch

- The group agreed that this is not a high priority but WPD does need to make sure they are meeting customer demand

### **Table 2**

- A representative of an environmental organisation observed that most of these current contact methods were reliant on electricity to work
- An energy industry representative stated that it was important that WPD kept up to date and used the most current and effective methods to contact customers
- An emergency services representative felt that it was important to build diversity into WPDs' communications strategy and ensure that the company can communicate effectively with all customers
- An emergency services representative also noted the issue posed by paperless bills, whereby the customer no longer was able to easily find a contact number for WPD
- A local authority representative suggested that WPD investigate a method by which a customer can be informed by text or email when their power has gone off, wherever they are. An energy industry representative agreed but felt that this had to be a two way system whereby the customer could also communicate back to WPD
- This prompted another stakeholder to ask if WPD knew when individual electricity supplies were interrupted
- A local authority representative asked if WPD gave official advice on surge protection equipment in the home

### **Table 3**

- A parish council representative stated that using new methods of communications is probably a small expenditure for WPD so the company might as well *'keep on top of it'*
- The stakeholders stated that it was important for WPD not to rely on any one method of communication
- Stakeholders felt that new methods of communication should be a medium priority but one that requires investment both now and in the future

### **Table 4**

- The group had split opinions on this topic, with some stakeholders feeling it was essential for WPD to embrace these new technologies and others feeling that many customers had no desire to become computer literate

- Representatives of local authorities agreed that customers needed to be able to access information and *'to hear a human voice'*

#### **Table 5**

- The stakeholder group had only one observation. In the South West mobile and broadband coverage was patchy, and to disregard traditional methods of communication would be a mistake until new technology is able to reach all consumers

## **5.9 Further Network / Customer Service Issues**

#### **Table 1**

- A representative of a housing association asked what WPD could do to reduce bills and help customers save money, including promoting energy efficiency
- The WPD representative responded that energy suppliers have that responsibility, but it is something WPD could look at

#### **Table 2**

- An emergency service stakeholder suggested that security of the network was an issue that should be of high priority for WPD, given the level of metal theft and vandalism currently being experienced. (S)he noted the issue of oil coolant systems installed at substations which could heat up and cause explosions or fires if other systems were affected by theft or vandalism
- A local authority representative expressed surprise that theft was a big issue for WPD. Several stakeholders stated that, from their experience, theft was a big problem for distribution networks
- A local authority representative asked whether WPD was insured and whether any damage costs were passed on to customers
- A representative of a commercial developer stated that this issue should be high priority for WPD, and the majority of stakeholders around the Table concurred
- A local authority representative asked whether theft of electricity was a major problem in the South West



### **Table 3**

- One stakeholder wished to raise the point of network vulnerability and the impact of external factors such as wars in the Middle East. (S)he felt that WPD should be prepared
- Local self reliance was also an issue that was discussed. It was felt that it should be an option for the future

### **Table 4**

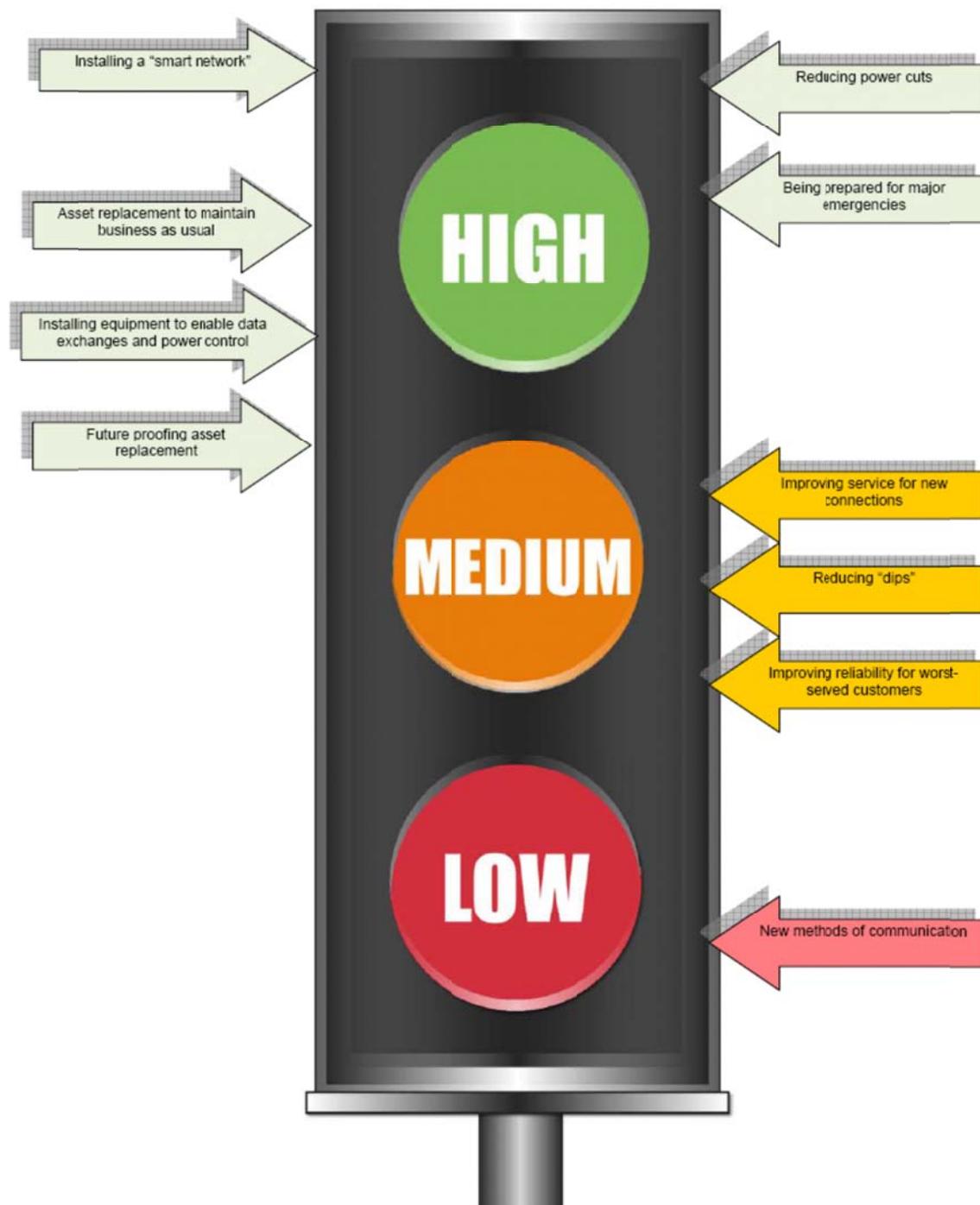
- The issue of voltage optimisation was raised by a representative of a water company. (S)he felt that WPD should look into providing different settings to customers: (s)he was of the opinion that it would be in the interests of WPD to have a higher voltage, to avoid disruption and low power issues, but that a whole parallel industry exists to limit voltage to domestic supply to reduce bills. It might be a higher cost on network infrastructure to provide lower voltage, but it would remove the intervention of this new industry selling additional transformers to domestic customers. His / her opinion was that voltage could be reduced by 5-10% without domestic customers seeing any difference
- All stakeholders were interested in this issue and agreed it should be a high priority for WPD to consider

### **Table 5**

- Stakeholders on Table 5 had no further Issues

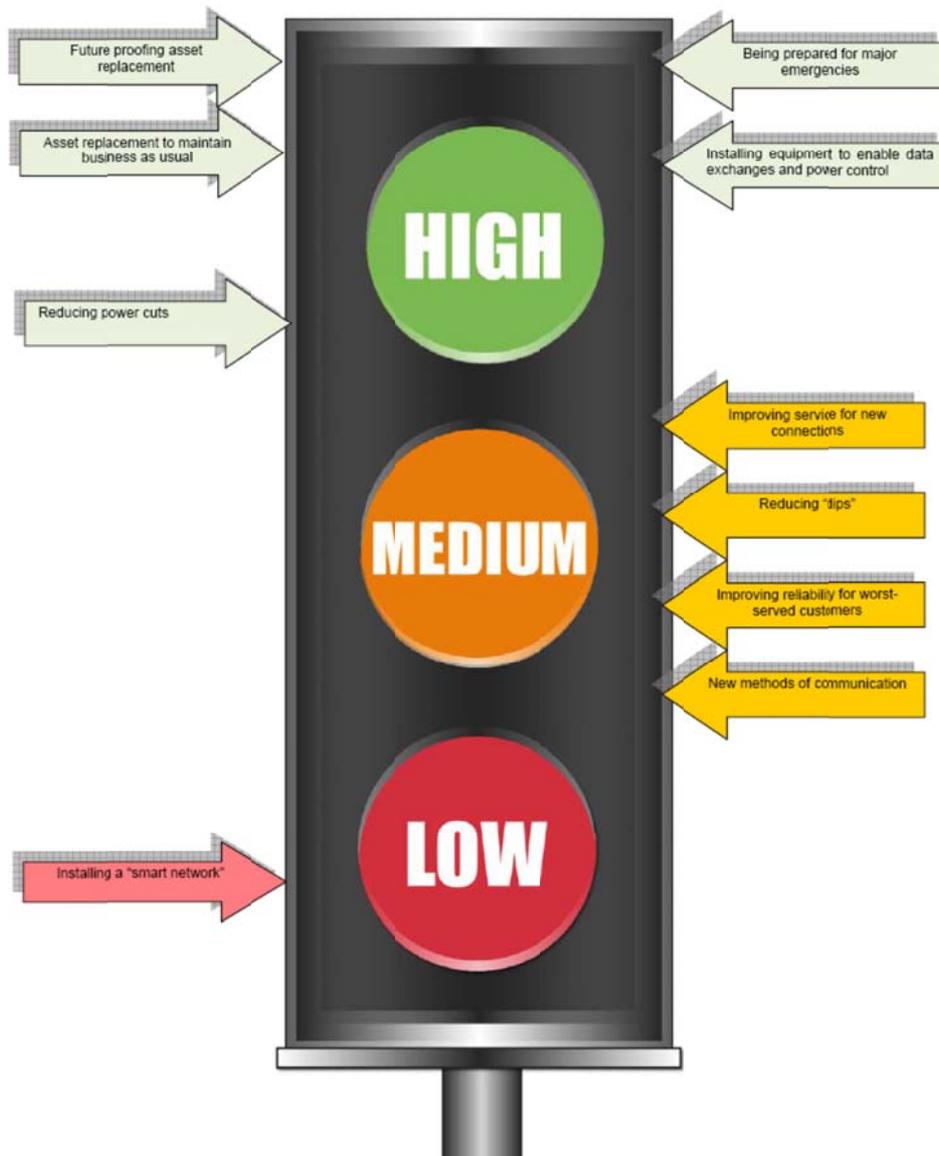
## 5.10 Conclusions and top three priorities

Table 1



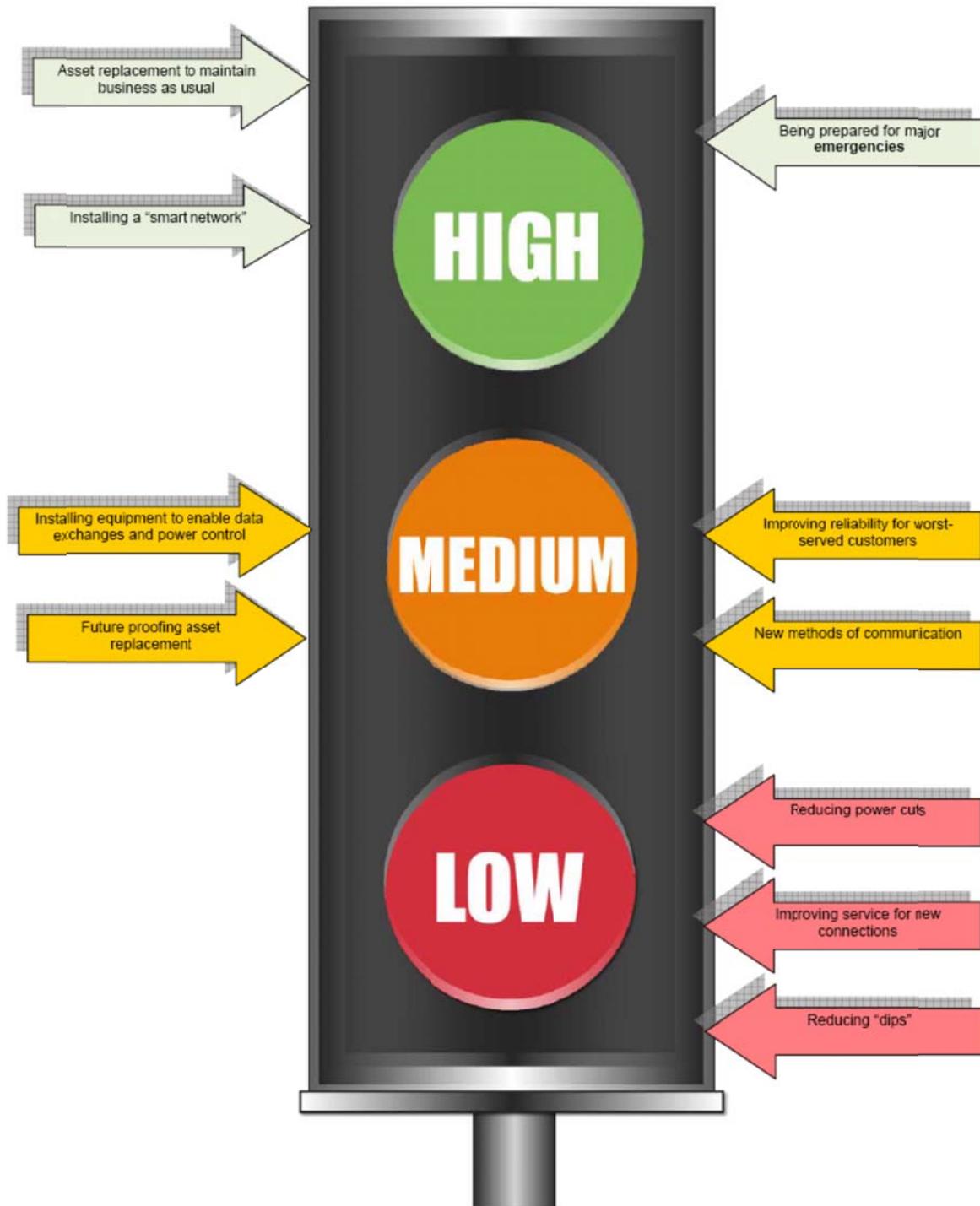
- The top three priorities for table 1 were: Installing a 'Smart network'; Reducing Power Cuts; and Being Prepared for Major Emergencies

Table 2



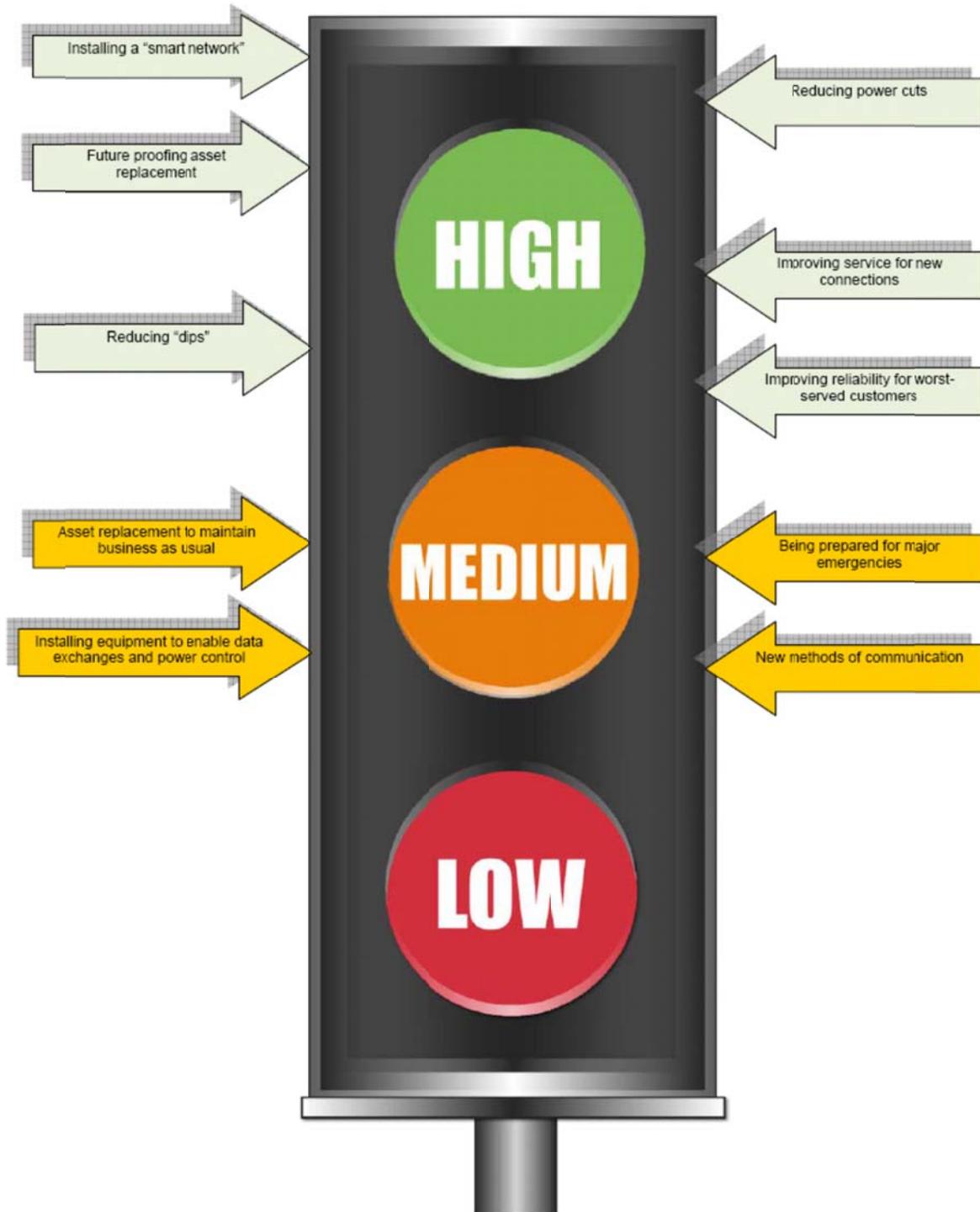
- Stakeholders identified Future Proofing of Asset Replacement and Asset Replacement to Maintain Business as Usual as a single linked issue, and this was a clear top priority
- Stakeholders also felt that Being Prepared for Major Emergencies was the second highest priority. They also added that WPD needed to act to ensure asset security (an Issue which hadn't been identified) should be a high priority
- Stakeholders identified Installing Equipment to Enable Data Exchange and Power Control as their third ranked priority

Table 3



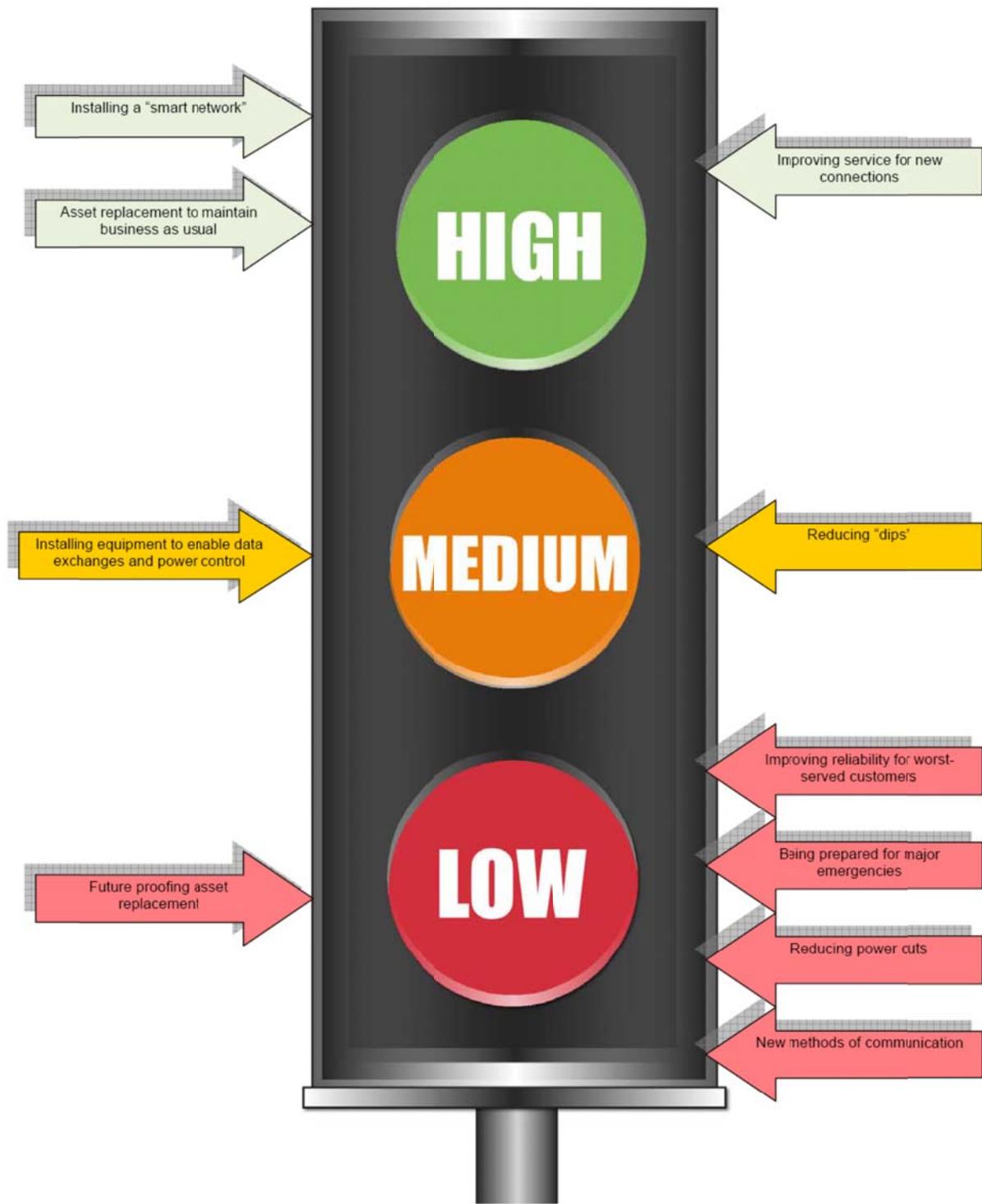
- Asset Replacement to Maintain Business as Usual was felt to be the highest priority Issue
- Being Prepared for Major Emergencies and Installing the Smart Network were Table 3's other top priority Issues

Table 4



- Stakeholders on Table 4 chose Installing a Smart Network, Future Proofing Asset Replacement and Reducing Power Cuts as their top three priorities

Table 5



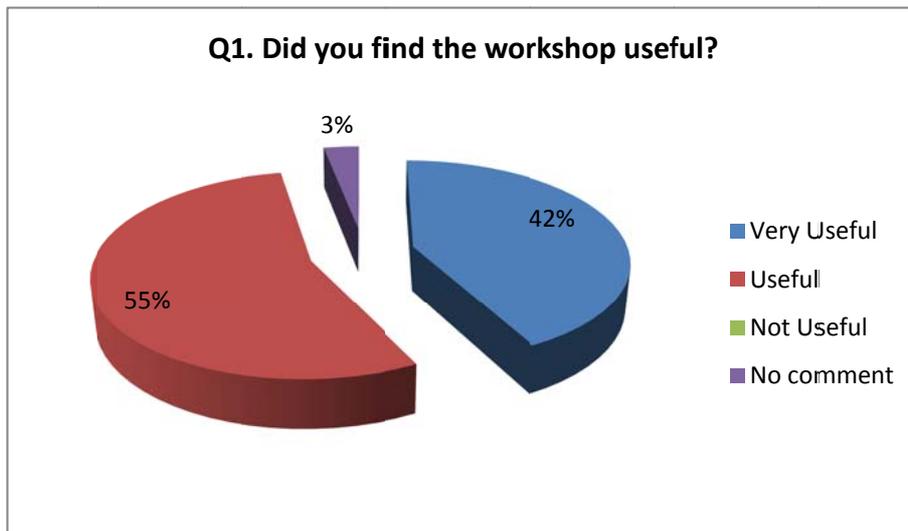
- It was felt that the top three priorities were: Installing a 'Smart Network'; Improving Customer Service for New Connections; and Asset Replacement to Maintain Business as Usual

## 5.11 Exeter stakeholder workshop: feedback

Stakeholders were asked to fill out a comment card following the workshop. The comments we received are shown below.

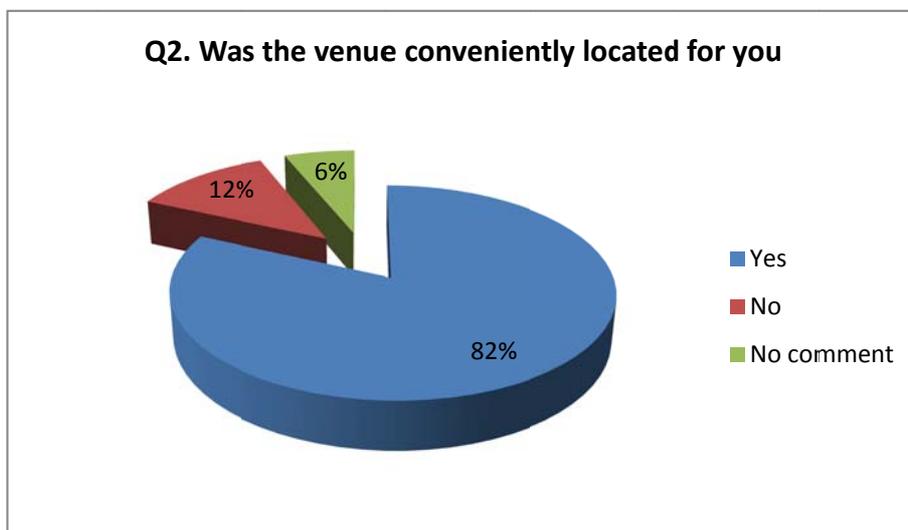
### 5.11.1 Question 1: Did you find the workshop useful?

Out of the 33 attendees who filled out a comment card 14 found the workshop 'very useful' and 18 found it 'useful'



### 5.11.2 Question 2: Was the venue conveniently located for you?

27 of the 33 respondents stated that the venue was conveniently located. 4 respondents did not find it conveniently located.

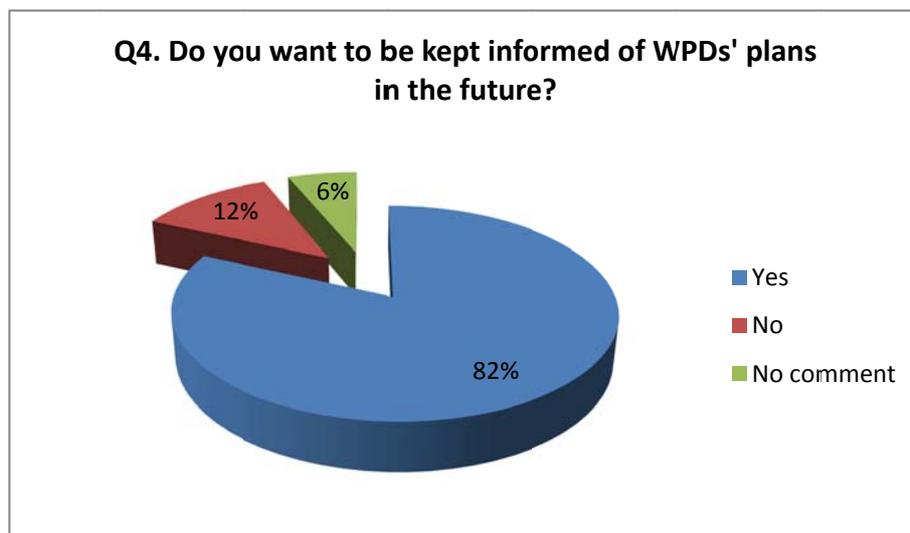


### 5.11.3 Did we provide you with enough information at the workshop?

30 of the 33 respondents stated that WPD provided enough information at the workshops, whilst only one stated 'no'.

### 5.11.4 Do you want to be kept informed of WPDs' plans in the future?

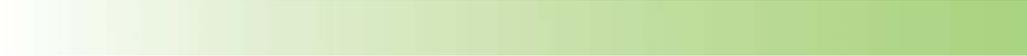
27 respondents stated that they would like to be kept informed of WPDs' plans in the future. Only 4 stated that they would not like to be kept informed.



### 5.11.5 Do you have any other comments on the workshop or the venue?

A total of 19 respondents provided further comments. A selection of verbatim comments received through the comment cards are listed below.

- *'Well ran and kept it moving - obviously relatively simplistic but WPD are to be praised for the consultation efforts'*
- *'Well run and facilitated'*
- *'Venue - closer to mainline public transport links. Sometimes difficult to hear speakers.'*
- *'Workshop - summary paper on what we will be expecting to comment on prior to meeting would be helpful'*
- *'Very good environment, easy, flowing. Thank you'*

- 
- *'I would have welcomed information about how the distribution networks of the future (local production) might differ from the existing network'*
  - *'Well facilitated'*
  - *'Useful update on looking at practice of WPD and at its priorities and proposals'*
  - *'I have learnt a lot that I did not know before, thank you'*
  - *'Good start to the process. Knowing the costs and willingness to pay will tell'*
  - *'Excellent'*
  - *'Need to inform participants where there are statutory provisions which must be adhered to'*
  - *'Good facilitation'*
  - *'The most sustainably located venues (in terms of public transport accessibility) are always the best, not that there's otherwise anything wrong with the venue! It would be interesting to know more about WPDs' role in planning for major new residential/commercial developments'*



**Report on the outcomes of the Stakeholder Workshop  
Bristol: May 18<sup>th</sup> 2011**

**Prepared by**

**GreenIssuesCommuniqué**

## 6. CONTENTS

6.	Contents	75
7.	Bristol Stakeholder Workshop	77
7.1	Date and location	77
7.2	Attendees	77
7.3	Bristol stakeholder workshop: overall conclusions	79
7.4	Theme 1: Environmental Issues	81
7.4.1	Short and long-term priorities	81
7.4.2	Environmental Issue 1: Minimising leaks from fluid filled cables and gas insulated switchgear	82
7.4.3	Environmental Issue 2. Continuing undergrounding schemes in National Parks / AONB	84
7.4.4	Environmental Issue 3: Reducing our business carbon footprint	87
7.4.5	Environmental Issue 4: Protecting habitats and species	88
7.4.6	Environmental Issue 5: Flood mitigation	89
7.4.7	Environmental Issue 6: Trialling technology and innovation to facilitate low carbon networks	91
7.4.8	Environmental Issue 7: Climate change risk assessment	92
7.4.9	Environmental Issue 8: Other climate change mitigation (eg. taller poles now or later; larger conductors now or later)	93
7.4.10	Environmental Issue 9: Facilitating electric vehicle charging infrastructure. Should we install more LV network capacity now or later	95
7.4.11	Environmental Issue 10: Facilitating the connection of local renewable energy (local community and household generation). Should we install more LV network capacity now or later?	96
7.4.12	Environmental Issue 11: Facilitating the Renewable Heat Incentive (more heat pumps). Should we install more LV network capacity now or later	98
7.4.13	Environmental Issue 12: Innovation projects, eg. smart meters, storage, demand side management	99
7.5	Further Environmental Issues	100
7.6	Conclusions and top three priorities	103
7.7	Theme 2: Improving the network / Improving customer service	108
7.7.1	Network / Customer Service Issue 1: Asset replacement to maintain business as usual	110
7.7.2	Network / Customer Service Issue 2: Installing equipment to enable local scheduling of customer generation and storage – ‘the smart network’	111
7.7.3	Network / Customer Service Issue 3: Installing equipment and systems to enable data exchanges and power control, eg. remote control switchgear	113
7.7.4	Network / Customer Service Issue 4: Future proof asset replacement	114
7.8	Theme 3: Improving customer service	116
7.8.1	Network / Customer Service Issue 5: Reducing power cuts	116
7.8.2	Network / Customer Service Issue 6: Improving customer service for new connections	117
7.8.3	Network / Customer Service Issue 7: Reducing short duration interruptions – ‘dips’	119
7.8.4	Network / Customer Service Issue 8: Improved reliability for worst-served customers	120



7.8.5	Network / Customer Service Issue 9: Being prepared for major emergencies	122
7.8.6	Network / Customer Service Issue 10: New methods of communication – email, text and other – website, online	124
7.9	Further Network / Customer Service Issues	125
7.10	Conclusions and top three priorities	127
7.11	Bristol stakeholder workshop: feedback	132
7.11.1	Question 1: Did you find the workshop useful?	132
7.11.2	Question 2: Was the venue conveniently located for you?	132
7.11.3	Question 3: Did we provide you with enough information at the workshop?	133
7.11.4	Question 4: Do you want to be kept informed of WPDs' plans in the future?	133
7.11.5	Do you have any other comments on the workshop or the venue?	133

## **7. BRISTOL STAKEHOLDER WORKSHOP**

### **7.1 Date and location**

The second WPD workshop took place on May 18<sup>th</sup> at The Clifton Pavilion, Bristol Zoo, Clifton Down, Bristol, BS8 3HA

### **7.2 Attendees**

Carl Francis-Pester, Executive Member for Environment and Asset Management - North Somerset District Council

Hugh Pratt – Wraxhall & Failand Parish Council

David Walker, Member of Energy Sub-Committee of Timsbury Environment Group – Timsbury Parish Council

Gerry Jones, Regional Director – Institute of Directors (IOD) South West

Michelle Osborn, Planning Co-ordinator – Somerset Wildlife Trust

David Lyon, Senior Electrical Engineer – Wessex Water

Chris Webb, Commercial Manager, Utilities – BOC Limited

Ashton Broad, Chair – Whitchurch Parish Council

Rex Chapman – Compton Martin Parish Council

Sian Parry, Planning and Policy Officer – Avon Wildlife Trust

Clive Pryor, Lead Engineer – Imerys Minerals

Bola Sangosanya, Project Engineer – Helius Energy PLC

Andrew Sugden – BOC

Andrew Heygate-Brown, Energy and Data Billing Analyst – Wessex Water

Simon Vicary – EDF Energy

Fiona Erleigh – Nailsea Town Council

Graham Clark, Regional Surveyor – Country Land and Business Association

Cllr Chris Sampson – Winscombe and Sandford Parish Council

Jonathan Richards, Planning Liaison Officer – Mendip Hills Area of Outstanding Natural Beauty

Karl Maryon – Haven Power Ltd

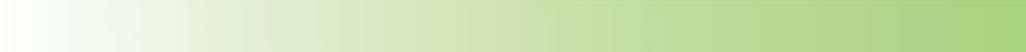
Mareike Schmidt, Executive Support Officer – Bristol Futures

Cllr CJ Thomas – Farmborough Parish Council

Cllr John Ford – Yate Town Council

Cllr Peter Mills – Combe Hay Parish Council

Valerie Moody, Project Manager – Somerset County Council



Paul Sobczyk, Interim Group Manager Strategy and Business Services – Sedgemoor District Council

Chris Ambrose – Wraxhall & Failand Parish Council

David Pitcher, Business Development Manager – Power Plus Communications

Helen O’Conner – South Gloucestershire District Council

Bernhard Kellas – Scottish and Southern Energy

Stephen Hilton, Service Director – Bristol Futures

Bob Carne, Senior Energy Analyst – Wessex Water

Kelly Edwards, Director – Green Issues Communiqué

James Garland, Director – Green Issues Communiqué

Ben Johnson, Account Manager – Green Issues Communiqué

Martyn Williams, Senior Consultant – Green Issues Communiqué

Amardeep Kainth, Consultant – Green Issues Communiqué

Simon Powell, Account Manager – Green Issues Communiqué

Alice James, Account Executive – Green Issues Communiqué

Siobhan Lavelle, Senior Consultant – Green Issues Communiqué

Amardeep Kainth, Consultant – Green Issues Communiqué

Farah Pasha, Account Executive – Green Issues Communiqué

Philip Bloomfield, Account Executive – Green Issues Communiqué

Alison Sleightholm, Regulation and Government Affairs Manager – WPD

Nigel Turvey, Design and Development Manager – WPD

Bob Parker, Regulatory Projects Manager – WPD

Philip West, Policy Manager – WPD

Natasha Richardson, Regulatory and Government Affairs Advisor – WPD

David Wornell, Pricing Analyst – WPD

Gwyn Jones, Distribution Manager – WPD

### 7.3 Bristol stakeholder workshop: overall conclusions

- Encouragingly, 15 out of the 26 workshop attendees found it to be ‘*very useful*’ and 10 told us it was ‘*useful*’
- The venue was conveniently located for most but for 5 out of 26 attendees it was not
- Most stakeholders told us that enough information was provided although some commented that prior notice of the questions would have been welcome
- 25 out of 26 respondents would like to be kept informed of WPDs’ plans in the future
- Minimising Leaks from Fluid Filled Cables and Switchgear was seen by the majority of stakeholders as being a high priority both in the short and long-term. For some it was to be considered one of WPDs’ three most pressing priorities for the future
- There was no consensus across the workshop on the Issue of Continuing Undergrounding Schemes in National Parks and AONBs. For some this was a top three priority but for others this was deemed a low priority. When initially discussed, all agreed that this should be a longer-term priority
- There was no consensus on WPD Reducing its Business Carbon Footprint. Across the group, most agreed that this was a medium priority for the future and the majority saw this as being more of a long-term than a short-term priority
- Protecting Habitats and Species was broadly seen as being a medium to high priority for the future. In the initial discussion, all stakeholder groups stated that this should be a priority both in the next 5 years and in the future
- The majority of stakeholders were of the view that Flood Mitigation should be a priority for WPD both in the short and long-term. When asked to rank this Issue alongside the others, stakeholders unanimously stated that this was a high priority
- The majority of stakeholders believed that Trialling Technology and Innovation to Facilitate Low Carbon Networks was a high priority for WPD, both in the coming 5 years and in the future. Some combined discussions on this Issue with the Issue of Innovation Projects and saw this as being a top three priority
- Climate Change Risk Assessment and Other Climate Change Mitigation were linked by a number of stakeholders. These Issues were seen as either high or medium priority by all stakeholders. Interestingly, Climate Change Risk Assessment was seen as being a higher priority than Other Climate Change Mitigation
- Broadly, Facilitating Electric vehicle Charging Infrastructure was seen as being the lowest priority Issue discussed across the group. All agreed that this was more of a long-term than a short-term priority but one Table stated that this should be medium priority; the rest thought this was a low priority Issue

- In the initial discussion, Facilitating the Connection of Local Renewable Energy Sources was seen by all stakeholder groups as being a long-term priority. However, it was only ranked as a high priority by one Table. The remainder considered this Issue to be low to medium priority
- Facilitating the Renewable Heat Incentive was initially considered a priority for WPD both in the next 5 years and in the longer-term. However, when discussed in the context of all of the other Issues, this was ranked as being medium to low priority
- All stakeholders who initially discussed this Issue were of the view that Innovation Projects should be a priority in both the short and long-term. Along with Flood Mitigation, this was the only Environmental Issue where all Tables agreed that this should be a high priority for the future
- Asset Replacement to Maintain Business as Usual was felt by the majority of stakeholders to be a high priority. By some, this was seen as being in the top three Issues facing WPD in the future. However, one Table saw this as being low priority
- When initially asked, all stakeholders saw Installing a 'Smart Network' as being a short-term priority for WPD. When ranked alongside other Issues, this was deemed to be medium priority
- Only one Table saw Installing Equipment to Enable Data Exchanges and Power Control as not being a short-term priority for WPD. When discussed alongside all of the other Issues relating to Improving the Network in the future, there was unanimous agreement that this should be ranked as a high priority
- Although one Table stated that Future Proofing Asset Replacement should not be a short-term priority, all were in agreement that this should be a priority in the longer-term. All but one Table ranked this as high priority when this Issue was discussed alongside all of the other Issues relating to Improving the Network
- All stakeholders initially felt that Reducing Power Cuts should be both a short and long-term priority. However, when this was discussed further, opinion was split on this Issue as discussions were dictated by personal experience. Two tables saw this as a high priority and the remainder deemed this to be low priority
- As with Improving Service for New Connections, there was no consensus across the group on the Issue of Improving Service for New Connections. Initially, this was seen as being both a short and long-term priority by all stakeholders. However, for the majority, this was seen as being low priority in the future
- Reducing 'Dips' was broadly viewed by stakeholders as being a high priority for the future. Interestingly, addressing this Issue was viewed by the group as being a higher priority than Reducing Power Cuts

- Improving Reliability for Worst Served Customers was ranked as being a medium to high priority. One of the stakeholders at the Bristol workshop ranked this as low
- Across the group, Being Prepared for Major Emergencies was seen as being a high priority for WPD and some ranked this Issue in their top three. However, two tables stated that this should be low priority for the future
- The Issue of New Methods of Communication was broadly viewed as being a medium to low priority for WPD

## 7.4 Theme 1: Environmental Issues

### 7.4.1 Short and long-term priorities

Stakeholders at the workshops were asked to state whether or not they saw a range of Issues relating to WPDs' environmental initiatives as being priorities for the next five years or in the longer-term. At all times, every effort was made by the workshop facilitator to take the consensus view of the Table. The outcomes of this initial discussion for all of the Bristol attendees are shown below:

THE ENVIRONMENT										
Environmental Issues	Is this a priority in the next 5 years?					Is this a longer term priority				
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 1	Table 2	Table 3	Table 4	Table 5
Minimising leaks from fluid filled cables and switchgear	Y	Y	N	Y	Y	N	Y	Y	Y	Y
Continuing undergrounding schemes in National Parks/AONBs	Y	Y	N	N	Y	Y	Y	Y	Y	Y
Reducing our business carbon footprint	N	Y	Y	N	Y	Y	Y	-	N	Y
Protecting habitats and species	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Flood mitigation	Y	Y	Y	Y	Y	N	Y	Y	Y	Y

THE ENVIRONMENT										
Environmental Issues	Is this a priority in the next 5 years?					Is this a longer term priority				
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 1	Table 2	Table 3	Table 4	Table 5
Trialling technology and innovation to facilitate low carbon networks	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Climate change risk assessment	N	Y	Y	Y	Y	Y	Y	-	Y	Y
Other climate change mitigation	N	Y	Y	N	Y	Y	Y	Y	Y	Y
Facilitating electric vehicle charging infrastructure	N	N	Y	Y	Y/N	Y	Y	Y	Y	Y/N
Facilitating the connection of local renewable energy sources	N	Y	—	Y	Y	Y	Y	Y	Y	Y
Facilitating the renewable heat incentive	N	Y	—	Y	Y	Y	Y	Y	Y	Y
Innovation projects	Y	Y	Y	Y	Y	Y	Y	-	Y	Y

### 7.4.2 Environmental Issue 1: Minimising leaks from fluid filled cables and gas insulated switchgear

**Table 1**

- An engineering professional asked whether it is possible for WPD to use a mix of nitrogen gases in pipelines as this was comparatively less potent than the existing ones in use
- A representative of WPD said that this was not available to WPD. (S)he stated the priority for WPD in the current 5 year period is removing 11 items of switchgear

- A representative of an environmental organisation stated that priority depended on the location of the cables. (S)he highlighted that it was particularly important to prevent leaks in environmentally sensitive regions
- Overall, stakeholders felt that it is important to be prudent on this issue. Most agreed that this issue is not an immediate priority; however WPD should not risk being negligent about minimising leaks in the long-term

## **Table 2**

- A representative of a local authority raised the question of whether or not there are particular advantages between the various insulating systems. A WPD representative outlined the various methods available, along with pros and cons relating to repair and fault detection
- Stakeholders had differing perspectives of the significance of this issue. A representative of a local environmental group felt this was an important long-term issue, and protecting natural habitats should be a high priority. Local authority representatives were generally in agreement. Other stakeholders did not consider this such a significant priority, as long as replacement work was being done on a gradual basis

## **Table 3**

- A parish council representative said that without knowing more information about the issue, (s)he did not feel able to respond
- The representative from WPD gave more details about the Issues around leakages from fluid filled cables and gas insulated switchgear
- A representative of a town council asked how leakages are discovered, and how long it takes to deal with them
- The WPD representative gave an explanation about the process
- A representative of a water company felt that this should be a high priority. The majority of the Table overruled this to rank it as a low / medium priority

## **Table 4**

- A representative of a town council stated that (s)he felt that minimising leaks was a high priority
- An AONB representative was in agreement
- Another stakeholder made the point that the it depends on how much is being lost and what WPD are already doing to reduce leaks

- One stakeholder stated that reducing leaks is a high priority particularly in the long-term

#### **Table 5**

- A local authority stakeholder asked if SF6 was really 23,000 times more potent than CO2 and expressed surprise (s)he hadn't previously been aware of it
- Another local authority stakeholder asked for clarification concerning the exact percentage of leakage from the network. (S)he also asked about the percentage of transmission equipment which contained these pollutants
- A representative of a major user suggested that as there was no replacement for these coolants, it should be an extremely high priority for WPD to maintain their assets so as to manage the issue
- A local authority stakeholder agreed, but felt that '*all efforts should be made to follow the CFC example and eliminate this problem altogether if possible*' (S)he felt that innovation to find a replacement should be WPD's focus
- Another local authority stakeholder suggested that WPD should prioritise leak management over the next five years but should be looking to find replacement technology in the future

### **7.4.3 Environmental Issue 2. Continuing undergrounding schemes in National Parks / AONB**

#### **Table 1**

- A representative of WPD explained that WPD has planned to invest around £3m by 2015 on undergrounding schemes in National Parks and AONB in Wales and the South West. S(he) said that once the initial list of proposed sites is complete, WPD will work with the National Parks and AONB on selecting the next tier of sites for undergrounding
- An engineering professional stated that it is wrong to assume that undergrounding is always the best option. S(he) pointed out that undergrounding could do more harm to the environment than good when being installed
- One stakeholder representing a local authority said that overhead lines were outdated and affected the value of property. S(he) said that the community (s)he represents would like overhead power lines removed to improve the aesthetics of residential living
- Stakeholders were in broad agreement that this issue should continue to be a high priority in AONB for WPD

## Table 2

- A representative of a local environmental group found this issue of particular interest, and noted that other organisations were also involved, such as National Grid. (S)he also noted that it will be of interest to see how WPD prioritise this against other Issues
- A representative of a local authority stated that (s)he felt strongly that it would be a high priority to get as many cables underground as possible
- In contrast, a representative of an electricity supplier felt this was a very low priority, as installation of underground cables interrupts systems and increases down time
- A representative of a mineral mining company agreed that this was not a high priority for them, preferring to rank this as a medium priority

## Table 3

- A representative of an energy company felt that using a replacement scheme would be ideal. This compromise would mitigate the significant cost of undergrounding, while still achieving the same results, albeit in a longer time frame
- The WPD representative gave some information around the timescales of replacement
- A Parish Councillor said that if undergrounding is not necessary over a large area, then the cost might be justified
- A representative of a town council asked whether WPD has an existing undergrounding scheme. This representative felt that replacement schemes would be effective, as the lines would need replacing eventually anyway. (S)he commented that underground lines are also more secure, but perhaps repair is likely to be more costly. She also commented that over-ground lines in the South West are *'like a patchwork over the horizon'*
- Undergrounding was felt to be *'ideal'*, particularly in areas of AONB. However, it does not need to be ranked more highly than other Issues on the WPD agenda according to the Table

## Table 4

- A representative of a local authority wanted to know whether the scheme was fairly small at the moment
- A representative of an AONB stated that underground cabling was one of the highest priorities for his / her organisation
- One stakeholder stated that undergrounding can make a big difference to scenery

- It was added that underground cabling is not without its problems but can greatly enhance these landscapes
- Another stakeholder stated that the issue of underground cabling was not a priority issue and that other things were more of a concern
- An AONB representative stated that undergrounding cables has an economic benefit due to the revenue generated from tourism. Increasing underground cabling is therefore a benefit to the wider population
- A town council representative stated that underground cabling should also be considered for urban areas
- A parish council representative stated that it was a good idea but not of high priority. It was added that it is expensive and pylons do not stop tourists from visiting these areas
- Another parish council representative raised concerns over the cost that underground cabling could have. It was also discussed whether the issues surrounding underground cabling were known to WPD
- Stakeholders at Table 4 found it difficult to reach a consensus, with an AONB representative wishing it to be the highest priority
- Stakeholders stated that they would like WPD to continue consulting with stakeholders on the topic of undergrounding cables
- Stakeholders made the point that it could be an increasing priority in the future

### **Table 5**

- A representative of a major user asked whether WPD had investigated putting new cables underground as a matter of course, as (s)he would prefer cables to be underground than overhead
- A representative of a local authority noted that undergrounding was a very expensive process and (s)he preferred targeting any programme to specific areas
- Another local authority representative felt that undergrounding was not an important issue. (S)he said there are other more important priorities on the list
- One stakeholder asked if there were efficiency benefits from putting cables underground, in particular concerning temperature control. A local authority representative said that (s)he was aware that Siemens were manufacturing this kind of technology for undergrounding
- Another local authority representative felt that there should be a national policy on undergrounding, potentially regulated by Ofgem. (S)he felt WPD should be looking at *'a national regime of regulation'*

### 7.4.4 Environmental Issue 3: Reducing our business carbon footprint

#### Table 1

- There was very little discussion on this point. It was broadly felt that WPD has a responsibility to reduce its carbon footprint, as long as it is beneficial for both business and the environment
- On the whole stakeholders agreed that this Issue was less of a priority and more of an ongoing operation for WPD

#### Table 2

- A representative of a local environmental organisation suggested that this was a high priority for any business, and that WPD had an obligation to review its business practices and make whatever progress it could in this area. (S)he mentioned initiatives like travel plans, reduction in car usage etc
- There was limited additional discussion on this point

#### Table 3

- A representative of an energy company deemed that this should be an ongoing commitment for WPD
- A representative of a town council felt that the priority placed on this would depend on the cost implications. This representative did not consider this as a high priority, as being more efficient and using fewer resources is not difficult. (S)he commented that although this is not necessarily commercially beneficial, it is important as a leading energy distributor to set precedence and take the lead on these issues
- A local authority representative thought that it would depend on what counts toward the carbon footprint
- A representative of a town council commented that as an energy distributor, it is important for WPD to be at the cutting edge of energy efficiency
- The group agreed that as an energy distributor, WPD should be setting precedent

#### Table 4

- One stakeholder felt that reducing WPDs' business footprint should not be discussed in the environmental Issue list as it should be normal company rules. Reducing the company carbon footprint should be part of business as usual for WPD
- Stakeholders were in agreement that WPD should continue trying to improve efficiency within the company

- Stakeholders stated that electrical losses from the network should be the issue that is being discussed

#### **Table 5**

- A representative of a local authority suggested that WPD had a role to play as it was a large business and could provide civic leadership
- Another local authority stakeholder suggested that regulations would provide a basis for reducing the company's carbon footprint. A major user agreed with this point, stating that WPD should seek to adhere to regulations already in place
- Three local authority stakeholders felt that WPD should seek to go over and above the regulations and lead by example, proving that businesses could be accountable for their carbon footprints, and that WPD could set an example as a leading responsible business
- A local authority representative asked what the relative cost of reducing carbon footprint would be
- One stakeholder suggested strongly that WPD examine its supply chain in order to understand where embedded carbon costs were. (S)he gave the example of rare metals used in the transmission equipment

### **7.4.5 Environmental Issue 4: Protecting habitats and species**

#### **Table 1**

- There was consensus around the Table that this was a very high priority issue
- A representative of a local authority stated that it was good practice to be respectful to wildlife
- One stakeholder representing an environmental organisation praised the Table for appreciating the importance of this matter. S(he) pointed out that it was *'naïve to think that the average contractor was mindful of this issue'*. S(he) also mentioned that it was important to remember that wildlife was not confined to sensitive sites. S(he) praised and thanked WPD for taking an interest in some of the projects run by the organisation (s)he represents
- A representative of WPD pointed out that this issue was highly regulated by the Government. (S)he explained that WPD already take this issue very seriously when managing sites

## Table 2

- Stakeholders agreed that this point had been discussed earlier in the session and no further discussion was needed

## Table 3

- A Parish Councillor asked for the priority to be defined in terms of cost implications
- The WPD representative responded and gave some examples of activities undertaken by the company in this area
- A representative of a water company felt that it is crucial to protect species in the next five years as well as longer-term
- The Table echoed the sentiments that this is both a short-term, as well as longer-term priority

## Table 4

- A town council representative stated that protecting habitats and species should be a long-term project
- Stakeholders felt that the WPD workforce should be made aware of what they should do and how they should behave when it comes to protecting habitats and species
- Stakeholders added that education of the WPD workforce about their impact on habitats and species would be of little cost
- Stakeholders stated that protecting habitats and species was an important issue but was not the highest priority

## Table 5

- A local authority representative commented that WPDs' aim should be to simply abide by current regulations and restrictions
- Stakeholders agreed with this point and did not feel that the issue was of great importance provided current performance and educational procedure was maintained

### 7.4.6 Environmental Issue 5: Flood mitigation

## Table 1

- One stakeholder representing a local authority stated that this was more of a universal priority and should not be viewed in isolation from other organisations
- A representative of a business organisation stated that if adequate resources were invested into resolving this issue, this may no longer be a problem in 20 years time

- The Table was in clear agreement that it was good '*common sense*' to treat this issue as a high priority

### **Table 2**

- There was consensus that this should be a high priority. Several stakeholders agreed that initiatives like raising the height of substations were sensible
- Stakeholders at Table 2 agreed that this is, and should continue to be, an important issue for WPD

### **Table 3**

- A representative of a water company was of the view that this is an absolute, immediate priority
- A representative of an energy company agreed, and commented that flood mitigation should be given high priority due to the destruction caused by the last floods
- The Table agreed that flood mitigation is non-negotiable and an essential immediate action

### **Table 4**

- An AONB representative made the point that unforeseen events will increase in the future and that flood mitigation should be a high priority
- A local authority representative stated that flooding will directly affect power supply so should be of importance
- It was added by another stakeholder that it could be something that is focused on in the long-term
- Stakeholders made the point that WPD could focus on particular at risk areas
- Another stakeholder stated that the current system needs to be maintained without acceleration of investment

### **Table 5**

- A local authority representative from an area previously subjected to flooding noted that this should be a high priority, given previous experiences
- Another local authority representative asked whether WPD carried out their own flood risk assessments in addition to those carried out by local government and other organisations
- Another local authority representative stressed the importance of working with regional authorities to make sure that resource is targeted to the correct areas

## 7.4.7 Environmental Issue 6: Trialling technology and innovation to facilitate low carbon networks

### Table 1

- There was very little discussion on this point but it was broadly felt that this was a high priority for WPD

### Table 2

- Consensus on this topic was clearly split between a community and business perspective. While all stakeholders agreed that this was important, stakeholders representing local authorities or community-focused organisations tended to feel that this was a higher priority than stakeholders representing a business perspective

### Table 3

- A representative of an energy company stated that WPD is incentivised to work on low carbon networks
- The WPD representative informed the group that WPD could just meet the standard requirements but they also have the option to increase their level of work, if stakeholders feel there is a need
- A representative of a water company felt that investing in untested technology with public money is unjustified
- A local council representative pointed out that WPD need to be proactive not reactive
- A representative of an energy company warned that not investing in this would be risky as the nature of the business will change and the network will have to respond to this

### Table 4

- A local authority representative stated that trialling new technology and innovation to facilitate low carbon networks was of particular importance to him / her
- It was added that it is key that WPD continues working with stakeholders when discussing trialling new technology
- Another local authority representative agreed that continued discussion with stakeholders is important but trialling new technology and innovation is about second guessing and that may not be feasible
- It was added that WPD and stakeholders can work together to help WPD determine where demand is for certain technologies

- A town council representative stated that WPD needs to be continuously researching but not spending too much money
- One stakeholder felt that an increasing issue around new technology would be renewable energy use. The stakeholder felt that it should be looked at in area / local cases rather than individually
- A town council representative stated that this is a great idea but costs money. It was felt that money should be primarily focused on research
- A parish council representative stated that this should be looked at in connection with other distribution networks
- Stakeholders stated that trialling technology and innovation should be a continuing priority but at a medium priority level

#### **Table 5**

- A local authority representative with a particular interest in innovation and investment stated that (s)he was already working with WPD on the roll out of LCN technology, and felt that given the mix of industry in the South West, it made sense to work on both research & development and innovative technology in this area
- A local authority representative asked whether low carbon networks would require the trialling of technology and innovation on transmission networks
- A local authority representative asked whether these types of trials cost the business significantly more than the other types of innovation identified
- Several stakeholders commented that WPD had to make sure that the demand for this technology was there before rolling it out. Nonetheless, they felt that R & D should continue within the business, to assist with future planning
- Stakeholders were keen to see a continuous level of investment into new technologies, although not necessarily vast amounts of money being invested

### **7.4.8 Environmental Issue 7: Climate change risk assessment**

#### **Table 1**

- A representative of WPD asked the Table whether the company should be preparing for climate change now or as it happens in the future
- The stakeholders reached a consensus that risk assessment was a high priority and required continuous incremental adjustments

## Table 2

- Stakeholders agreed that this issue should be a medium priority, with the exception of a representative of a local environmental group who felt this should ranked high
- All stakeholders at Table 2 agreed that this was a long term and ongoing issue for WPD to address

## Table 3

- A Parish Councillor registered discomfort in investing money in something he felt was unproven
- The group agreed that the actual risk assessment process itself is a high priority

## Table 4

- A town council representative made the point that climate change risk assessment was already being carried out for WPD by other organisations. Therefore, the company does not need to spend lots of money on this issue
- It was added that WPD should continue using other peoples data
- A parish council representative stated that climate change risk assessment is part of what WPD needs to do as a business. It was added that for a consumer it is about a loss of power and WPD needs to decide what an acceptable loss of power is for a consumer. Climate change risk assessment should be part of normal business practice
- Stakeholder felt that it is a *'no brainer for the company'* and should be a high priority

## Table 5

- A representative of a major user felt that this was a high priority for WPD, although it required a relatively low amount of input to achieve. (S)he felt that forward planning and investigating potential scenarios was vitally important
- A local authority representative felt that WPD would struggle to plan ahead given the uncertainty surrounding the issues

### **7.4.9 Environmental Issue 8: Other climate change mitigation (eg. taller poles now or later; larger conductors now or later)**

## Table 1

- One stakeholder representing a local authority stated that undergrounding and installing taller poles were the most effective ways to mitigate climate change

- A representative of an environmental organisation said that reinstating woodland would be a better way of mitigating climate change
- Stakeholders did not reach an agreement on how to mitigate climate change but decided that it was generally a high priority for WPD in the long-term

### **Table 2**

- Table 2 reached consensus on this point quickly and with limited discussion

### **Table 3**

- A representative of a local authority felt that it would be dependent on how much of an issue climate change becomes and at what rate
- A local council officer thought that using the same poles would be unwise and that it makes sense to start implementing replacement schemes using higher poles
- A representative of a water company echoed that replacement schemes seem the most effective immediate action
- The group felt that large investment would not be effective, but they did agree that small steps like raising poles at replacement would be a good way to make steady improvements

### **Table 4**

- A town council representative made the point that if WPD doesn't make changes now then it will cost the company more money in the future. It was felt that it makes more business sense to do it now
- Stakeholders wanted to know whether WPD had carried out a risk assessment of the whole network
- One stakeholder felt that it was a '*steady as you go*' process and that it is an expensive luxury to make changes straight away for the entire network
- A Parish Councillor added that (s)he does not think WPD should waste money on a theoretical risk

### **Table 5**

- Local authority representatives suggested that WPD should be cautious and avoid making decisions either way which it might later come to regret
- Many stakeholders felt that WPD should seek to carry out mitigation as part of its renewal and maintenance programmes, where possible

- A representative of a major user stated that WPD would be best to carry out an incremental programme of measures, rather than following a widespread ‘one-shot’ solution

#### **7.4.10 Environmental Issue 9: Facilitating electric vehicle charging infrastructure. Should we install more LV network capacity now or later**

##### **Table 1**

- A business representative stated that this was a viable proposition as long as the Government was willing to subsidise a scheme
- A stakeholder representing a local authority said that it was crucial to make sure there was network capacity
- There was a general consensus among the Table that this was a relatively low priority. One stakeholder representing an environmental group stated that even with the current Government subsidy, electric vehicles are very expensive and until they become more affordable there is no point in facilitating electrical vehicle charging

##### **Table 2**

- A representative of a mineral mining company suggested that this was unlikely to be a priority for the next five years, and should be ranked as low priority. While several stakeholders representing communities agreed with this perspective, a representative of a local environmental group felt that this was one of many issues that has an impact on climate change, and as such that this should be a high priority for WPD

##### **Table 3**

- A representative of a water company asked what the timescales are as this issue would depend heavily on public uptake
- A local council representative commented that it must be done now, as it is important to reduce emissions. Lack of infrastructure for electric cars will be a deterrent for the public, so ideally WPD should put support in place if they can
- A Parish Councillor commented that this would depend on the expense
- A representative of an energy supplier felt that this should be a medium priority
- A Parish Councillor didn’t feel as though people would buy electric cars so this should be a low priority

#### **Table 4**

- A town council representative felt that electric cars are going to happen in the future and that WPD must be prepared for it. However, it was seen as a medium priority for this stakeholder
- An energy company representative felt that electric cars are not a realistic option and therefore do not need to be a future priority

#### **Table 5**

- A local authority stakeholder felt that the question was attempting to simplify a complex problem. (S)he stated that WPD needed to make a decision on infrastructure at the last possible moment of responsibility. The challenge for WPD would be to carry out the research in order to ensure that the decision was made at the correct time
- A representative of a major user said that WPD should be aiming to respond to the market rather than drive it
- A local authority representative drew attention to the existing regulatory commitment on electric vehicles made by the Government and stated that WPD needed to bear this in mind
- A local authority representative with a particular interest in research and investment stated that WPD shouldn't be operating in isolation. (S)he felt that there was a need for a collaborative approach between employers, large businesses and industry stakeholders
- A local authority representative from a rural area was of the opinion that WPD would be best to focus on urban areas rather than rural areas, initially
- A representative of a major user stated that WPD should aim to facilitate electric vehicles, rather than drive their development. This aptly summarised the general consensus view around the Table

### **7.4.11 Environmental Issue 10: Facilitating the connection of local renewable energy (local community and household generation). Should we install more LV network capacity now or later?**

#### **Table 1**

- A representative of WPD stated that electricity consumption is set to rise considerably in the future. (S)he asked the Table whether they think that WPD should



build the additional capacity into the infrastructure now or wait until demand catches up

- There was little discussion around this issue; however the broad consensus was that in the short term this issue remains a low priority

### **Table 2**

- Stakeholders on Table 2 had differing perspectives on this issue, specifically relating to whether they were considering this from a domestic or commercial / business perspective. The consensus from community-based stakeholders tended to be that this was important, and of high - medium priority
- A representative of a supplier felt differently, stating that this concerns extremely small levels of local generation, and as such it should be a low priority, with larger projects taking a higher priority ranking

### **Table 3**

- The Table wanted to know more about what this issue involved. The WPD representative gave an overview
- A representative of an energy company queried what WPDs' scenario expectations would be. Without a clear understanding of these, a clear path forward cannot be made. Government incentives play a big part in this, and there is a lack of clarity about what the future network would look like. The view was that it is not worth the investment now until there is a clearer picture of what the network would need to look like in the future

### **Table 4**

- A local authority representative stated that this topic was of particular importance to his / her organisation as it is already happening in his / her local area
- There was little discussion around this topic

### **Table 5**

- A representative of a local authority suggested that this was an important issue for city councils (and Bristol especially), given the requirements for housing associations and public buildings to be more sustainable and provide renewable energy
- Another local authority representative was of the opinion that leadership is required in this sector and that WPD could lead on such issues

- A local authority representative said that there would be significant roll outs in the area which will require alterations to connections and networks from WPD and, as such, this had to be considered an immediate issue to be addressed in the next 5 years
- A local authority representative stated that (s)he felt that it was again a case of waiting for the last responsible moment
- A local authority stakeholder was of the opinion that making a judgement or decision now would be difficult, as WPD wouldn't know where generation is happening and what developments might emerge in the near future
- Another local authority stakeholder was of the opinion that WPD should focus on localising its network where possible in order to respond to increasing microgeneration
- Another stakeholder agreed with this, and felt that creating a generic priority or protocol would be the wrong move. (S)he cited, specific schemes and projects coming forward and noted that WPD had responded at a local level. This should continue
- A local authority stakeholder agreed that localising the network was beneficial, but felt that at the same time macro level discussions had to be had with other members of the industry, government and regulatory bodies
- Another local authority stakeholder mentioned that there was a large area in his / her local authority's jurisdiction which had been earmarked for PV development. (S)he felt that this illustrated that the last responsible moment was closer than we think
- Another stakeholder suggested that steep Government led targets on renewables might well have an influence on this area

#### **7.4.12 Environmental Issue 11: Facilitating the Renewable Heat Incentive (more heat pumps). Should we install more LV network capacity now or later**

##### **Table 1**

- There was very little discussion on this point and it was broadly felt that this was a high priority for WPD

##### **Table 2**

- Stakeholders linked this issue with the previous issue. As a group, Table 2 agreed that this is important, although not necessarily a high priority

### Table 3

- Table 3 linked this answer to the response for issue 10
- A representative of the development sector felt that this should be placed higher rather than lower, but it may be preferable to implement it over a longer period of time. The representative felt that it is essential to find a decentralised way to work towards Government targets. However, (s)he noted that at the moment it is too costly to connect to the grid
- A local council representative asked why there is a charge to connect to the grid

### Table 4

- A parish council representative made the point that Issues 9, 10 and 11 are very dependant on Government policy. It was added that distribution companies should follow policy rather than lead
- Stakeholders stated that this Issue should be a priority but not something that WPD should steer

### Table 5

- A major user felt that heat pumps merely increased the strain on the network without giving a huge amount of benefit, but that larger scale combined heat and power projects would be of value
- A local authority stakeholder felt that the technology was still too expensive and that as such it didn't really benefit the poorest who it would be most help to

## 7.4.13 Environmental Issue 12: Innovation projects, eg. smart meters, storage, demand side management

### Table 1

- One stakeholder made the point that innovation was absolutely key and that WPD should invest as much money as possible in research and development
- A stakeholder representing an environmental organisation said that it was important for the UK to continue in this field in order to meet 2020 targets
- Stakeholders were in strong agreement that this issue was a very high priority

### Table 2

- Stakeholders were interested to hear more detail about the types of initiatives WPD could consider under this banner, and a WPD representative spoke in detail about this

- A representative of a local authority felt that there should be as many of these types of initiatives explored as possible
- A representative of a local environmental group agreed that this was essential, and linked potential benefits to climate change issues. (S)he also noted a potential positive impact for customers, specifically the ability to manage energy use and cut costs
- Stakeholders on Table 2 agreed that this is both a current and long-term priority for WPD

### **Table 3**

- A water company representative felt that this should be an immediate priority; as it is low cost and is worth the investment
- A representative of the development sector observed that this issue is more about a behavioural change in energy usage, and agreed that innovation is vitally important

### **Table 4**

- Stakeholders stated that this was a high priority. It was added that the management of implementing innovation projects should also be a priority
- However, a town council representative questioned whether the cost to customers would be worth it

### **Table 5**

- Stakeholders had already discussed this Issue under Issue 6. It was felt that WPD should always seek to innovate and improve
- There was a short discussion concerning WPDs' proactive approach to Government regulation and process management. One local authority stakeholder felt that WPD should drive Ofgem, National Grid and the Government to innovate further, as the current regulatory atmosphere was not conducive to development
- Another local authority stakeholder felt that there was an economic incentive to innovate as it would make the UK more competitive on an international scale
- A representative of a major user stated that WPD had to be receptive to new ideas

## **7.5 Further Environmental Issues**

### **Table 1**

- No additional Issues were raised

## Table 2

- Additional Issues raised included support for geothermal energy; preparation for a wide range of energy types in the future; providing support for large-scale wind and tidal energy projects
- A representative of a local authority suggested that at this stage everything should be considered, and nothing excluded
- A representative of a mineral mining company suggested that WPD look to specific counties (e.g. Cornwall) and internationally to see what is being done elsewhere
- The WPD representative mentioned the educational activities the company is involved in with schools and education providers. Stakeholders were pleased to hear about these activities and agreed that this was important for WPD to continue

## Table 3

- Stakeholders wanted to discuss the cost of connection
- A development industry representative had observed that one of the major blockages for people to move to more renewable sources is the cost of connection to the grid. While it is recognised that this is a cost that must be paid for, at the moment it is proving to be a disincentive. This representative asked the group how this could be addressed
- A representative of an energy company expressed concern that generator connection is not a *'level playing-field'*, as there is no space for subsidies. It seems the customer is forced to make the choice between avoiding the standard charges and paying for a connection
- A local council representative offered the suggestion that there may need to be a scale dependent on how much is produced. There should be different protocols in place for personal users
- A representative of an energy supplier stated that, as smart meters will be a requirement soon, it is key that WPD incorporates this into its priorities
- A representative of an energy supplier commented that wish lists are great but it is important to be mindful of the cost given the end consumer
- A representative of an energy supplier asked where the peak demand for solar power is from the South West
- It was also asked *'how does storage on and off-peak work?'* The representative felt that it is essential demand can be met
- All agreed flood mitigation was fundamental as it posed the most immediate risk

- 
- One stakeholder commented that Government subsidies are seemingly a very big influencing factor on the uptake of alternative energy
  - A representative of an energy supplier asked what the immediate impact would be on the WPD network if all customers decided to start using renewable sources
  - The WPD representative responded that they would need to double their existing capacity

**Table 4**

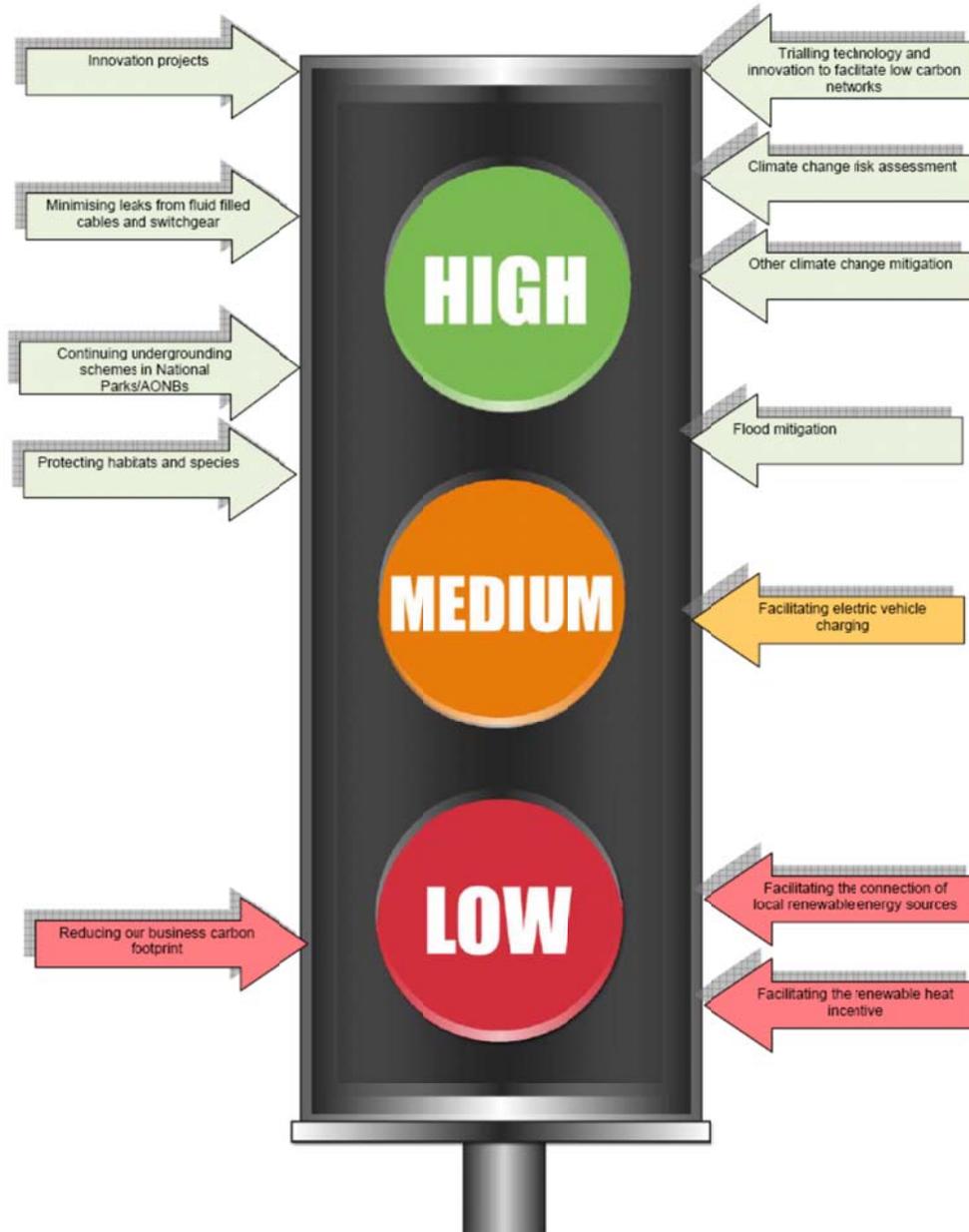
- There were no further Issues that the stakeholders wished to discuss

**Table 5**

- A local authority stakeholder suggested that WPD needed to also consider the socio-economic effects of its work. For example tourism, impacts on the visual environment, design of pylons, property values
- A local authority stakeholder felt that WPD needed to take into account PCBs
- A local authority stakeholder asked if WPD had a decontamination programme and budget

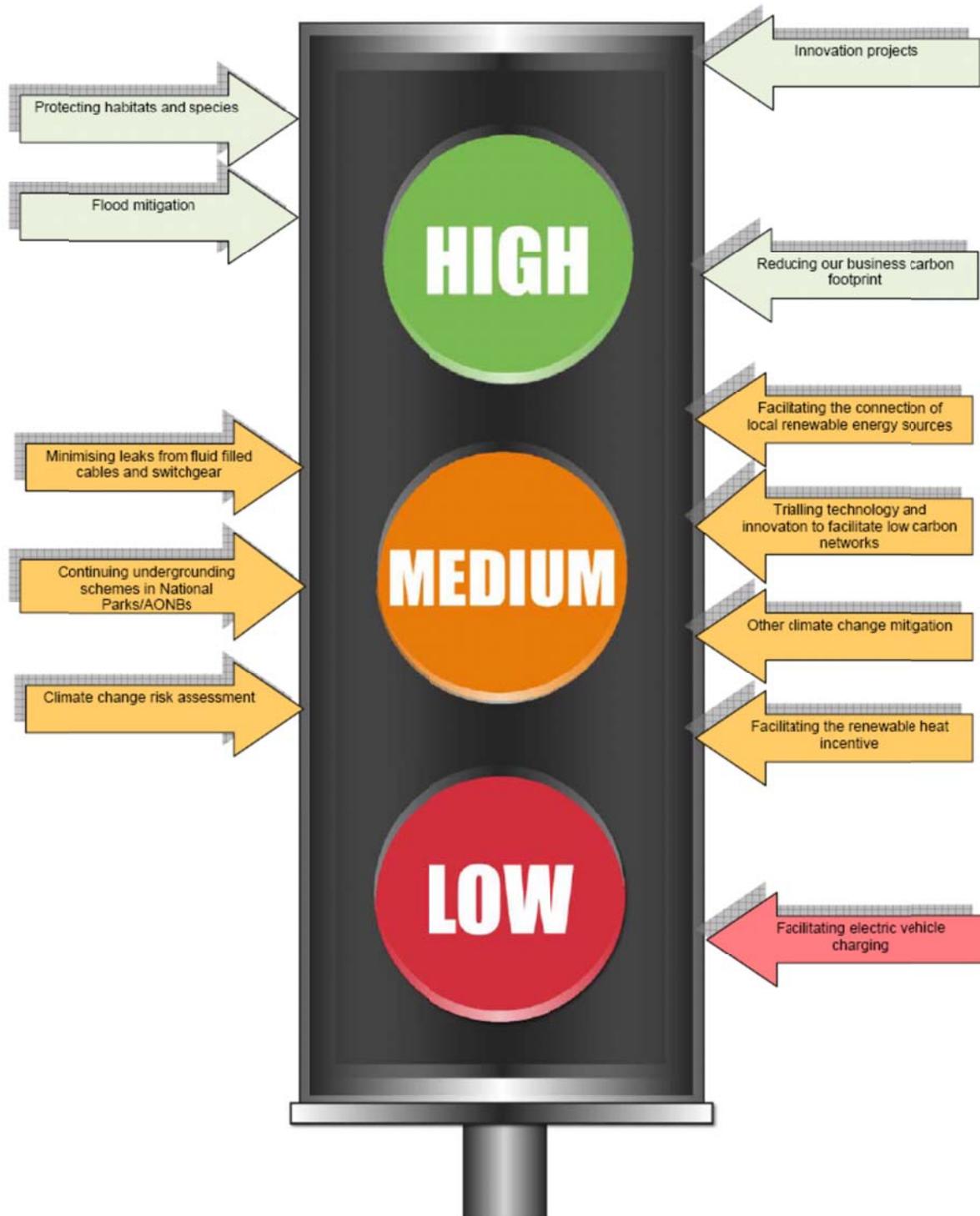
## 7.6 Conclusions and top three priorities

Table 1



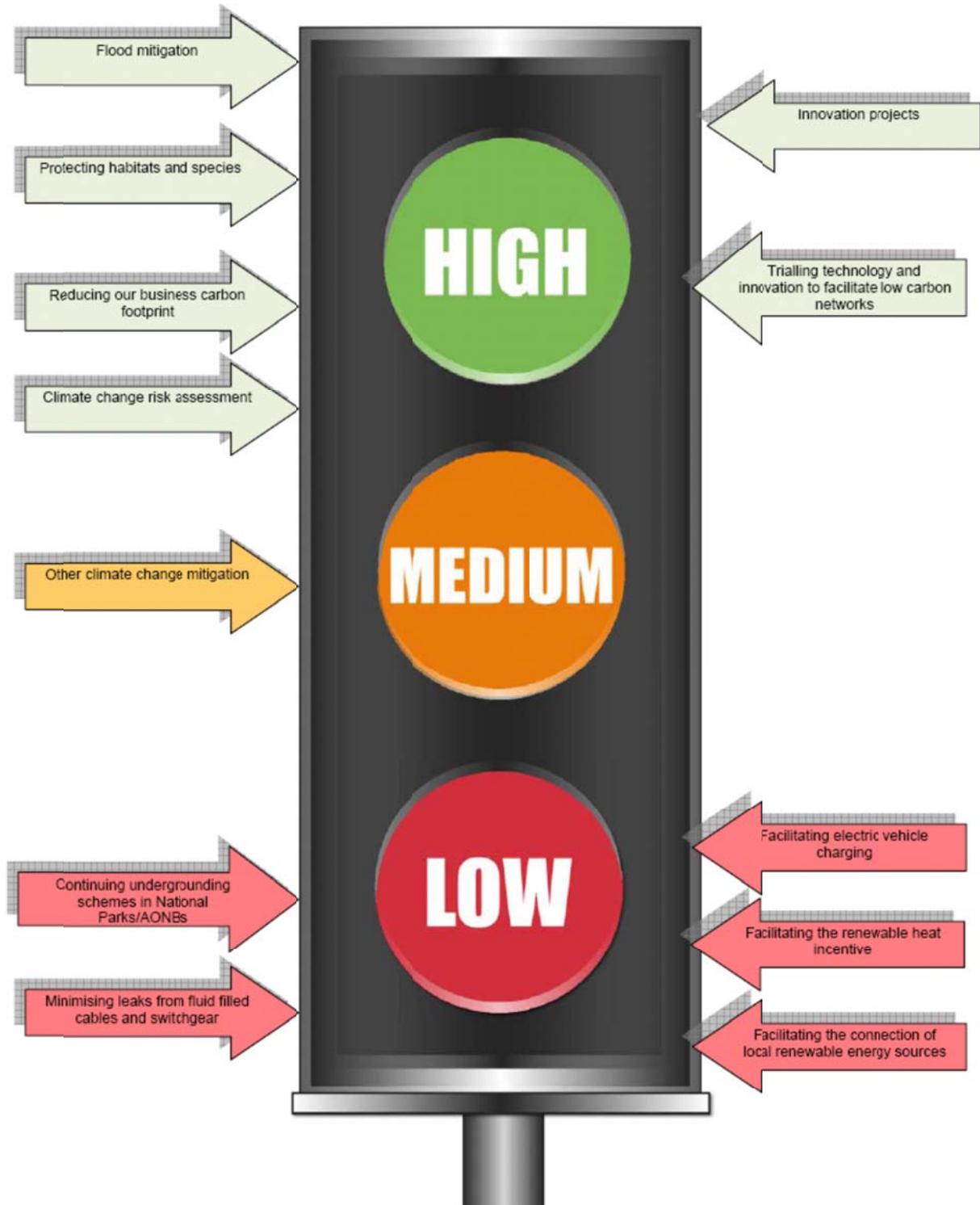
- There was a general consensus across the Table that Innovation Projects and Trialling Technology should be grouped together and should be the number one priority
- Minimising Leaks from Fluid Filled Cables and Switchgear and Other Climate Change Mitigation (combined with Climate Change Risk Assessment) were deemed priorities two and three, respectively

Table 2



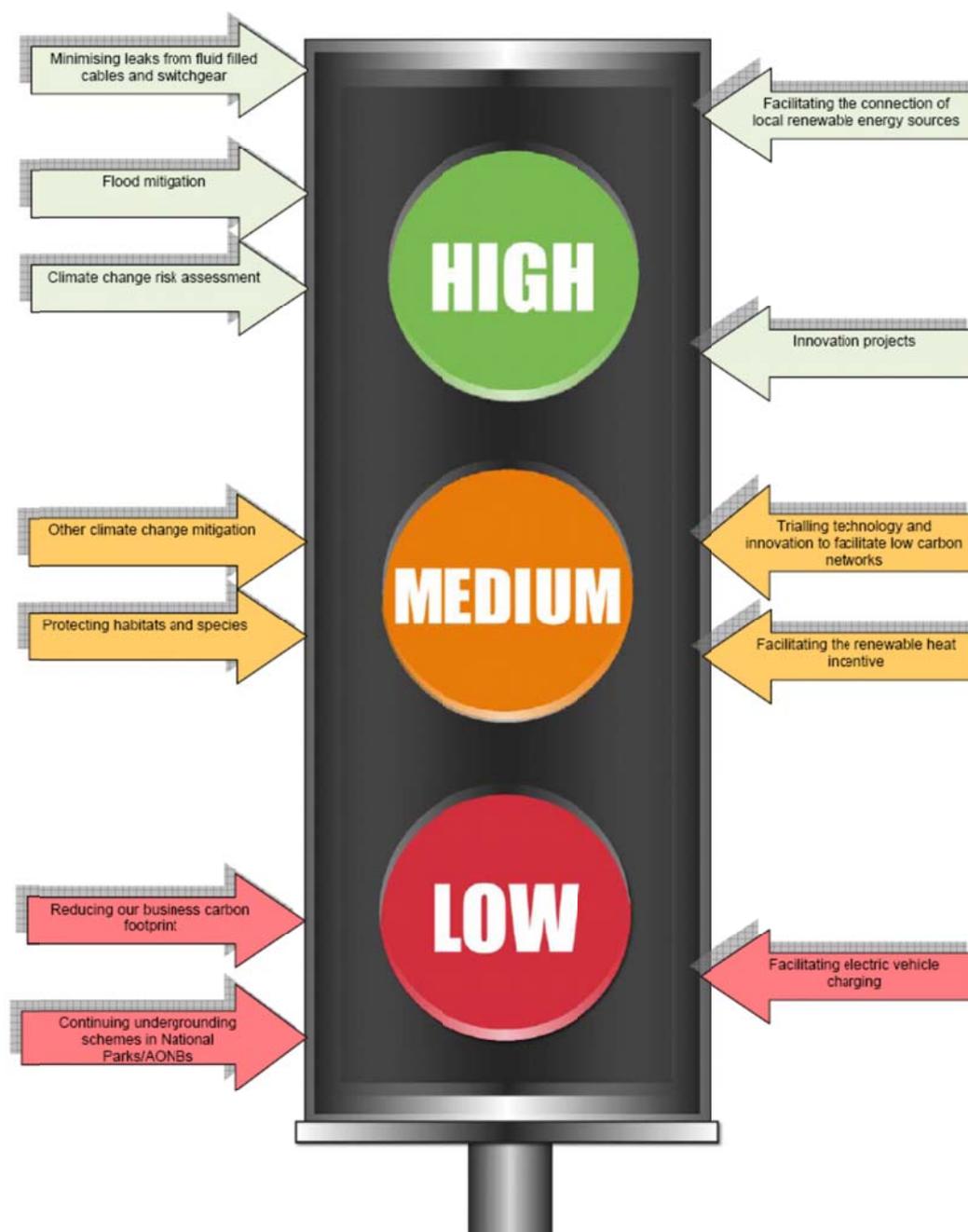
- Stakeholders at Table 2 selected Innovation Projects as the top environmental priority
- The group linked Protecting Habitats and Species and Flood Mitigation (together) as the second highest priority for WPD
- Reducing Business Carbon Footprint was selected as the third priority for WPD

Table 3



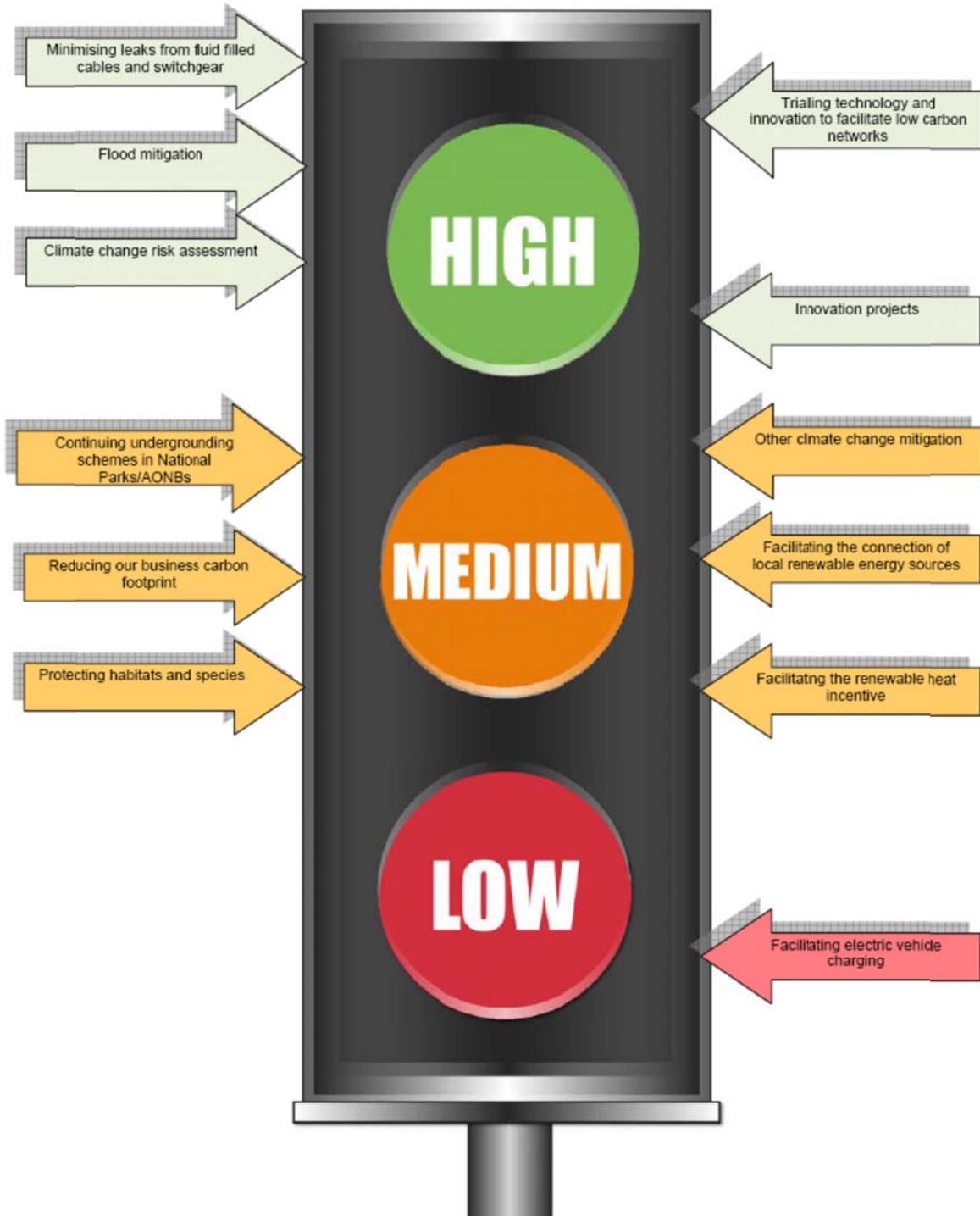
- The top three priorities for the group were Flood Mitigation; Innovation Projects and Protecting Habitats and Species

**Table 4**



- Stakeholders felt that Minimising Leaks and Facilitating the Connection of Local Renewable Energy were the top two priorities.
- Stakeholders at Table 4 found it difficult to choose between Flood Mitigation and Climate Change Risk Assessment and asked if these could be grouped together as the Table's third priority
- Stakeholders stated that Innovation Projects should also be given a high priority status but not be included in the top three

Table 5



- Stakeholders felt that WPDs' top priority should be Minimising Leaks
- The second highest priority was a combination of Trialling Technology to Facilitate Low Carbon Networks and Innovation Projects
- Stakeholders felt that a Climate Change Risk Assessment, combined with Flood Mitigation measures was the third most important priority for WPD

## 7.7 Theme 2: Improving the network / Improving customer service

The Issues of Improving the Network and Improving Customer Service were discussed together.

The session began with stakeholders discussing which Issues relating to these two topics should be WPDs' priorities for the next five years and which should be longer-term priorities.

The outcomes of this exercise are shown in the table below:

IMPROVING THE NETWORK										
Network Improvements	Is this a priority in the next 5 years?					Is this a longer term priority?				
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 1	Table 2	Table 3	Table 4	Table 5
Asset replacement to maintain business as usual	N	N	Y	Y	—	Y	N	Y	Y	—
Installing a “smart network”	Y	Y	Y	N	Y	Y	Y	Y	Y	Y
Installing equipment to enable data exchanges and power control	Y	N	Y	Y	Y	Y	Y	Y	Y	Y
Future proofing asset replacement	N	Y	Y	Y	Y	Y	Y	Y	Y	Y



IMPROVING CUSTOMER SERVICE										
Customer Service Improvements	Is this a priority in the next 5 years?					Is this a longer term priority?				
	Reducing power cuts	Y	Y	Y	Y	Y	Y	Y	Y	Y
Improving service for new connections	Y	Y	Y	Y	–	Y	Y	Y	Y	–
Reducing “dips”	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Improving reliability for worst-served customers	N	Y	N	Y	Y	Y	Y	Y	Y	Y
Being prepared for major emergencies	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
New methods of communication	–	N	Y	Y	Y	–	N	Y	Y	Y

## 7.7.1 Network / Customer Service Issue 1: Asset replacement to maintain business as usual

### Table 1

- An engineering professional said that this was a longer term priority and should be dealt with as and when necessary
- A representative of WPD said that 1.4 billion pounds had already been invested on replacing assets
- The Table agreed that this is a priority in the long-term

### Table 2

- A WPD representative clarified the considerations WPD makes in determining whether or not to replace a piece of equipment
- A representative of a local authority gave the perspective that the company should not wait for something to go wrong before taking action
- Stakeholders were keen to clarify whether WPD intended to maintain the status quo with equipment, or whether they were seeking to improve equipment. A WPD representative outlined the cost benefits of replacing defunct equipment with new, more expensive equipment that has potential extra features that may be of value in the future
- Stakeholders appreciated the complexities of business decisions involved in this area and agreed that it would be important to invest in the future by improving equipment, not just installing equipment with the same functionality

### Table 3

- A Parish Councillor stated that this is essential as it is part of the basic everyday running of WPD services
- A local council representative echoed this sentiment, deeming the work *'immediate and essential'*

### Table 4

- The stakeholders stated that asset replacement to maintain current levels of service is a high priority
- There was little discussion on this issue
- One stakeholder stated that one should continue this programme at its current level *'otherwise the company would start going backwards'*

## Table 5

- The general consensus was that this is a very important issue and something which WPD should be pursuing as a *'given'*
- A local authority stakeholder was keen to see lines being upgraded rather than simply replaced, to ensure improvements in terms of reliability and 'future proofing'
- Another local authority stakeholder said that to pursue business as usual would be completely unacceptable and that WPD need to be looking to the future and upgrading

### 7.7.2 Network / Customer Service Issue 2: Installing equipment to enable local scheduling of customer generation and storage – 'the smart network'

## Table 1

- A WPD representative pointed out that the key issue with installing the smart network was volume and accuracy of data
- A business representative said that WPD should strike up an agreement with a regional distributor. The feeling was that without doing so promptly this option may not be possible in the future
- S(he) pointed out that a vast amount of generation capacity is due to be reduced due to Government policy to reduce emissions; therefore it is crucial that a grid is able to respond rapidly to meet current demand
- There was a broad agreement that this issue was a high priority

## Table 2

- A representative of a mineral mining company suggested that this was a good idea, and a very high priority
- A representative of a supplier noted that while WPD shouldn't obstruct this, suppliers should lead on this type of initiative

## Table 3

- A development industry representative felt that this should be a high priority due to the rate at which technology is progressing
- A representative of a water company stated that this needs to be done in the next 5 years, but is nevertheless a medium priority

- An energy supplier representative stressed the need for more flexibility. Every customer needs a smart meter by 2019, so this needs to happen at some point. This stakeholder asked ‘*will WPD reach a stage in the next 5 years when can be implemented*’? This representative also queried whether this should be WPD’s responsibility.
- A local council representative thought that, ‘*like broadband*’, uptake will happen on an “*ad hoc*” basis, so the infrastructure to support it cannot be implemented all at once
- A development industry representative commented that as we are hearing about energy in the news everyday, uptake is likely to be quick. Therefore, it should be a priority to prepare for this

#### **Table 4**

- Stakeholders stated that future proofing is an important issue and the system has to be adaptable to meet future needs
- A town council representative stated that WPD needs to invest in this area so this should be a high priority
- The stakeholders on Table 4 decided as a group that the ‘smart network’ is a medium to high priority

#### **Table 5**

- One local authority representative stated that, at present, the take up of equipment was not huge, therefore WPD could be wasting its money. (S)he felt it was once again a case of ‘*biding time*’ and waiting for the last responsible moment
- Another local authority representative suggested that the moment had already arrived, as we’d seen 300+ applications in Cornwall. (S)he further suggested that top down demand from Government would not be going away and that WPD needed to pay attention to big, major projects as a matter of priority
- Another local authority stakeholder stated that due to the status of Cornwall, which had previously pushed for PV and other technology, there may well be the existing infrastructure there to roll out network improvements and trial innovation
- Another local authority representative asked what the difference in the load rating of the future would be when compared to current load rating. (S)he expressed a particular interest in how the requirements of public buildings and social housing might affect this rating

- Generally, stakeholders felt that WPD would achieve best value by targeting investment to urban areas ahead of rural areas
- Several stakeholders felt that installing this type of equipment would help WPD future proof its assets and network
- A representative of a major user stressed the importance of ensuring that any new systems are future proof. (S)he recommended that WPD investigate creating a modular system built upon measurable data to ensure that any equipment installed now can interface with anything installed in the future
- A local authority stakeholder asked whether this type of technology assisted with providing resilience in the system and asked if there was currently scope for greater intelligence in the system

### **7.7.3 Network / Customer Service Issue 3: Installing equipment and systems to enable data exchanges and power control, eg. remote control switchgear**

#### **Table 1**

- The stakeholders decided that this issue was '*middling*' on the scale of priorities but that more information would be helpful

#### **Table 2**

- A representative of a mineral mining company felt that this was particularly important and of high priority. (S)he felt that aspects of this would provide solutions to better reaction and monitoring, resulting in fewer power outages
- A representative of an energy supplier questioned whether the grid was flexible enough to support this type of system. His / her opinion was that this should be planned for now, but financial investment should follow at a later stage

#### **Table 3**

- A Parish Councillor expressed that although this is desirable, it is not essential
- A representative of an energy supplier felt that it would be sensible to do this in a managed and targeted way. (S)he asked whether the cost would reduce with time
- A representative of a water company informed the group that it would be likely to reduce costs in the long run. The representative also added that it is required to get the demand management system in place

- A representative of a local council queried whether relying on replacement schemes would be enough to do the task within a desirable time frame
- A representative of an energy supplier commented that this type of technology doesn't move quite as fast. Therefore, pre-emptive installation does not seem viable, as the industry is not ready yet and the technology could outdate. Asset replacement projects are important, but critical mass must be reached before the investment is worthwhile
- A Parish Councillor stated that seemingly an educated guess would need to be made as to when the best time is to implement is, in order to be both efficient as well as cost effective

#### **Table 4**

- There was little discussion on this topic as the stakeholders felt that it was too technical for them to discuss
- It was felt to be a medium priority

#### **Table 5**

- A local authority stakeholder said that the important thing was making sure that WPD knew what to do with the data to turn into relevant information
- A representative of another utility noted the current limitations of meter technology, which for his / her business did not allow remote switch on or switch off
- Another local authority stakeholder stated that at present his/her authority has meters installed in every social housing area which provided updates every 15 seconds, but that the authority has yet to maximise the use of this data. (S)he felt that making sure WPD turned data into information should be the priority
- A representative of a major user suggested that what would be most important would be ensuring that we put the right equipment in at this stage to avoid having to carry out retrofits in the near future

### **7.7.4 Network / Customer Service Issue 4: Future proof asset replacement**

#### **Table 1**

- A business representative stated that the physical capacity of cable diameters needs change in of view sufficient assets underground. He noted that if there is a development plan in place for the area, this should be taken into account

- This stakeholder stated that planning permissions for solar panels should be made easier and WPD should develop a lobbying role to try to encourage local Government to facilitate this
- One stakeholder mentioned that some local authorities were unable to comprehend the specifics of service delivery and, on this basis, blocked innovation
- A WPD representative stated that *'joined up'* Government policy is needed
- The stakeholders decided that this was medium on the scale of priorities and that this issue and the previous issue could be grouped together

#### **Table 2**

- There was no further discussion of this point at this stage

#### **Table 3**

- A representative of an energy supplier suggested that installing equipment that is enabling, without fully providing a solution, would be a good alternative option, due to the rate at which technology in this sphere is progressing. Enabling installation should be high, and immediate due to upcoming changes
- A representative of a local council agreed that introducing enabling technology is seemingly the best option. The representative commented that so much is dependent on rate of technological development
- A representative of a water company felt that it should be a priority but placed low in terms of urgency
- However, the stakeholders as a group reached a majority decision that this should be a high and ongoing priority

#### **Table 4**

- There was little discussion surrounding future proofing asset replacement. However, stakeholders stated that it should be a high priority but not necessarily across the whole network

#### **Table 5**

- All stakeholders agreed that this was a very high priority which incorporated elements from all Issues thus far discussed and that it was more important to improve rather than maintain business as usual
- A local authority stakeholder felt that WPD needed to look at how to upgrade particularly problematic areas in terms of supply

## 7.8 Theme 3: Improving customer service

### 7.8.1 Network / Customer Service Issue 5: Reducing power cuts

#### Table 1

- A representative of a business organisation made the point that reducing power cuts should be WPDs' key priority at all times. S(he) also stated that the way in which the data is recorded should also change
- One stakeholder stated that it was important to minimise power outages to large users, especially hospitals
- The broad consensus across the Table was that this issue is a high priority

#### Table 2

- Although stakeholders agreed that this is a high priority, there was also agreement that investment now should mean that this should not need to remain as a high priority in the future if current investment solves this problem

#### Table 3

- A representative of a water company thought this should be a high priority for WPD
- A Parish Councillor mentioned that as this had not been a personal problem, it does not need to be a priority
- A local authority representative felt that localised power cuts are more of an issue. However, (s)he mentioned that good response mechanisms from WPD can make this much less of an issue
- A representative of an energy supplier felt this would be a very high priority for certain customers, but likely to seriously affect few. This representative felt that as long as customers are given good information about power cuts, then it does not need to be a high priority

#### Table 4

- A parish council representative queried whether there was a difference between urban and rural customers with regard to the number of power cuts
- One stakeholder stated that it should be a high priority and that it is worth the investment
- It was added that the company should always strive for better
- A representative of a local authority stated that it depends on individual impact and that it would be more of an issue for businesses and public buildings

- A parish council representative stated the (s)he does not feel that WPD should spend any more money on reducing power cuts. (S)he added that it is a personal issue with a low priority level

#### **Table 5**

- One local authority representative praised WPD for the improvements to his / her service. (S)he was previously a '*worst served customer*' and used to experience multiple 4+ hour failures during winters, but since WPD set out to improve service, (s)he has seen a huge improvement over the past 2 years. (S)he did note that there had been issues with contacting call centres during outages due to high demand
- One local authority stakeholder reminded WPD that criminal activities increase during blackouts, and that reducing power cuts would therefore have a public safety benefit
- Another local authority representative stated that the neither the frequency nor the duration of the cuts was hugely important as both caused inconvenience whenever they happened as appliances still needed to be reset
- Another stakeholder stated that (s)he was '*reasonably happy*' with WPD's performance
- A representative of a major user felt that WPD needed to differentiate between business and domestic customers during power cut situations. (S)he said that his / her company had 300+ individual pieces of equipment in the WPD area which needed to be manually reset each time there is a power cut

### **7.8.2 Network / Customer Service Issue 6: Improving customer service for new connections**

#### **Table 1**

- One business stakeholder felt that the system has been overcomplicated by Ofgem and the process for new connections should be easier than it is
- Stakeholders generally agreed that there needs to be some sort of management of interfaces between organisations, adding that his was a '*high priority*'

#### **Table 2**

- A representative of a mineral mining company suggested that this was an issue with greatly differing impact, depending on whether it concerned business or domestic customers. (S)he added that his / her personal experience of new connections has been very good

- A representative of WPD explained the complexities of the new connections process, and stakeholders were interested to understand more about the many elements involved
- A representative of an industrial gas / equipment supplier made the point that this was generally a low priority until *'you were trying to establish a new connection for yourself'*: it then escalated to be a high priority. (S)he then suggested that WPD should demonstrate to customers that their side of this process is progressing smoothly (wherever that is the case). Other stakeholders agreed that this should be a high priority and that customers would be understanding if they recognised that delays were the result of legal / technical Issues
- There was consensus at Table 2 that WPD should focus on improving communications with customers
- A representative of a national generator added an additional perspective: Issues around new connections for businesses tend to arise from a lack of capacity on the network. Improving network capacity is therefore important

### **Table 3**

- A representative of a local council noted that people connecting to the network expect it to happen on their own timescale
- The WPD representative informed the Table that this is the area of most complaints in the energy industry
- A representative of a water company informed the Table that energy service cannot be provided until the first payment has cleared. The representative commented that insisting on waiting for payment is an unreasonable action in certain cases
- The WPD representative informed the group that once someone is connected, WPD is not allowed to disconnect for non-payment. This is the primary reason for WPD waiting for payment to clear prior to connection
- A representative of an energy supplier thought that although this does not need to be a high priority, work does need to be done
- A development industry representative noted that once the recession is over, demand for new connections will increase, and WPD should built in processes for expansion. At the very least, this should be a medium priority

### **Table 4**

- There was little discussion around the topic of new connections

- Stakeholders felt that improving customer service for new connections should be a low priority
- One stakeholder stated that WPD provides a good service already

#### **Table 5**

- A representative of a major user said that (s)he was happy with current standards and that the current process did not cause any particular problems
- One local authority representative flagged up an issue with feed-in tariffs at present. (S)he asked whether there were toolkits or resources to assist customers and if site surveying could be packaged up to help customers work out whether they can feed in or not. (S)he recommended that WPD encouraged its customers to think about their connections as being ‘two way’

### **7.8.3 Network / Customer Service Issue 7: Reducing short duration interruptions – ‘dips’**

#### **Table 1**

- One business stakeholder stated that to reduce the number of dips would require massive investment
- Another business representative said that dips can interfere with the smooth functioning of electrics which can cause major problems for big businesses

#### **Table 2**

- All stakeholders on Table 2 agreed that this had differing levels of impact, depending on whether you were a domestic or business customer. It was agreed that this was a high priority, requiring investment, from a business perspective, but that domestic customers did not require such investment and would rank this as low priority

#### **Table 3**

- A Parish Councillor commented that in his / her parish every night, the lights go off for a few minutes at a time. This stakeholder felt that as these dips are so short, they are not a massive inconvenience and they do not need to be a priority
- A representative of an energy supplier supported this, commenting that aside from needing to reset equipment, it is not a massive problem
- The Table agreed that although dips should not be happening, they are a low priority

#### Table 4

- A local authority representative discussed personal experience of 'dips'. (S)he went on to state that frequency of 'dips' has reduced. The stakeholder made the point that opinion on this issue was driven by personal experience
- A local authority representative questioned whether manufacturers could build a level of resilience into their products
- It was added by the group that pressure should be put on manufacturers to build in a level of resilience into their products
- A parish council representative made the point that improving technology is decreasing the impact that 'dips' have on people
- Stakeholders felt that customers could take steps to improve the interruption and the impact that it has on them. It was added that customers could be educated to deal with interruption
- One parish council representative stated that (s)he experiences more dips now than before, so therefore feels that the number of dips should be reduced
- However, the rest of the stakeholders at Table 4 felt that the current standard is acceptable
- It was added that this is something that WPD should be working towards but not necessarily at a high level priority

#### Table 5

- Most stakeholders were unconcerned by this issue, with one local authority representative stating that they were no worse than '*irritating*' but that improvements in equipment would hopefully lead to them becoming ever less frequent
- A major user commented that WPD should only try and reduce such 'dips' if possible and economically viable

### 7.8.4 Network / Customer Service Issue 8: Improved reliability for worst-served customers

#### Table 1

- There was very little discussion on this point and it was broadly felt that this was a medium priority for WPD

## Table 2

- A representative of a local authority suggested that maintaining supply and ensuring continuity of supply were both important Issues. Problems of this nature needed to be resolved
- Again a difference was noted between business / industrial and domestic customers, with a representative of an energy supplier outlining the significant impact an interruption to supply can have, even if it only lasts a few seconds
- In response to a question from a representative of a local authority, a WPD representative confirmed that some customers in areas prone to bad weather may be more likely to experience more faults
- A representative of a local environmental group agreed that this was of low priority for domestic customers

## Table 3

- A Parish Councillor noted that this priority would depend entirely on whether you are a worst served customer
- A representative of an energy supplier asked whether this is a specific issue for more remote geographical areas. If this is the case, then new lines and underground protection might be a valid solution
- The WPD representative informed the group that this is an option, but the cost would be spread to every customer, not only those living in remote areas
- A representative of a local council felt that not having a fully reliable energy service is an accepted part of living remotely. Aside from consideration for the vulnerable, customers should have their own contingency plans
- A representative of an energy supplier asked the group whether the cost is worth the benefit. Customers should take their own precautions in areas where service disruption is common
- A Parish Councillor thought it would be most appropriate to continue current procedures
- A development industry representative then countered that the gap between the best served and the worst served customer is likely to become bigger given the rate of technological advancement. Though it might not be a top priority, it does need some investment in the long run
- A representative of a local council felt that cost is a determining factor
- The group agreed that it is an area that needs work, but it is an ongoing priority rather than an immediate one

#### Table 4

- A local authority representative stated that these customers are paying the same percentage of the bill as every other customers so therefore should get the same service
- A parish council representative questioned whether worst-served customers could be identified and targeted separately
- Another parish council representative made the point that it would be more economical for WPD to *'put UPS in'*
- It was also added that WPD should come up with a *'local solution for a local problem'*
- One stakeholder stated that it is becoming more of a priority as more people are working from home
- Another stakeholder felt that it should be a priority as WPD serves the South West and South Wales, which includes a significant amount of rural areas

#### Table 5

- Many stakeholders felt that whilst this was a high priority, it was not currently a big problem, at least domestically. They recommended that WPD pursue more *'customer orientated solutions'* such as backup generators, batteries or microgeneration
- Another stakeholder made the point that most generation equipment cuts out when the mains drops off
- A stakeholder who had previously been a worst served customer stated that this was a high priority for WPD
- A local authority stakeholder recommended that WPD examine how to provide solutions on a case by case basis
- A local authority representative said that the South West was often one of the most unreliable areas due to topography, which made it a particular issue for WPD

### 7.8.5 Network / Customer Service Issue 9: Being prepared for major emergencies

#### Table 1

- A business representative stated that it was important to be prepared for major emergencies given the unpredictable nature of climate change
- A WPD representative said that there was no significant cost of having a plan in place. It is the escalation of a crisis that becomes costly as dealing with this requires additional staff and resources as situation develops

- The majority of the Table agreed that this was a very high priority

### **Table 2**

- A representative of a local authority confirmed how important continuity of supply is for domestic customers
- A representative of a local environmental group suggested that this linked back to previous discussions about environmental Issues. His / her perspective was that if this was important for WPD strategically, then being prepared for such events should be prioritised operationally

### **Table 3**

- A representative of an energy supplier highlighted that the potential impact of a sub-station going down would be high. It would be worth the investment to try to mitigate this risk given the large number is could affect
- A representative of a local council thought that weather emergencies are the most risky
- A water company representative commented that, in the past, WPD has not had enough four-wheel drives – this is something WPD should invest in

### **Table 4**

- One stakeholder questioned whether being prepared for major emergencies included the provision of spare assets
- A representative of a town council stated that WPD seems to operating at an acceptable level already
- A representative of a local authority stated that, like any business, if WPD prepare for what is a known risk then that is acceptable and there is no need to expand

### **Table 5**

- Stakeholders were generally of the view that this was an area which was easy to service and required a series of planning exercises rather than direct investment, necessarily

## 7.8.6 Network / Customer Service Issue 10: New methods of communication – email, text and other – website, online

### Table 1

- A local authority representative stated that good communication was essential in order to manage expectations
- An engineering professional noted that many people would prefer to send an email
- Most stakeholders agreed that this was a medium priority

### Table 2

- Stakeholders agreed that this should be a low priority, unless the cost impact was minimal. Money should be directed first to other more important activities
- There was consensus that customers should be able to access information at a low cost, and recognition that email is often cheaper than phone calls, but stakeholders didn't feel there was any particular advantage to new methods of communication

### Table 3

- A local council representative said that she felt it imperative that WPD use a variety of communication methods
- A representative of an energy supplier felt that increasing the quality of information would be ideal. Additionally, he commented that improvements in methods of communication are desirable but not essential
- A Parish Councillor observed that as this would not be an especially costly activity, it is worth investing in
- The WPD representative asked the group for thoughts on the fact that dealing with large numbers of customers at one time is a key challenge
- A water company representative registered that it would be ideal for domestic and business customers to be differentiated
- A representative of an energy supplier said that management of more detailed databases would increase the workload briefly, but this could help WPD manage their communications better
- A development industry representative expressed disbelief that WPD had not already engaged in new and alternative communication methods
- The group reached a consensus that although using new methods of communication would be desirable, it is more important to ensure communication channels are effective and efficient

#### Table 4

- One stakeholder stated that it should be about reliable methods of communication. (S)he felt that it is important for customers to be able *'to get an answer'*
- Stakeholders added that the method of communication should also depend on the generation (age group) that needs to be contacted
- However, stakeholders stated that they do not want *'daily updates'*
- A local authority representative stated that the methods of communication used should match the customers' needs
- Stakeholders felt that it was a priority but one that should be part of *'business as usual'*

#### Table 5

- One stakeholder felt that WPD could make use of smartphone locatative technology to inform customers of power cuts in their immediate vicinity wherever they are

## 7.9 Further Network / Customer Service Issues

#### Table 1

- Stakeholders on Table 1 had no further network / customer service Issues

#### Table 2

- An additional point that stakeholders at Table 2 felt needed consideration was the continuity of supply, specifically during periods of bad weather. They also agreed that there was a need to improve network capacity
- A representative of a local authority summarised a key point of the discussion, saying that many of these issues are interlinked but the most important elements here are maintaining supply and continuity of supply
- Many Issues raised led to consensus across the group that domestic and business customers have different needs; for example when looking at the impact of power outages. Stakeholders agreed that these should be measured and prioritised accordingly, with one suggestion being that outages should be measured and assessed in terms of energy lost plus the significance to that business. This would give industry / business a measurable impact to discuss and potentially flag to the regulatory body. It was also recognised that businesses had more specific information needs than domestic customers, and that this should be catered for

### Table 3

- A representative of an energy supplier asked whether there was a way for smaller customers to gain an indication of their bill, as this could potentially improve customer service. Knowing that information can be useful, and it is available for larger customers

### Table 4

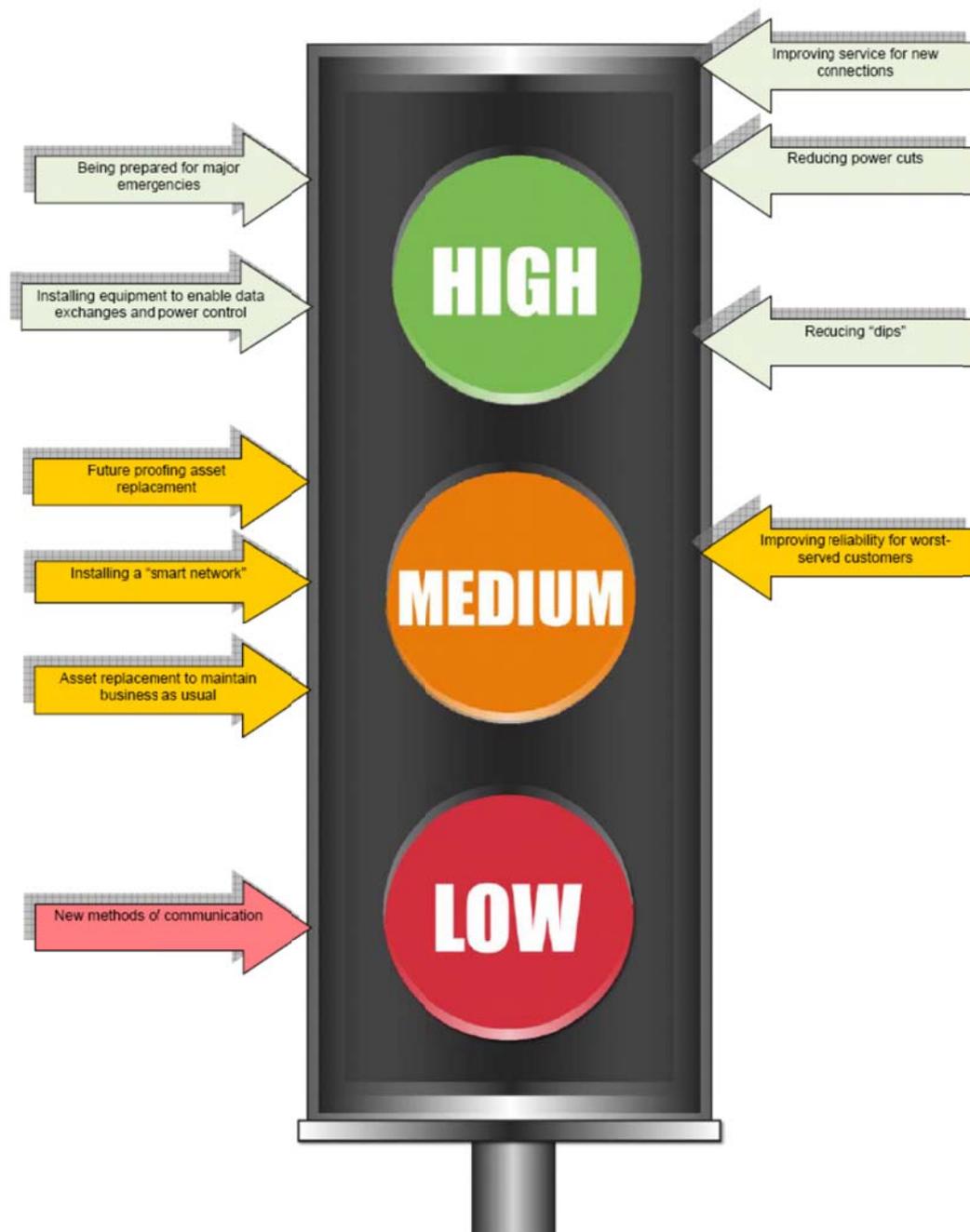
- Stakeholders on Table 4 had no further network / customer service Issues

### Table 5

- A local authority stakeholder asked whether WPD either on its own or in conjunction with the IPC had any plans for undergrounding in the area around Nailsea in support of the Hinckley proposals
- One local authority stakeholder felt that better route planning and strategy, in conjunction with decommissioning, was a key issue that WPD hadn't raised and which needed to be looked at
- Another local authority representative commented that such strategic planning would enable WPD to secure its assets and reduce its environmental impact
- A representative of a local authority made the point that there was currently '*a lot of waste within the system*'. (S)he felt that as a business, WPD needed to look at being more efficient with resources and minimising wastage. A major user representative asked whether WPD had to adhere to any key performance indicators (KPIs) on waste and efficiency
- One local authority representative queried whether domestic customers would be willing to foot the bill for improvements and whether business customers would be willing to pay for domestic improvements
- Another local authority stakeholder was keen to see WPD move more cables underground as the faults were easier to repair, (s)he suggested that WPD move all cables of 132,000v level underground if possible
- One stakeholder commented that as there was already a mix of overhead and underground in the network there must be data available on potential efficiency of each
- There was a short discussion on smart meters, and a few stakeholders were interested in who received the data from the meter and how it would be processed and utilised. WPD representative fielded the questions

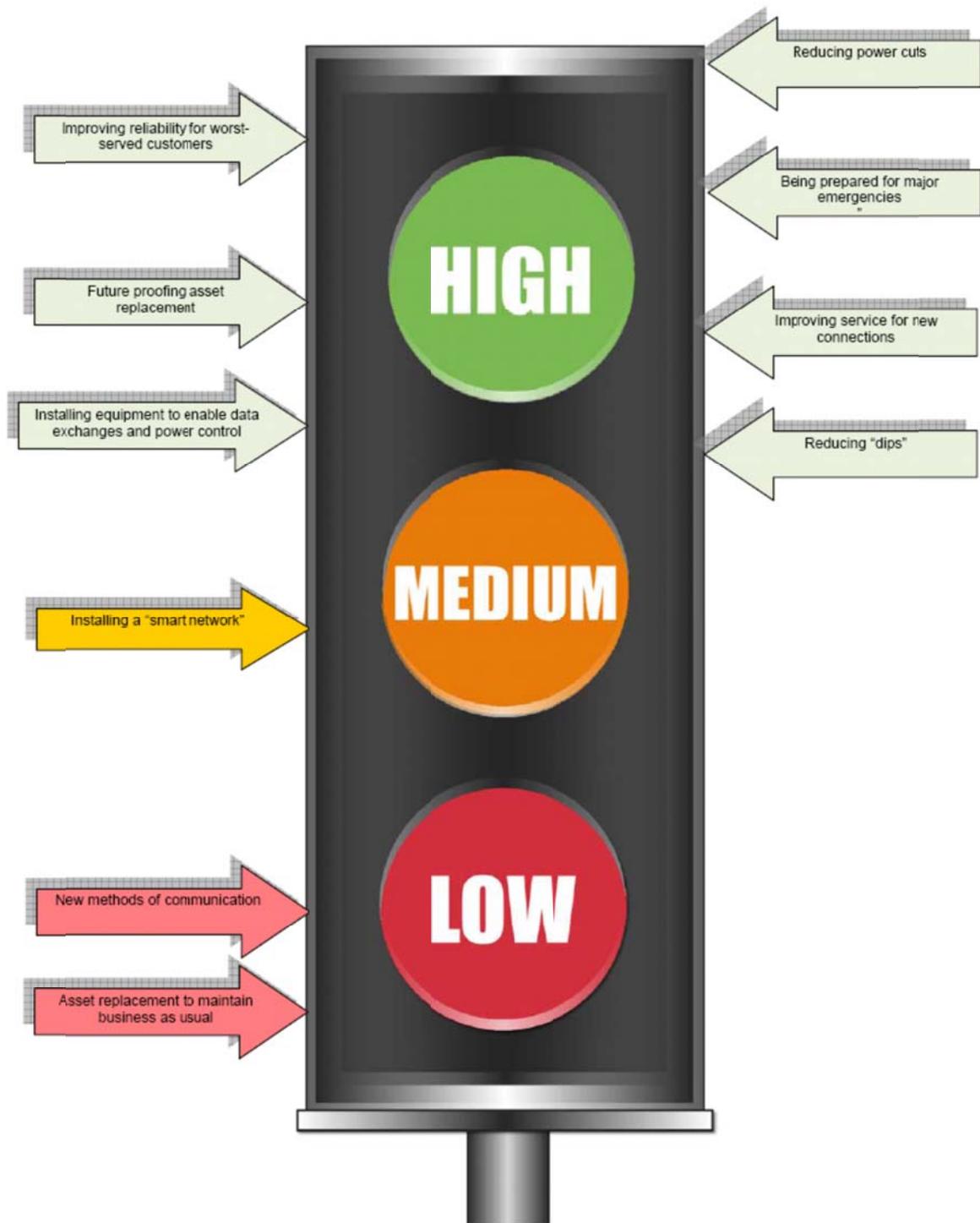
## 7.10 Conclusions and top three priorities

Table 1



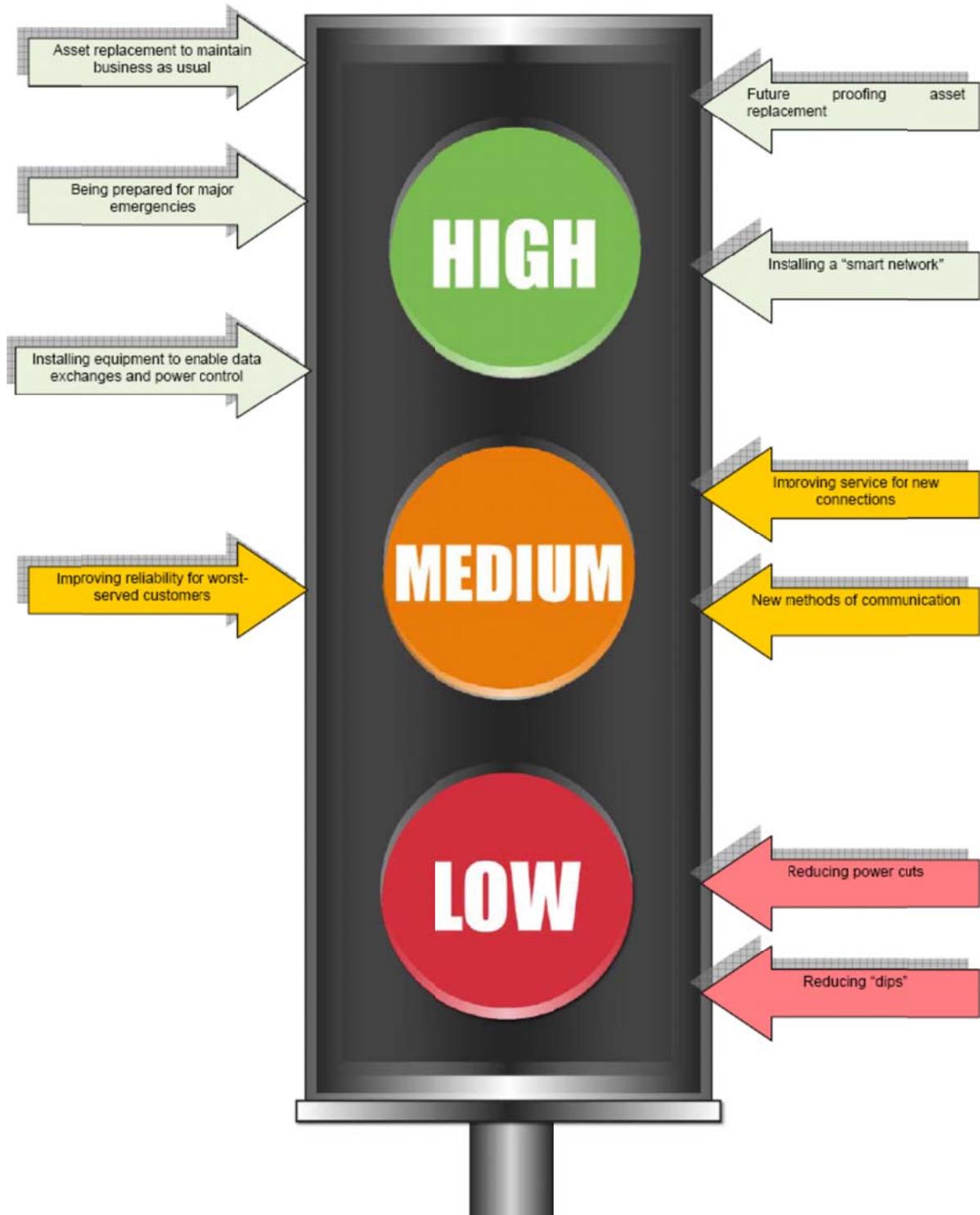
- Stakeholders generally prioritised Issues relating to Network Improvements above those relating to Improving Customer Service
- It was also felt that WPD should play more of a lobbying role for viable renewable related initiatives
- The top three priorities were: Improving Customer Service for Network Connections; Reducing Power Cuts and Being Prepared for Major Emergencies

Table 2



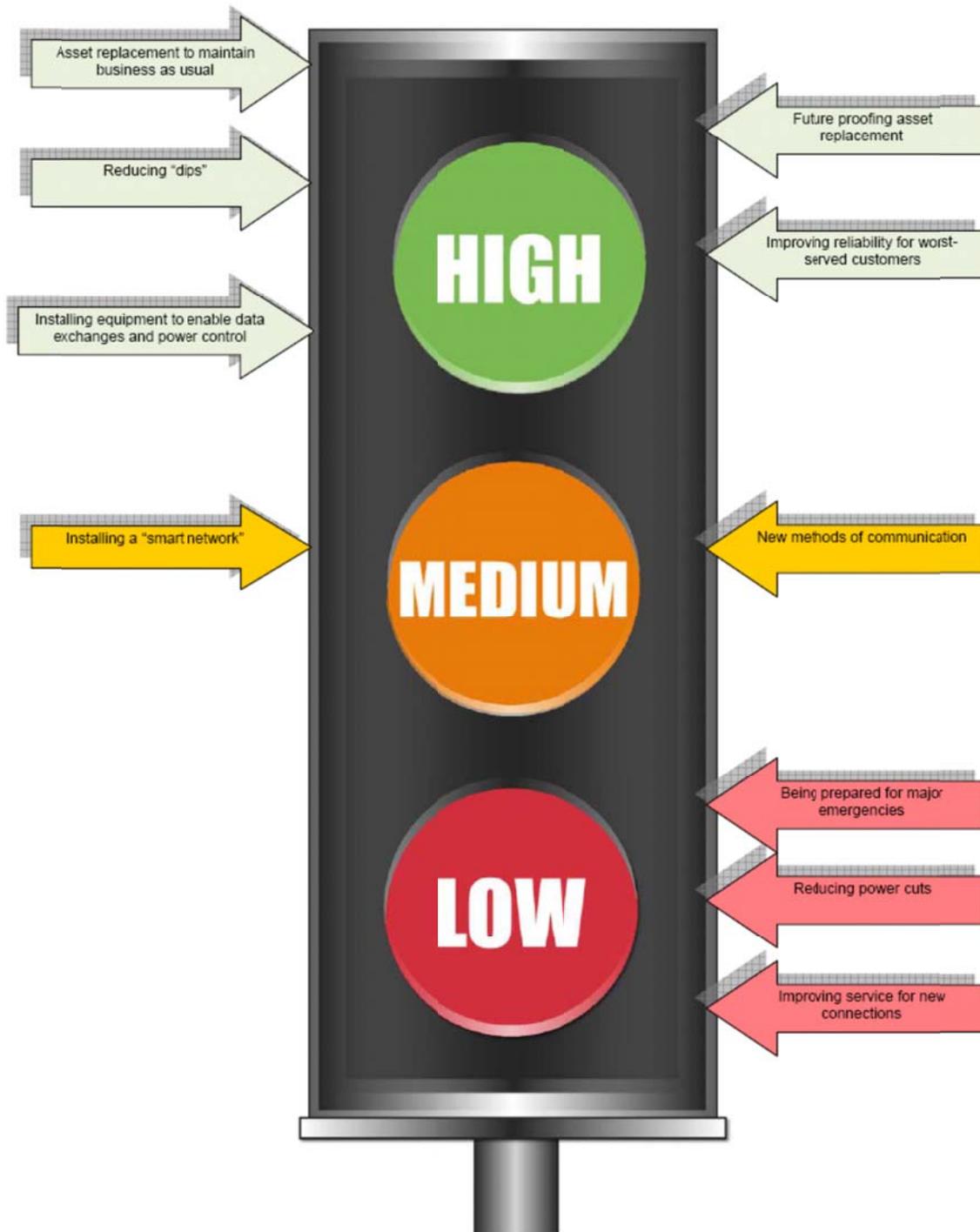
- Table 2 listed Reducing Power Cuts as the top priority for WPD to address
- Second priority was Improving Reliability for Worst-Served Customers, followed by Being Prepared for Major Emergencies
- Stakeholders asked to select a fourth issue to add to their top priority list, recognising Future Proofing Asset Replacement as being of great significance

Table 3



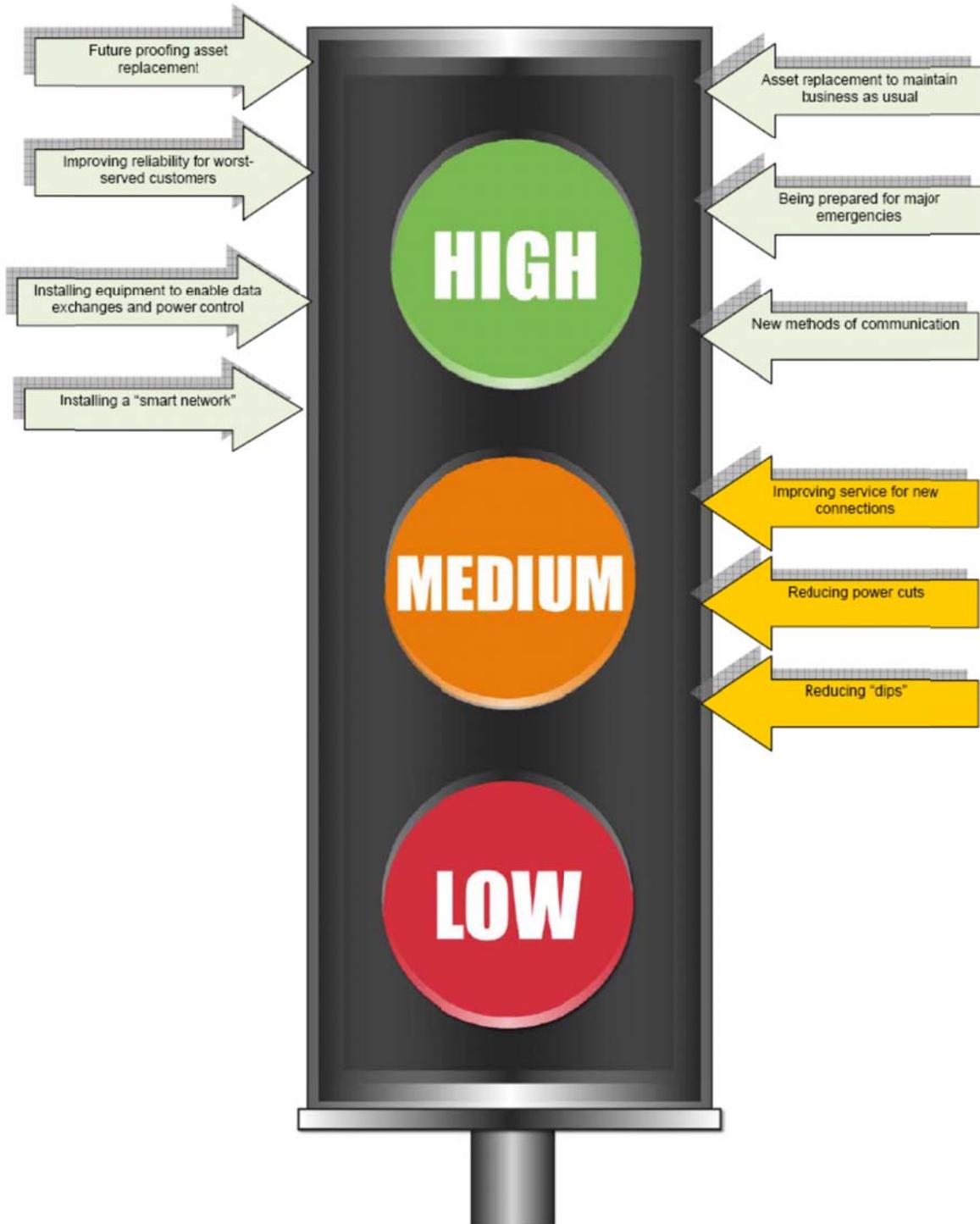
- The top three priorities for Table 3 were: Asset Replacement to Maintain Business as Usually, Future Proofing Asset Replacement and Being Prepared for Major Emergencies

Table 4



- Stakeholders on Table 4 found it difficult to decide on a top three priority list. Instead stakeholders chose four options: Asset Replacement to Maintain Business as Usual; Future Proofing Asset Replacement, Reducing Short Duration Interruptions; and Improving Reliability for Worst-Served Customers
- A parish council representative added that if WPD Future Proofs its Assets, this will benefit for the worst-served customers

Table 5



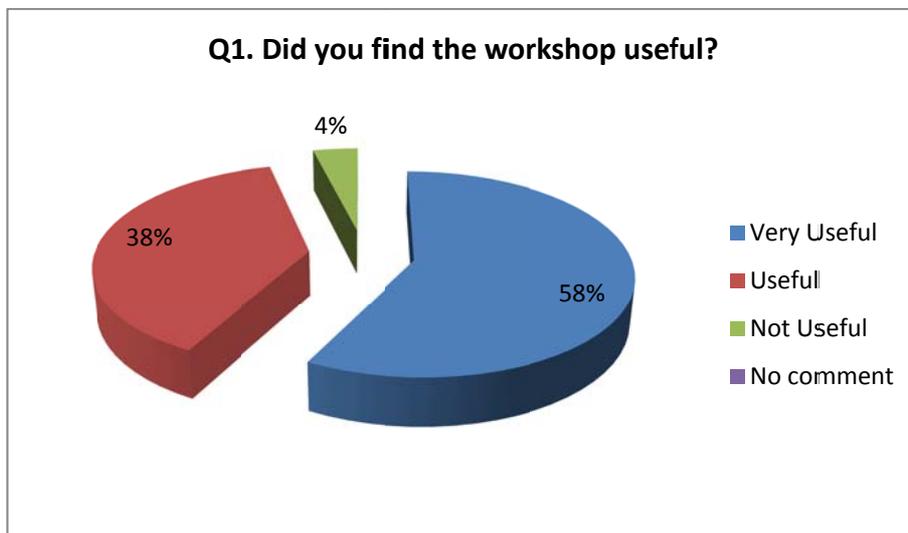
- The top priorities for the Table were Future Proofing; Asset Replacement to Maintain Business as Usual; and Improving Reliability for Worst-Served Customers
- Stakeholders were also keen on the idea of using smartphone and geolocation technology to provide targeted and relevant customer updates as part of its customer service initiatives

## 7.11 Bristol stakeholder workshop: feedback

Stakeholders were asked to fill out a comment card following the workshop. The comments we received are shown below.

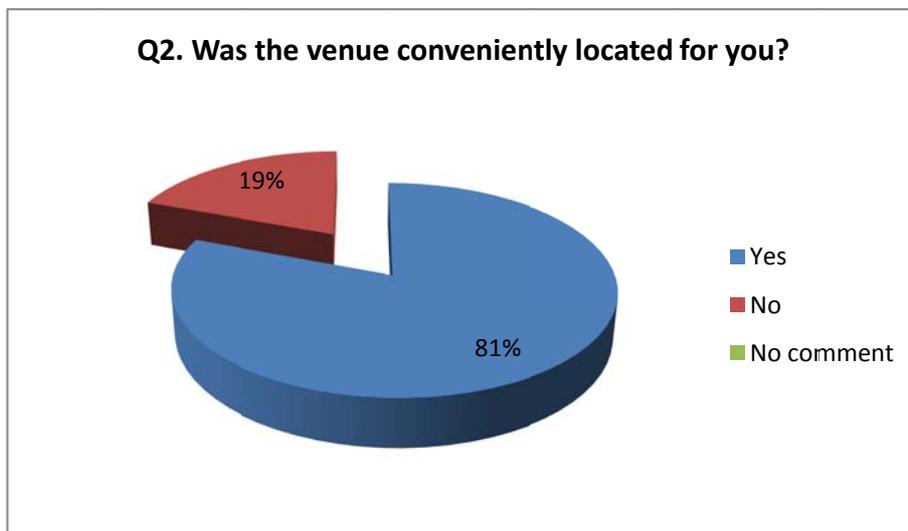
### 7.11.1 Question 1: Did you find the workshop useful?

15 of the 26 stakeholders who filled out the feedback comment cards stated that the workshop was 'very useful'. Another 10 respondents stated that the workshop was 'useful'. Whilst only 1 respondent stated that the workshop was 'not useful'



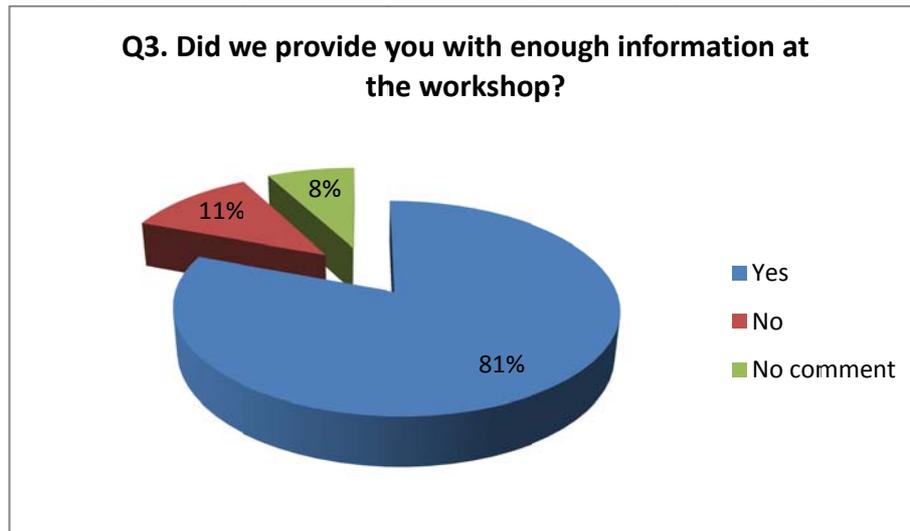
### 7.11.2 Question 2: Was the venue conveniently located for you?

21 respondents, 81%, stated that the venue was conveniently located for them. 5 respondents stated that the venue was not conveniently located.



### 7.11.3 Question 3: Did we provide you with enough information at the workshop?

Again, 81% of respondents stated that WPD provided them with enough information at the workshop. 3 respondents stated otherwise and felt that they did not have enough information at the workshop.



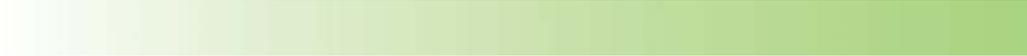
### 7.11.4 Question 4: Do you want to be kept informed of WPDs' plans in the future?

25 out of 26 respondents stated that they would like to be kept informed of WPDs' plans in the future.

### 7.11.5 Do you have any other comments on the workshop or the venue?

15 of the 26 respondents provided further comments. A selection of verbatim comments received through the comment cards are listed below.

- *'Very well constructed workshop, possibly one of the best I have attended. Venue was fine but noise level was too high'*
- *'Was hoping for more detail on DUOS charges over the next five years, to help with capital projects in relation to reducing exposure to peak charges by shifting demand. Please can you send me WPDs' DCPEE form that is sent to industry participants as this may help in the longer term'*

- 
- *'Very well ran and good venue for me. Maybe more background information as raised at workshop prior to attending would have been helpful. Thanks'*
  - *'Not easy to get to'*
  - *'Acoustics could have been slightly better. Consider microphone? But not a major problem'*
  - *'Welcome WPDs' engagement and consultation with its customers'*
  - *'To discuss the issues we really need more information on current performance measures, and the cost of implementing change'*
  - *'Would be particularly interested in decentralisation of generation issues to facilitate more renewable energy schemes'*
  - *'VVG'*
  - *'Any follow up may benefit from WPD having questions provided by stakeholders in advance'*



**Report on the outcomes of the Stakeholder Workshop**  
**Cardiff: May 19<sup>th</sup> 2011**

**Prepared by**

**GreenIssuesCommuniqué**

## 8. CONTENTS

8.	Contents	136
9.	Cardiff Stakeholder Workshop	138
9.1	Date and location	138
9.2	Attendees	138
9.3	Cardiff stakeholder workshop: overall Conclusions	140
9.4	Theme 1: Environmental Issues	142
9.4.1	Short and long-term priorities	142
9.4.2	Environmental Issue 1: Minimising leaks from fluid filled cables and gas insulated switchgear	144
9.4.3	Environmental Issue 2. Continuing undergrounding schemes in National Parks / AONB	146
9.4.4	Environmental Issue 3: Reducing our business carbon footprint	148
9.4.5	Environmental Issue 4: Protecting habitats and species	150
9.4.6	Environmental Issue 5: Flood mitigation	151
9.4.7	Environmental Issue 6: Trialling technology and innovation to facilitate low carbon networks	152
9.4.8	Environmental Issue 7: Climate change risk assessment	154
9.4.9	Environmental Issue 8: Other climate change mitigation (eg. taller poles now or later; larger conductors now or later)	156
9.4.10	Environmental Issue 9: Facilitating electric vehicle charging infrastructure. Should we install more LV network capacity now or later	158
9.4.11	Environmental Issue 10: Facilitating the connection of local renewable energy (local community and household generation). Should we install more LV network capacity now or later?	161
9.4.12	Environmental Issue 11: Facilitating the Renewable Heat Incentive (more heat pumps). Should we install more LV network capacity now or later	163
9.4.13	Environmental Issue 12: Innovation projects, eg. smart meters, storage, demand side management	164
9.5	Further Environmental Issues	165
9.6	Conclusions and top three priorities	167
9.7	Theme 2: Improving the network / Improving customer service	172
9.7.1	Short and long-term priorities	172
9.7.2	Network / Customer Service Issue 1: Asset replacement to maintain business as usual	173
9.7.3	Network / Customer Service Issue 2: Installing equipment to enable local scheduling of customer generation and storage – ‘the smart network’	174
9.7.4	Network / Customer Service Issue 3: Installing equipment and systems to enable data exchanges and power control, e.g. remote control switchgear	175
9.7.5	Network / Customer Service Issue 4: Future proof asset replacement	177
9.8	Theme 3: Improving customer service	178
9.8.1	Network / Customer Service Issue 5: Reducing power cuts	178
9.8.2	Network / Customer Service Issue 6: Improving customer service for new connections	181
9.8.3	Network / Customer Service Issue 7: Reducing short duration interruptions – ‘dips’	182



9.8.4	Network / Customer Service Issue 8: Improved reliability for worst-served customers	184
9.8.5	Network / Customer Service Issue 9: Being prepared for major emergencies	186
9.8.6	Network / Customer Service Issue 10: New methods of communication – email, text and other – website, online	187
9.9	Further Network / Customer Service Issues	189
9.10	Conclusions and top three priorities	191
9.11	Cardiff stakeholder workshop: feedback	196
9.11.1	Question 1: Did you find the workshop useful?	196
9.11.2	Question 2: Was the venue conveniently located for you?	196
9.11.3	Question 3: Did we provide you with enough information at the workshop?	196
9.11.4	Do you want to be kept informed of WPDs' plans in the future?	196
9.11.5	Do you have any other comments on the workshop or the venue?	197

## 9. CARDIFF STAKEHOLDER WORKSHOP

### 9.1 Date and location

The third WPD stakeholder workshop took place on May 19<sup>th</sup> at the Wales Millennium Centre, Bute Place, Cardiff CF10 5AL

### 9.2 Attendees

Matthew Bowen – Swansea City and County Council

Dr Norma Barry (CNP), Head of Welsh Affairs – Campaign for National Parks

Andrew Moore, Head of Integrated Risk & Business Resilience – Welsh Blood Service & Velindre NHS Trust

Cllr Lyn Ackerman, Environment and Housing – Caerphilly County Borough Council

Nick Speed, External Relations Manager for Wales – Ofgem

Robert Donovan, Project Manager Emergencies – Welsh Assembly Government

Adrian Hughes MBE, Chair – Reynoldston Community Council

John McGarrigle – University Hospital of Wales

Michael Haines – New Radnor NR Community Council

Liz Stahtam – National Grid

Alun Thomas, Public Affairs Officer – Citizens Advice Cymru

Dave Stiens – Neath and Port Talbot Borough Council

Andrew Nixon, Development Officer – Wye Valley AONB

Craig Salter, Electrical Engineering Manager – Associated British Posts South Wales (Port Authorities)

Dave Lucas, Principal Planning Officer – Caerphilly County Borough Council

Wasif Anwar – E.ON UK

Helen Roach, Development Officer – National Energy Action Wales

Jane Lannea, Planning Officer – City & County of Swansea Council

Nigel Bessant – Scottish and Southern Energy

Alison Hughes, Civil Contingencies & Resilience Unit – South Wales Police

Jake Dunn – ESBI Investment

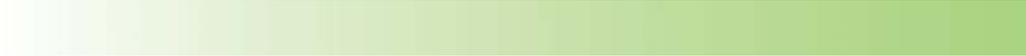
Simon Gave, Service Director of Planning – Rhondda Cynon Taf County Borough Council

Karen Griffiths, Insights & Innovations Manager (Wales) – Carbon Trust

John Bradshaw – Welsh Assembly Government

John Bungay, Consultant – ECO ESD Ltd

James Byrne, Senior Conservation Officer – RSPB Wales



Alan Jenkins, Lighting & Building Services Manager – Neath Port Talbot CBC  
Nigel Porter, Principal Engineer – NHS Wales Shared Services Partnership Facilities Services  
Simon Rowlands, Senior Maintenance Manager – Associated British Ports South Wales (Ports Authorities)  
Philip West – Western Power Distribution  
G Widdas, Chairman – Redwick Community Council

James Garland, Director – Green Issues Communiqué  
Martyn Williams, Senior Consultant – Green Issues Communiqué  
Ben Johnson, Account Manager – Green Issues Communiqué  
Amardeep Kainth, Consultant – Green Issues Communiqué  
Simon Powell, Account Manager – Green Issues Communiqué  
Alice James, Account Executive – Green Issues Communiqué  
Siobhan Lavelle, Senior Consultant – Green Issues Communiqué  
Andrew Berridge, Consultant – Green Issues Communiqué  
Philip Bloomfield, Account Executive – Green Issues Communiqué  
Debbie Fowler, Office Manager – Green Issues Communiqué

Alison Sleightholm, Regulation and Government Affairs Manager – WPD  
Nigel Turvey, Design and Development Manager – WPD  
Bob Parker, Regulatory Projects Manager – WPD  
Philip West, Policy Manager – WPD  
Natasha Richardson, Regulatory and Government Affairs Advisor – WPD  
Mark Shaw, Network Services Manager (Wales) – WPD  
Ian Lawrence, Distribution Manager (Cardiff) – WPD

### 9.3 Cardiff stakeholder workshop: overall Conclusions

- All stakeholders who completed a feedback form told us that they found the workshops to be *'useful'* or *'very useful'*
- Wales millennium Centre was conveniently located for the vast majority of stakeholders
- Encouragingly, all stakeholders who completed a feedback form stated that enough information had been provided
- Most Cardiff stakeholders agreed that Minimising Leaks from Fluid Filled Cable and Switchgear should be a medium priority. However, two tables ranked it among their top three Environmental priorities
- While a majority of stakeholders did not see Continuing Undergrounding Schemes in National Parks/AONBs as a priority in the short-term, it was seen as a long-term priority. Two Tables saw the schemes as a high priority and one Table included it in their top 3 Environmental priorities
- Stakeholders agreed that Reducing Our Business Carbon Footprint should be a medium to high priority for WPD
- Stakeholders had mixed feelings about WPD's plans for Protecting Habitats and Species in the short-term, although a majority agreed that it should be a long-term priority. On average, stakeholders ranked this Issue as medium priority in comparison to other Environmental Issues
- Flood Mitigation was an Issue that was universally ranked as a high priority by all Cardiff stakeholders. A majority included the Issue as one of their top three Environmental priorities
- Stakeholders were in favour of WPD Trialling Technology and Innovation to Facilitate Low Carbon Networks. Over half of the stakeholders felt that it should be a high Environmental priority for WPD. Many stakeholders also considered this to be an Issue linked to Innovation Projects
- Stakeholders were in agreement that Climate Change Risk Assessment needed to be a long-term priority for WPD, although only a slight majority considered it to also be a short-term priority. This was reflected when stakeholders prioritised Environmental Issues, as Climate Change Risk Assessment was broadly seen as a medium priority
- In the short-term, stakeholders did not consider Other Climate Change Mitigation a priority for WPD, although it was seen as more of a long-term priority. A majority of

stakeholders at Cardiff considered it to be a medium priority compared to other Environmental Issues

- Stakeholders were unanimous in stating that Facilitating Electric Vehicle Charging Infrastructure should not be a short-term priority for WPD. A majority of stakeholders did believe this Issue should be a longer term priority for WPD, but this did not stop it being broadly ranked as a low priority in comparison to other Environmental Issues
- Unanimously, stakeholders at Cardiff agreed that Facilitating the Connection of Local Renewable Energy Sources should be a high priority. Two out of five tables included the Issue in their top three Environmental priorities. Some stakeholders felt that this Issue should be linked to Facilitating the Renewable Heat Incentive
- Stakeholders were split as to whether Facilitating the Renewable Heat Incentive should be a short-term priority or not; but they did see it as a priority for WPD in the long-term. Two Tables ranked it as a high priority (and one included it in their top three Environmental priorities), but other Tables were not convinced and felt it should be a medium priority. Some stakeholders felt that this issue should be linked to Facilitating the Connection of Local Renewable Energy Sources
- There was strong support from all stakeholders for WPD to pursue Innovation Projects and all Tables ranked this as a high priority. A majority of stakeholders placed it within their top three Environmental priorities. Many stakeholders suggested that this Issue should be linked to other Issues including; Facilitating the Connection of Local Renewable Energy Sources, Other Climate Change Mitigation, Flood Mitigation and Trialling Technology and Innovation to Facilitate Low Carbon Networks
- In general, Cardiff stakeholders felt that Improving the Network was a higher priority than Customer Service
- A majority of stakeholders supported WPD continuing Asset Replacement to Maintain Business as Usual, with four out of five Tables ranking it amongst their top three Network and Customer Service Issues
- Similarly, Cardiff stakeholders supported WPD Installing a 'Smart Network', and four out of five Tables also ranked it as a top three Network and Customer Service priority
- Installing Equipment to Enable Data Exchanges and Power Control was also felt to be a high priority by the vast majority of stakeholders
- Future Proofing Asset Replacement was considered a high priority, and three out of five tables ranked it in their top three Network and Customer Service priorities
- Many stakeholders felt that the priorities listed under Improving the Network were interlinked to various degrees

- Reducing Power Cuts was the second highest ranked Customer Service Issue, yet a majority of stakeholders still felt it was a low priority for WPD
- Stakeholders were of the view that Improving Service for New Customers was a low priority for WPD
- Reducing ‘Dips’ was widely regarded as a low priority for WPD
- Broadly, stakeholders agreed that WPD should categorise Improving Reliability for Worst-Served Customers as a medium priority, although one Table ranked it as a high priority
- Being Prepared for Major Emergencies was the highest ranked Customer Service priority for Cardiff stakeholders. Four out of five Tables ranked it as a high priority and one table included it in their top three Network and Customer Service priorities
- A majority of stakeholders considered investigating New Methods of Communication to be a medium term priority for WPD

## 9.4 Theme 1: Environmental Issues

### 9.4.1 Short and long-term priorities

Stakeholders at the workshops were asked to state whether or not they saw a range of Issues relating to WPDs’ environmental initiatives as being priorities for the next five years or in the longer-term. At all times, every effort was made by the workshop facilitator to take the consensus view of the Table. The outcomes of this initial discussion for all of the Cardiff attendees are shown below:

THE ENVIRONMENT										
Environmental Issues	Is this a priority in the next 5 years?					Is this a longer term priority				
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 1	Table 2	Table 3	Table 4	Table 5
Minimising leaks from fluid filled cables and switchgear	Y	Y	N	Y	Y	Y	Y	Y	Y	N
Continuing undergrounding schemes in National Parks/AONBs	N	N	Y	N	N	Y	Y	Y	N	N

## THE ENVIRONMENT

Environmental Issues	Is this a priority in the next 5 years?					Is this a longer term priority				
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 1	Table 2	Table 3	Table 4	Table 5
Reducing our business carbon footprint	Y	Y	Y	Y	N	Y	—	Y	Y	N
Protecting habitats and species	N	—	Y	Y	—	N	Y	Y	Y	—
Flood mitigation	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Trialling technology and innovation to facilitate low carbon networks	—	Y	Y	Y	Y	—	Y	Y	Y	—
Climate change risk assessment	N	Y	Y	Y	N	Y	Y	Y	Y	N
Other climate change mitigation	Y	N	N	Y	N	N	Y	Y	Y	N
Facilitating electric vehicle charging infrastructure	N	N	N	N	N	N	Y	Y	Y	N
Facilitating the connection of local renewable energy sources	Y	Y	Y	Y	Y	Y	Y	Y	Y	N
Facilitating the renewable heat incentive	—	Y	N	Y	N	—	Y	Y	Y	Y
Innovation projects	Y	Y	Y	Y	Y	—	—	Y	Y	Y

## 9.4.2 Environmental Issue 1: Minimising leaks from fluid filled cables and gas insulated switchgear

### Table 1

- A representative of a community council asked if there is any academic research that WPD is able to draw on
- A representative of the Welsh Government asked how often research from academic institutions is used
- A health sector representative was of the opinion that his / her view on this issue it would very much depend on the financial impact on the customer

### Table 2

- A representative of a charity asked for more clarification on the type and scale of the problem
- The WPD representative reassured the group that leakage is not a huge issue and is closely controlled. There have been no major occurrences and WPD is investing in developing a leak detection process
- A representative of an energy supplier asked the WPD representative how serious leaks are
- The WPD representative went through some scenarios with the Table
- A charity representative asked if a third party could damage the cables
- The WPD representative responded that they could, but this is unlikely due to the high voltage and the fact the cables are deep underground
- A representative of a port authority asked whether damaged cables could impact the integrity of the network
- The charity representative remarked that even though the issue is not huge, the risk should still be mitigated if possible, adding that this should be a high priority

### Table 3

- A representative of a major user asked for some context concerning the scale of the leakage. (S)he felt that this issue was a bit of a '*no-brainer*', therefore, WPD should address it
- A representative of a local authority asked if WPD had statutory duties to carry out a clean up

- A representative of the energy industry asked whether WPD had a preference for *'reactive or proactive measures'* and asked how much WPD currently spends fixing leaks
- A representative of an environmental organisation felt that as (s)he'd never heard of this type of leakage before today it merely required steady work to *'chip away'* at it in the future. (S)he asked whether there was any likelihood of WPD being able to replace SF6 in the future and find a better substitute
- A representative of a major user stated that it might be best if WPD focussed its energy on fixing the most problematic pieces of equipment

#### **Table 4**

- A representative of an environmental organisation stated that reducing leaks should be part of WPDs' on-going asset maintenance
- It was added that shouldn't WPD add transformers in to this category
- An energy company representative wanted to know the quantities when discussing leakage
- One stakeholder stated that reducing leakage should not just be about the carbon impact but also the localised environmental damage
- A representative of local emergency services stated that other WPD priorities that are being discussed are linked with this issue and the other priorities can have an impact on leakage
- The stakeholders were in agreement that minimising leaks should be a priority for now and in the long-term but were undecided over the priority level that it should be given. It was decided that it should be a medium priority for WPD

#### **Table 5**

- WPD representatives were asked to provide information on leakage data by a health sector stakeholder;
- An environmental company representative stated that minimising leaks was *'classic crisis management'*
- The representative of a conservation organisation stated that there was an immediate need for investment in equipment as a priority for societal and environmental benefits
- This prompted questions by several stakeholders regarding WPDs' capital programme and asset life – WPD representatives answered their queries

- A local authority stakeholder made the point that gas insulated switches should be given a much higher priority - (s)he felt they were *'20,000 times more a priority'* than those filled with fluid
- There was consensus around the Table that the minimisation of leaks was a high priority in the short-term, particularly with regard to gas insulated switchgear; however, it was questioned what financial impact this investment would have on WPD

### 9.4.3 Environmental Issue 2. Continuing undergrounding schemes in National Parks / AONB

#### Table 1

- A conservation representative made the point that Welsh national parks and open green space are of high economic value to Wales due to tourism. (S)he went on to say that pylons detract from the landscape value of such areas
- An additional point made by this stakeholder was that the inherent advantage of underground power cables is that they are less prone to weather damage
- A representative of the Welsh Government added that undergrounding schemes should be a lower priority than protecting wildlife from leaking oil, which endangers wildlife
- One stakeholder representing a community council argued that this should be a high priority and also made the point that in rural areas there is a similar issue with how wind farms spoil areas of beauty as well as overhead cables

#### Table 2

- A representative of a port authority commented that (s)he had grown up with pylons on the skyline, and stated that if they had been taken away it would not make much difference. This representative felt that it should be a priority for the longer term but was a low short-term
- A local authority representative asked what the *'tangible difference'* is other than aesthetic
- The WPD representative responded that the aesthetic difference is the primary difference
- A representative of a charity commented that the choice to underground is mainly dependent on cost; and whether this cost will be placed on customers. If it will put an added cost in the final bill to the customer, then it should be a low priority. Even a small rise in bills can place an added strain on poorer customers

- A local Government representative asked how easy undergrounding is in practice, and what the payback would be per customer for maintenance
- The WPD representative responded that for WPD maintenance is not the issue
- A representative of an energy supplier queried whether WPD have a requirement to underground anyway
- The WPD representative said 'yes', but the degree to which WPD pursues this depends on WPD stakeholders want
- A representative of a port authority assumed that all new lines are automatically placed underground
- A representative of an energy supplier said that no firm decision could be taken before a cost benefit analysis
- A local authority representative stated that AONB are important, but there are more pressing Issues
- A representative of an energy supplier said that £3m in terms of WPD revenue isn't a huge sum, so WPD should just invest in it
- An officer of a conservation agency said that he would like to see this as a high priority as the organisation (s)he represented have been working on undergrounding with central networks for 7years. The focus should only be on specific, iconic sites which equates to 1% of the network, working on 200-300 meters of lines at a time. (S)he observed that it has been really appreciated and effective. It is not a requirement and the scheme is still in its infancy
- A local authority representative registered concern that as there is not an immediate 'threat' from this, it should not be prioritised over other Issues

### Table 3

- A representative of a major user asked if the process was very expensive
- A representative of an environmental organisation stated that (s)he was already working with WPD to identify such sites, including Strumble Head in Pembrokeshire, and that (s)he felt that it '*makes such a difference and has such a positive impact*' including for tourism. As there were a large number of current projects and schemes identified, (s)he felt this was a high priority
- A representative of the energy industry felt that given the number of wind turbines everywhere '*it shouldn't be an issue, especially given the cost involved*'. (s)he was opposed to this being made into a general scheme
- An environmental stakeholder state that in his opinion, only a small number of schemes required undergrounding

- A representative of the energy industry explained that his / her work dealt primarily with new connections and that the cost of overhead cable was significantly lower than undergrounded cable. (S)he felt that continuing the current process through liaison with environmental and conservation organisations would be the best way forward, and was supportive of new equipment being undergrounded in areas of natural beauty, but in general favoured putting all new network being put on the ground rather than underground
- A major user remarked that (s)he felt this was a good scheme which provided good PR for WPD and was a *'quick win, low cost venture'*

#### **Table 4**

- Stakeholders wanted clarification as to whether continuing with undergrounding schemes meant replacement of existing overheads
- An energy company representative stated that underground cabling is solely about aesthetics and is a very specific issue
- It was added that the cost of undergrounding is an important factor in deciding its level of importance
- Another stakeholder felt that the only benefit of underground cabling was visual improvement
- Stakeholders were in consensus that undergrounding is a low priority

#### **Table 5**

- A stakeholder from the health sector asked WPD representatives if new links to networks would be pylons or if it was only new infrastructure that would go underground
- A Welsh Government representative enquired about undergrounding existing assets and asked if there had been significant lobbying on the subject
- The point was made by a stakeholder from an environmental organisation that WPD was *'not as large as National Grid'*
- The stakeholders generally felt this issue was a low priority with regard to existing assets for WPD and that undergrounding was only relevant for new infrastructure

### **9.4.4 Environmental Issue 3: Reducing our business carbon footprint**

#### **Table 1**

- Stakeholders on Table 1 were of the view that it is imperative for WPD to be reduce its carbon footprint, and as a result this Issue should be a high priority

- A stakeholder representing a conservation organisation expressed that in his / her opinion this should be part of a CSR plan as a matter of course
- A Welsh Government stakeholder was of the opinion that separating Issues 1,2,3 and 4 was strange and that they are all linked Issues that should be treated together under one heading
- The stakeholder group generally concurred with the above points made by the aforementioned members

### **Table 2**

- A representative of a port authority felt that this Issue should not be on the list, because every business has an obligation to do this anyway
- A local authority representative made the point that the cost will inevitably fall back on the customer
- A representative of an energy supplier informed the group that there are incentives in place for distribution networks
- A local authority representative asked whether WPD are looking at doing over and above the statutory requirement
- The WPD representative gave an overview of the activities that WPD is currently undertaking, and mentioned some other activities they could look at
- A local authority representative asked whether WPD are looking to upgrade current buildings to meet BREEAM standards
- A representative of a port authority responded that this is a requirement so WPD has to do this anyway
- A representative of an energy supplier commented again that cost would play a big part in the decision-making process

### **Table 3**

- Stakeholders generally felt that this was an important priority for WPD
- A local authority representative felt that this Issue '*was in the own interest of WPD*' and shouldn't be pursued at the expense of other areas - but was definitely very important

### **Table 4**

- An environmental organisation representative stated that WPD reducing its business carbon footprint is '*vitaly important*'

- A local authority representative made the point that all businesses should look at their carbon impact
- Stakeholders stated that WPD should be going further than what is currently legislated
- The stakeholders were in consensus that reducing the business carbon footprint makes business sense

#### **Table 5**

- A stakeholder representing the health sector asked how often WPD replaced its vehicles
- There was limited discussion on this topic and while it was broadly felt not to be a high priority for WPD a Welsh Government stakeholder considered '*all expenditure*' on reducing WPDs' carbon footprint '*worthwhile*', although '*the company must look closely at how costly this is for customers*'

### **9.4.5 Environmental Issue 4: Protecting habitats and species**

#### **Table 1**

- There was very little discussion on this point and it was broadly felt that this was not a high priority for WPD

#### **Table 2**

- A representative of a charity said that WPD should be doing this now, and that it is a high priority
- A local authority representative asked whether this is about going beyond WPDs' existing directives
- A representative of a port authority felt that this should be a high priority as it is a requirement anyway
- A local authority representative commented that WPD has a duty to do this, but questioned whether WPD should be '*going further than that*'
- An officer from a conservation organisation thought that this should be a high priority for WPD
- The group agreed that this should be a priority, but it should be a longer term, medium priority

### Table 3

- Stakeholders were generally happy with WPD's performance on this Issue at present
- An environmental representative noted that WPD had statutory duties in respect of this area and that in a protected area such measures were an absolute necessity

### Table 4

- One stakeholder questioned whether WPD is doing more than is required of them
- A local authority planning officer stated that there are alternative options that are of low cost and can have high impact. The example of using GIS systems was given to WPD
- Again, stakeholders felt that it was good business practice to protect habitats and species
- Stakeholders were in consensus that protecting habitats and species is a medium priority

### Table 5

- Several stakeholders felt it was difficult to judge without knowing WPDs' existing practices
- A representative of an environmental organisation wanted to know whether WPD would have to undertake an Environmental Impact Assessment if it was putting in new infrastructure
- The Table generally considered the topic to be a medium priority. One stakeholder suggested that while *'all'* businesses did this as a matter of course, given the growing awareness by customers it would show WPD was *'alert to the issue'*

## 9.4.6 Environmental Issue 5: Flood mitigation

### Table 1

- A representative of a conservation organisation was of the opinion that this is a *'partnership issue'*, and a representative of WPD agreed
- (S)he also recalled a time that WPD had to replace switch gear on a substation and raise a building on stilts when faced with flooding problems
- A representative of the Welsh Government stressed the high priority nature of flood mitigation and supported this point by explaining how the Gloucester floods had affected the Welsh grid

## Table 2

- The group agreed unanimously that flood mitigation is an immediate and high priority

## Table 3

- Generally stakeholders agreed that this was a high priority in both the long and the short term

## Table 4

- One stakeholder wanted clarification as to whether flood mitigation meant talking about adaptation strategies
- WPD was also asked whether this was also about altering existing equipment
- The WPD representative provided answers to these questions
- Stakeholders agreed that flood mitigation is a high priority
- Stakeholders felt it was particularly important after witnessing real life examples in the region
- One stakeholder stated that the most important thing for WPD to do was to able *'to keep the lights on'*

## Table 5

- There was consensus on Table 5 that this issue was a very high priority for WPD in both the short and long-term
- A stakeholder from the health sector pointed out that WPD must protect its assets at all costs
- Stakeholders universally agreed that while disruption to any customer should be avoided, hospitals were an especially high-risk category

### 9.4.7 Environmental Issue 6: Trialling technology and innovation to facilitate low carbon networks

## Table 1

- A representative of a conservation organisation was of the opinion that this should be medium priority, and that regarding partnerships with universities there are other companies that can also be collaborated with

## Table 2

- A representative of a port authority felt that this should be a high priority

- A representative of an energy supplier thought that this should be deemed high priority and is important in both the short and long term
- A local authority representative agreed that this is a high priority for now. It is important to trial and pilot programmes now to ensure implementation is smooth longer-term

### Table 3

- A representative of a major user asked whether development funding came from Ofgem or from customers
- An environmental organisation representative felt that this Issue should be a medium priority based on the fact that it was *'customers' money'*
- An energy industry representative stated that the network *'has not changed for 80 years'* [so] *'given the potential network pressures in the future'* this should be a *'top priority'*
- A major user commented that this type of work had to be carried out, but queried whether it should be WPDs' priority
- An energy industry representative said that (s)he felt that third parties should be involved

### Table 4

- Stakeholders stated that they wanted this question linked with Issue 12 (innovation projects)
- A representative of an environmental organisation made the point that it's the responsibility of companies to look at new technology and innovation. The stakeholder gave the example of the USA and how it is a legal requirement to look into new technology and innovation
- Within this point, a local authority representative raised the point that WPD needs to incentivise residents when planning new projects and developments
- The stakeholder went on to explain that people who are directly impacted by wind turbines do not see a direct (positive) impact on their energy bills. (S)he felt that there would be less opposition if residents saw a reduction on their energy bills. If people experience a broader benefit then they will be more welcoming of new innovation projects such as wind farms
- Another stakeholder added that people will not be welcoming new technology and innovation when the added benefit goes straight into the national network

- Stakeholders felt that WPD has to do more to *'capture people's enthusiasm'* for innovation, especially people who are taking on the costs but not seeing proportional benefit
- It was added that WPD would see less opposition if they took this point on board
- Stakeholders felt that trialling technology and innovation to facilitate low carbon networks is a high priority but community engagement should be an important aspect of it as well

### Table 5

- Stakeholders on Table 5 agreed that this Issues 6 and Issue 12 (Innovation projects, eg. smart meters, storage, demand side management) should be discussed as a combined topic
- A Welsh Government representative stated that *'the general point of innovation'* was *'if a company didn't do it, it would go out of businesses. (S)he* felt that it was important to replace assets with new technologies and that innovation benefited customers and WPD alike as it gave the company the opportunity to work with local universities, specialist suppliers, etc – *'just make sure they come to South Wales!'*
- An environmental company stakeholder agreed and added that with technology such as solar power WPD must look at future work with developers, adding that (s)he *'think[s] it's imperative'*
- WPD representatives were asked by one stakeholder to confirm that this was done on a national basis
- Table 5 stakeholders were in complete agreement that trialling technology and innovation to facilitate low carbon networks and other projects was a priority in the short-term. In addition, there was consensus that storage should be a priority for the longer term
- The stakeholders agreed that, overall, innovation was a high priority for WPD

### 9.4.8 Environmental Issue 7: Climate change risk assessment

#### Table 1

- A representative of a conservation organisation said that there is a broader issue of who should be supplying the resources here: the Government or the private sector as this is *'currently unclear'*
- A representative of WPD explained that the company currently works with the Met Office on such issues, but this is at a cost. This outlay includes investments in guiding research and development work

- In response to a question from a representative of a conservation organisation, the WPD representative explained that universities aren't currently involved in research with his company

#### **Table 2**

- A representative of an energy supplier stated that as this work is a statutory requirement, it must be given priority
- The group all agreed this should be a high and ongoing priority

#### **Table 3**

- A representative of a local authority asked whether WPD was legally required to carry out such an assessment anyway
- A major user representative asked whether a risk assessment had already been completed or was still ongoing. (S)he stated that the ongoing and evolving nature of such a process could potentially make it a very high cost activity
- A representative from a major energy user stated that such a process would be particularly worthwhile when considering flood mitigation
- A local authority representative expressed scepticism and wanted assurance that WPD was confident in the data it possessed regarding climate change

#### **Table 4**

- Stakeholders stated that this Issue and Issue 8 (other climate change mitigation) should be discussed together
- One stakeholder stated that discussing climate change risk assessment comes back to the point about business sense
- A local authority representative stated that it's a *'pure business decision'* if its going to reduce cost in the future
- Stakeholders were split as to whether WPD should increase expenditure now or later
- Other stakeholders felt that change and increased spending should begin now
- A 'straw poll' was taken and it was decided that this Issue is a priority now and in the long-term

## Table 5

- The stakeholders linked this issue with Issue 8 (other climate change mitigation)

### 9.4.9 Environmental Issue 8: Other climate change mitigation (eg. taller poles now or later; larger conductors now or later)

## Table 1

- A stakeholder from a conservation organisation considered this to be a difficult issue. His / her main concern was with the visual impact of taller poles so (s)he advised to *'exercise caution in considering any plans in this area'*. In his / her opinion it's important to protect areas of outstanding natural beauty and areas of landscape value
- A representative of the Welsh Government made the point that such work is best carried out alongside other scheduled maintenance work such as replacing and repairing cables. This argument was supported by a representative of a community council
- In response to the stakeholder of the Welsh Government's previous point, a representative of WPD said that such work is done when refurbishing networks. (S)he also added that if such work were completed when other maintenance work is carried out then the cost would be higher in ten years time. The cost would be minimal if such work were carried out sooner

## Table 2

- A local authority representative observed that Issues 8, 9, 10, and 11 are about the choice *'to either be proactive or reactive'*
- An officer from a conservation agency registered a concern that technology is developing very fast in this field, and so the *'infrastructure required may change'*
- A local government representative commented that taller poles would affect the environment, as they will increase WPDs' carbon footprint. He said it is difficult to consider any of these questions in isolation
- An officer from a conservation agency said that this should be a low priority, mainly because new technology is not *'stable'*, so investing in it now could be risky. However, different infrastructure will be needed if there is a quick shift to localised power
- A representative of a port authority felt that this should be considered a business decision

- A local government representative remarked that *'superconductors would have significant impact'*, as if smaller conductors are being used, different infrastructure will be required
- The group felt that this area is too uncertain to be placed as a high priority but they did feel that it should be monitored by WPD closely

### **Table 3**

- A majority of stakeholders felt that this was a worthwhile process
- A representative of a major user stated that WPD should carry out mitigation whilst carrying out routing maintenance in order to reduce cost

### **Table 4**

- Stakeholders wished to discuss the two subjects (Issues 7 and 8) together

### **Table 5**

- Stakeholders discussed this topic in conjunction with the previous question and generally agreed that mitigating climate change was a priority
- After significant debate, agreement was reached by most of the Table that climate change was a medium to high priority for the short and long-term
- Two stakeholders, however, disagreed. The representative of the health sector considered that there was insufficient data to judge; while an environmental stakeholder thought it should be a high priority and asked the Table if it thought global warming wasn't a major issue
- A stakeholder from the health sector asked if higher poles would make a stronger line; (s)he made the point that there seemed to be an increase in windy weather conditions and asked if this would have an affect on cables
- One local authority representative considered *'raising the specification'* worth doing to future proof the network
- The issue of cost implications for WPD was a key concern for most of the Table. In particular the questions of whether it was financially preferable for WPD to make improvements to its existing infrastructure now or in the future was discussed. The Table stressed the need to balance this against asset life
- In response, a health sector stakeholder suggested that there was an *'obvious'* benefit in larger conductors

### 9.4.10 Environmental Issue 9: Facilitating electric vehicle charging infrastructure. Should we install more LV network capacity now or later

#### Table 1

- The general consensus reached was that it seemed unfair for the public to pay for a technology when there isn't a high level of demand at present and should not subsidise the few people that are early adopters of such technology. It was agreed that the car manufacturers should be taking the initiative
- A stakeholder from an environmental group made the point that for people and communities who do want such technology, car clubs could be set up by groups of people interested
- Furthermore (s)he also made the point that there could be a tie in to '*transport poverty*' and pre-existing innovative rural transport schemes

#### Table 2

- A local authority representative asked whether WPD has weighed up the likelihood of pure electric vehicles being taken up as opposed to hybrid vehicles
- An officer from a conservation agency asked what capacity the network has currently. It should be able to absorb the growth while expansion increases with demand
- A local government representative felt that if consumption is increasing, then WPD should prepare the network for this
- A representative of an energy supplier commented that customers are already paying '*something towards LV*'
- A representative of a port authority mentioned that councils are also doing work towards this and the cost is being met from the council budget
- A representative of the charity sector made the point that electric vehicles are not cheap, and poorer members of society cannot afford them. This will primarily benefit businesses '*like BT*', who have electric vans, therefore it should be a low priority at the moment
- A local government representative noted that if oil prices were to double tomorrow, there would be a greater uptake of electric vehicles but this depends on outside factors
- The group agreed that this should be a low priority for both the short and long-term

### Table 3

- A representative of a major user stated that there were still issues concerning the duration of battery life on such vehicles. (S)he asked whether there were any countries where the electric vehicles were '*successful*' at present
- An energy industry representative stated that there was a lot of money going into the development of better electric vehicles in terms of manufacturing but that installing LV charging capacity now would be '*a massive waste of money*'. (S)he recommended that WPD investigated trialling so that when the time came, charging points can be quickly manufactured and installed
- A representative of a major user echoed this point and said that the stress should be on keeping abreast of developments
- A business representative felt that it would be a waste of time installing the infrastructure if battery life was still the obstacle
- An environmental representative felt that, in the short-term, WPD should not invest significantly, but should in the longer-term. All stakeholders agreed with this point

### Table 4

- Stakeholders stated that WPD should definitely be planning for such scenarios
- An representative of an environmental organisation made the point that it is a '*chicken or egg situation*'
- The representative went on to discuss bid made by Cardiff and Bristol Councils to win charging points. It was stated that if the cities are successful then investment in electric vehicles will have to increase
- A representative of a local authority stated that if WPD invests in this technology, there is the possibility that it will be superseded by other new technologies
- One stakeholder stated that this is a national issue, not necessarily one that WPD should have to lead. Electric vehicles and LV network capacity should be planned on a national level.
- It was stated that WPD needs to be involved in long-term discussions and stakeholders felt that it is an Issue that needs national guidance

### Table 5

- A Government agency representative expressed the view that the question of installing LV network capacity would be dependent on revenue and that given WPDs' '*balance sheet*' it would be difficult

- There was much debate around the Table over whether electric vehicles should be a short or long term priority. Initially stakeholder opinion was divided: a healthcare representative believed that fuel cell cars were *'over'*; in contrast an environmental company representative expressed the view that electric vehicles were a short-term measure to *'appease'* people and that if they were the future all car manufacturers would be on the *'bandwagon'* now whereas *'they're not really putting effort into it'*
- A Welsh Government representative commented that electric vehicles currently had a typical range of 80 miles and needed frequent recharging
- This led to the suggestion by a representative of a Government agency for the adoption of smart charging technology
- A representative from the Welsh Government noted that a UK report on electric vehicles infrastructure was due in June and (s)he believed it likely the issue would be driven by the private sector. In addition, (s)he asked if there were incentives for the commercial sector to provide *'posts'* for electric vehicles
- The representative of a Government association highlighted the issue that it was difficult to predict the future, that heat plants, microgeneration, etc were unproven and WPD could be *'well wide of the mark'*
- A community group stakeholder felt that home generation was more prevalent than electric vehicles and this prompted a question by a healthcare stakeholder whether the network would need to be reinforced if a local area widely adopted photovoltaic cells
- The Table went on to discuss the topics of local renewable energy and heat pumps, (Issues 10 and 11)
- On the issue of local community and household generation a Welsh Government representative asked if this would only apply to new infrastructure
- This led to a discussion about cost and capacity. A representative from healthcare provider asked why (s)he should have to pay for it; a local authority stakeholder commented that WPD would need to ensure they had capacity, and the representative for the Welsh Government warned that that WPD could be a barrier if local renewable energy did *'take off'*
- On the subject of heat pumps a Welsh Government stakeholder felt that technology was more appropriate for new builds; (s)he also commented that building regulations were changing and that the Welsh Government regulations were *'more aggressive'*
- One healthcare representative noted that, as consumers became more cost conscious over the next five years, purchasing a heat pump would have greater

importance. Conversely, the stakeholder representing a Government agency felt there were many obstacles to using heat pumps, such as their noise

- A representative of an environmental company asked if there was a Government led initiative for housing associations to install heat pumps
- This prompted other stakeholders to state that WPD should take its lead from the Government as it was believed this was more of a generation issue
- A Welsh Government representative commented that electricity distribution was more of a problem following the disaster in Japan and although biomass was being encouraged (s)he felt companies were '*working on not enough data*' and '*can't do everything*'
- In conclusion, there was overall agreement that facilitating renewable energy was medium priority for the next five years and that WPD should take a reactive rather than proactive role. It was felt that renewable heat incentives were a medium priority for the future rather than now; and agreement was eventually reached that electric vehicles were a low priority for WPD, both currently and longer term

#### **9.4.11 Environmental Issue 10: Facilitating the connection of local renewable energy (local community and household generation). Should we install more LV network capacity now or later?**

**Table 1**

- A stakeholder from a conservation organisation stated that it's a very difficult Issue as a business to divorce oneself from the framework. (S)he also noted that there is a wider issue of Government targets as well as adding that in Wales there are many onshore and offshore wind farm projects
- A representative of a community council added that its an effort to get communities on the side of wind farms
- (S)he also added that often developers forgoe the rather crucial issue of getting electricity into the grid, to which a representative of WPD responded that the issue is about '*to what extent the network gets ready to connect*'
- It was eventually concluded by a representative of a community council that it might be worth considering WPD lobbying to make this simple

## Table 2

- An officer from a conservation agency thought that this should be the responsibility of the homeowner
- A representative of an energy supplier felt that with the advent of feed in tariffs, it would be become more of an issue
- A local authority representative added that the BREEAM requirements would also have an effect, due to their impact on building regulations
- It was felt that it must be a high priority to ensure that the network is prepared for changes in usage

## Table 3

- A business representative felt that this Issue was a high priority
- A major user representative stated that (s)he felt '*critical mass has been reached*' and that WPD didn't want to be seen as the obstacle
- A representative of the energy industry said that there were a large number of solar farms coming online due to the feed-in tariffs scheme. However (s)he expressed caution on this issue as FITs were currently being reviewed
- A local authority representative stated that in his / her opinion WPD had to make sure it kept up with demand. His / her council was putting up turbines and PVs on buildings, with a budget of £3million. They wanted to install £1million worth of panels on a school near Abergavenny, but WPD told them that the work will not be done in time before the deadline for the FITs, even if the council funded it themselves. As a result, his/her council has lost out on the opportunity to get a '*big win*' and will now have to investigate a multitude of sites rather than '*one big win*'

## Table 4

- One stakeholder questioned whether the environmental benefit of facilitating the connection of local renewable energy was worth the cost
- It was added that people interested in the uptake of local renewable energy should not be discouraged from doing so. WPD should assist as much as possible
- Stakeholders were in agreement that WPD should do as much as possible to respond to people interested in new connections
- Stakeholders felt that facilitating the connection of local renewable energy is one of the most important things for WPD to do

## Table 5

- There was consensus that this Issue was a medium rather than high priority for the next five years and that WPD should take action as necessary rather than lead this issue

### 9.4.12 Environmental Issue 11: Facilitating the Renewable Heat Incentive (more heat pumps). Should we install more LV network capacity now or later

## Table 1

- A representative of WPD explained that there is a Government incentive to resource ground source heat pumps. (S)he also added that they produce three times the heat as the energy put in but they still require a lot of energy, which puts a lot of demand on the network, which therefore would require more investment in cabling
- A local authority stakeholder noted that there have been a lot of applications and interest in this area and that this is also increasing
- Concern was raised regarding the net impact on the environment and where they would be built by a stakeholder from an environmental organisation

## Table 2

- The group felt that the response to this Issue would be the same as to the previous Issue

## Table 3

- A major user expressed concern that there was still a risk of wasting money at the moment if investment is wrongly made
- An energy industry representative made the point that a large proportion of new properties will have such technology, but older properties will take a long time (and a large amount of money) to retrofit, unlike microgeneration
- An environmental representative asked whether ground source heat pumps are any different for the network when compared to solar farms and wind turbines in terms of added strain

## Table 4

- One stakeholder stated that facilitating the Renewable Heat Incentive is linked to facilitating the connection of local renewable energy (Issue 10)

- An energy company representative stated that installation of this technology is an individual decision that WPD cannot dictate. It was added that if people decide to 'go down that route' then WPD has to facilitate that interest
- An environmental organisation representative stated that WPD needs to be able to act quickly in helping people get what they want
- There was a consensus among stakeholders that facilitating the Renewable Heat Incentive is a high priority

#### **Table 5**

- This Issue was linked to Issues 9 and 10 and stakeholders agreed that it should be a medium priority for WPD in the long-term rather than now

### **9.4.13 Environmental Issue 12: Innovation projects, eg. smart meters, storage, demand side management**

#### **Table 1**

- A brief discussion including a conservation representative and a stakeholder from the Welsh Government concluded that innovation should be a high priority for every company and that there is a clear business benefit to innovation

#### **Table 2**

- A local government representative mentioned that smart meters would give WPD information on usage and operation and, in turn, generators will be able to react to that
- A representative of an energy supplier expressed concern that smart meters will not be fully implemented by the target date of 2019
- An officer from a conservation agency asked about the implications of demand side management and storage
- A representative of a port authority mentioned a crematorium in Manchester that uses its energy to heat the building
- A representative of an energy supplier felt that due to the fact the innovation work is mandatory, WPD needs to focus on ensuring it implement this at the right time

### Table 3

- A representative of a major user suggested that smart metering could be a worthwhile investment, as it would help people learn where they use electricity and cut down their usage
- An environmental representative expressed surprise that this didn't fall under the remit of the suppliers rather than the distribution networks

### Table 4

- See Issue 6. Stakeholders stated that the two Issues be linked
- One stakeholder wanted to discuss smart metering. (S)he felt that the meter should be installed by the distributor rather than the supplier. The stakeholder felt that this would make it a lot more efficient to install
- A representative of an environmental organisation stated that the relationship between distributor and supplier should be improved when discussing innovation projects

### Table 5

- This issue was discussed as part of Issue 6

## 9.5 Further Environmental Issues

### Table 1

- A stakeholder from a conservation organisation raised the matter of the Welsh Government developing a natural environment framework. Regarding this, (s)he considered it important that WPD protects habitats and species

### Table 2

- A representative of an energy supplier felt that Issues 6, 10, 11, and 12 should be grouped together, as they all broadly concerned innovation

### Table 3

- Stakeholders felt strongly that activity to modernise WPD's activity to create a more environmentally friendly network in the future would be the highest priority
- As such, stakeholders agreed that facilitating the connection of local renewable energy should be the top priority



#### Table 4

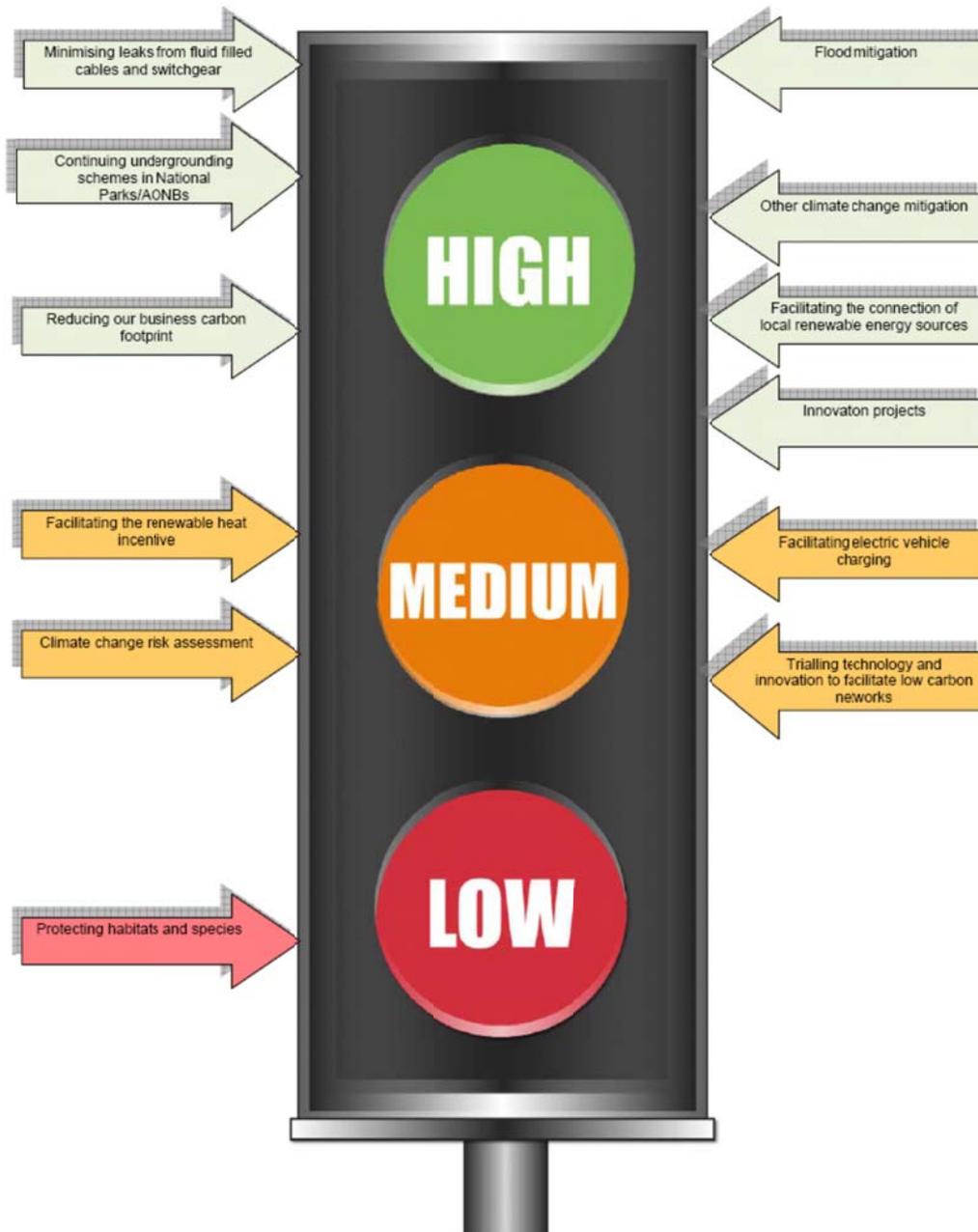
- There were no further environmental Issues that stakeholders wished to raise

#### Table 5

- The Table generally agreed that smart meters should be discussed as a separate issue and stakeholders from the larger organisations were the most active participants
- A Welsh Government representative stated that WPD was on the boundary of distribution and generation
- A stakeholder from a healthcare organisation asked if WPD was prepared to invest in smart meters; s(he) then went on to ask what other storage WPD had in mind and this prompted a wider discussion about innovation, linking back to Issue 12 concerning the different projects WPD could undertake
- One stakeholder suggested that storage should be looked at as a new issue, and that batteries and fuel cells were a longer- term priority; another asked if WPD wanted to be in the *'rent a battery'* business
- One stakeholder commented that WPD faced the problem of the cost of carrying out multiple projects. Another stakeholder stated that these were different solutions to a common problem
- A stakeholder representing a local authority made the point that if WPD invested in storage and monitoring innovation now it would spend less on infrastructure in the future which (s)he believed made sense

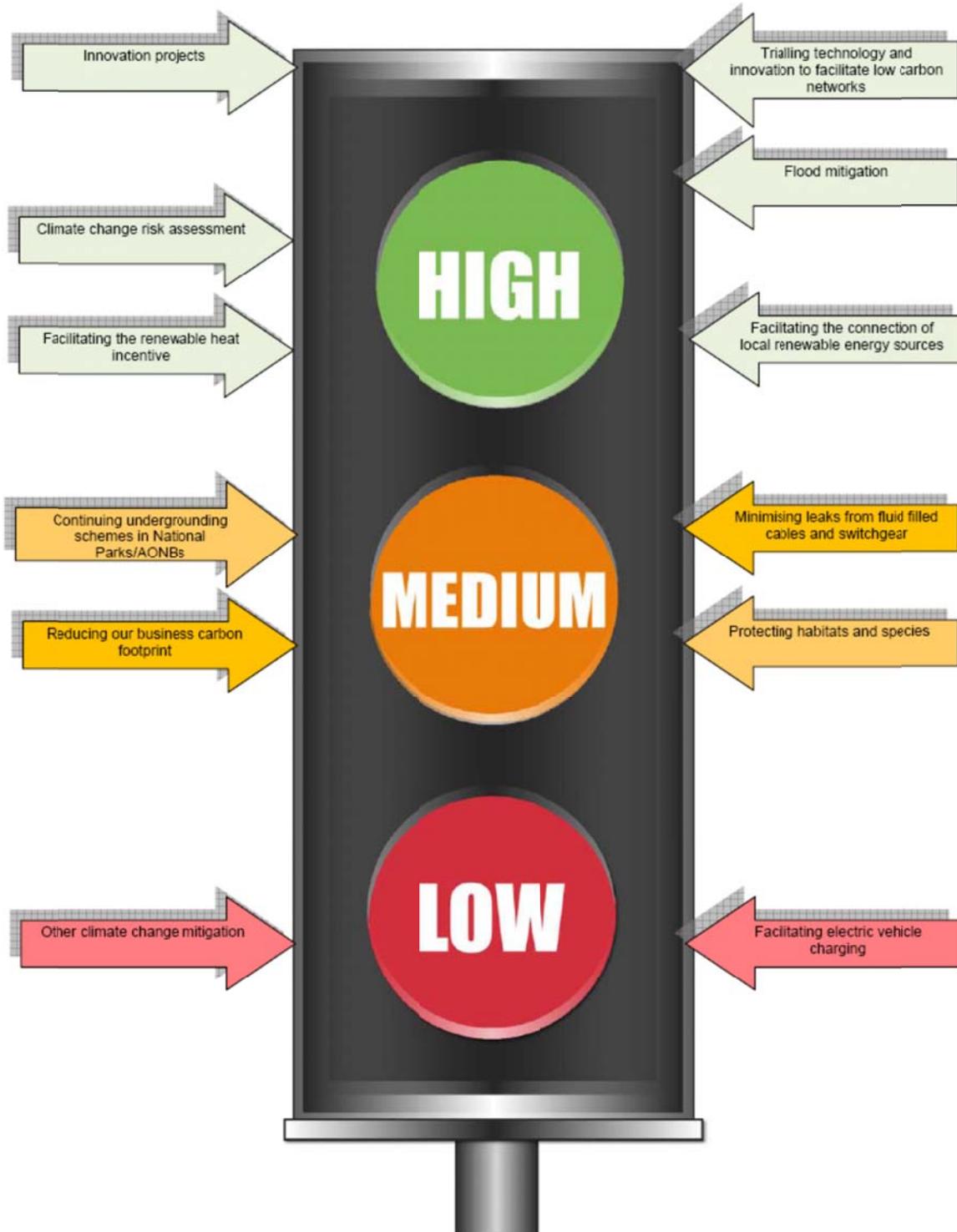
## 9.6 Conclusions and top three priorities

Table 1



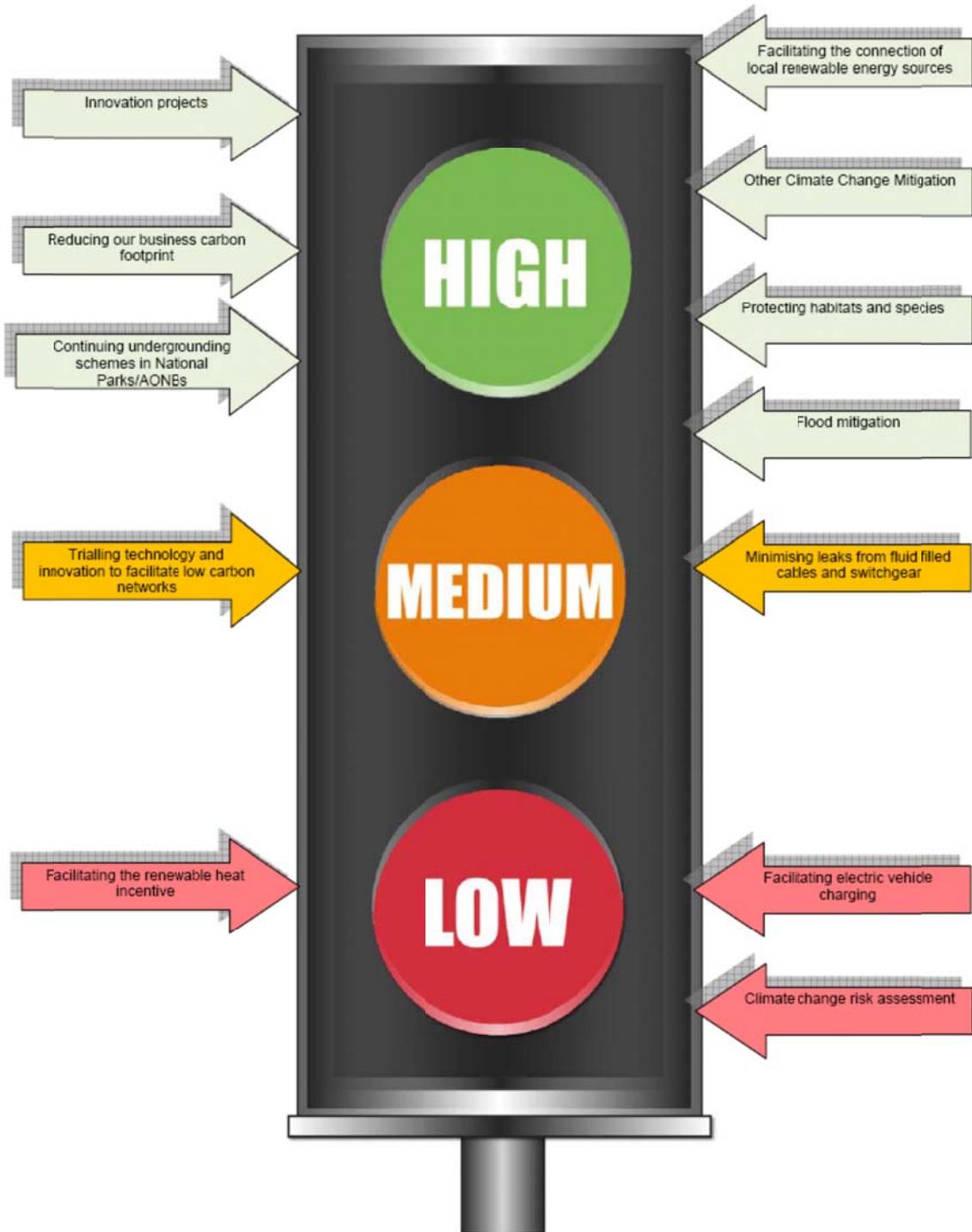
- The top three priorities agreed by stakeholders were: Flood Mitigation; Minimising Leaks from Fluid Filled Cables; and Undergrounding schemes in National Parks
- Another notable high priority agreed by stakeholders was Facilitating Connection of Local Renewable Energy
- Innovation projects were also deemed worthy of high consideration by the stakeholder group

Table 2



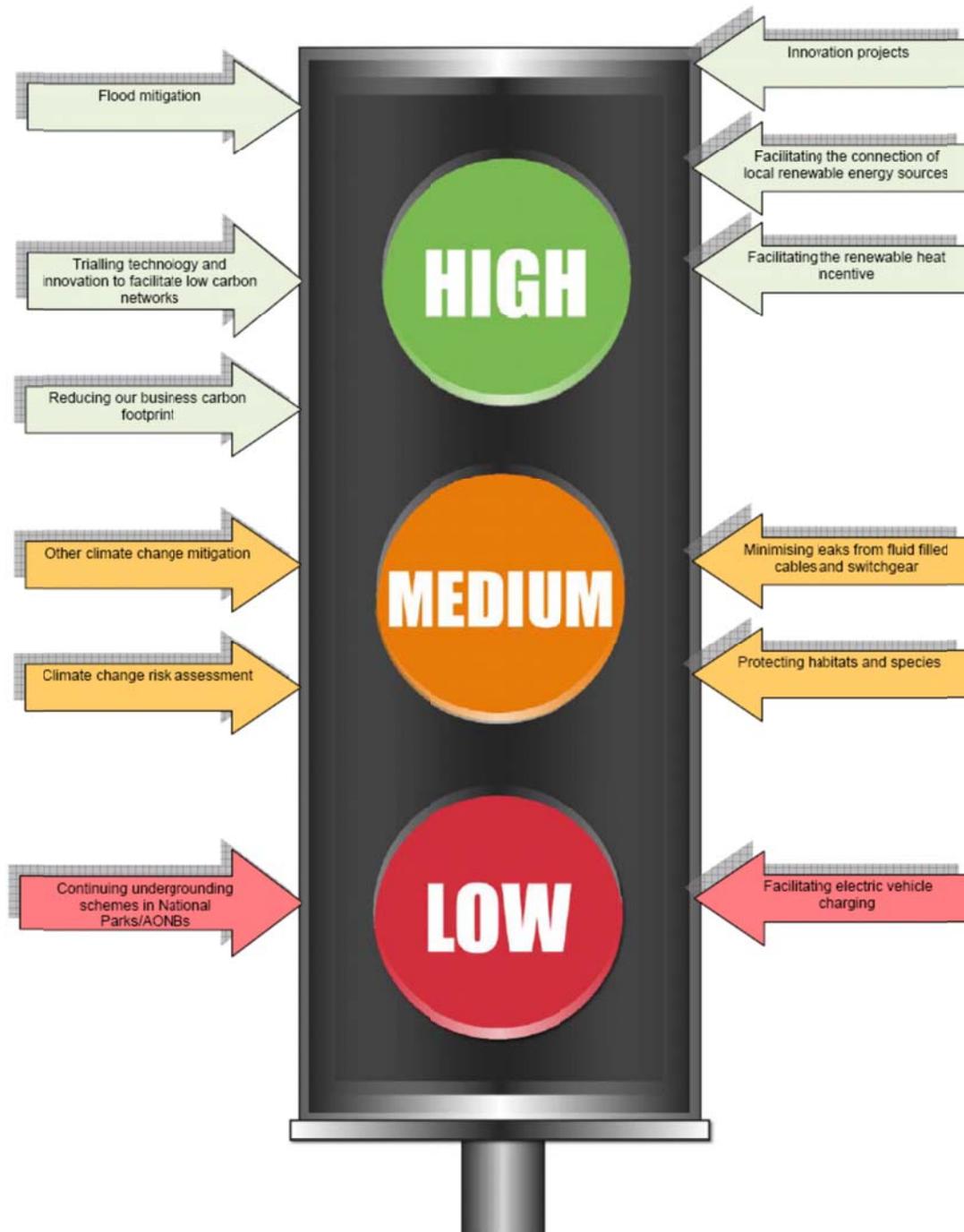
- Innovation was considered the highest priority and the group wanted this Issue to include: Innovation Projects, Trialling Technology; Facilitating the RHI and Facilitating the Connection of Local Renewable Energy Sources
- Flood mitigation and Climate Change Risk Assessment were also included in the group's 'top three'

Table 3



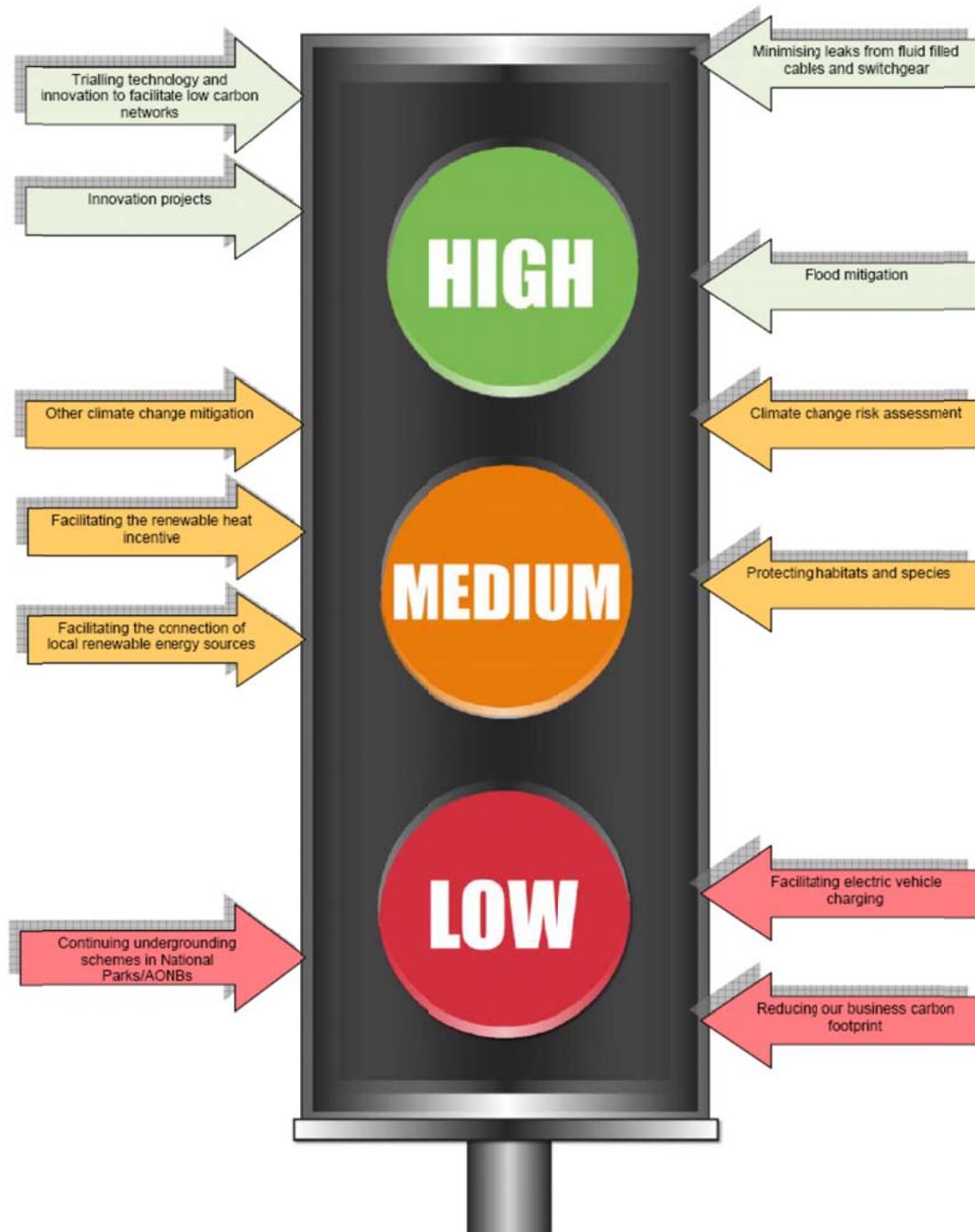
- Stakeholders felt strongly that activity to create a more environmentally friendly network in the future should be the highest priority
- As such, stakeholders agreed that Facilitating the Connection of Local Renewable Energy should be the top priority
- Innovation Projects and Climate Change Mitigation were deemed to be priorities two and three, respectively

Table 4



- Stakeholders stated that Trialing Technology and Innovation Projects should be combined as the group's top priority
- Flood Mitigation was deemed second priority
- The group stated that Facilitating the Connection of Local Renewable Energy Sources and Facilitating the Renewable Heat Incentive should be combined as the groups third highest priority

Table 5



- Stakeholders considered the highest priority Environmental Issues to be Minimising Leaks and Trialling Technology / Innovation Projects (combined)
- The Table generally agreed that issues relating to climate change (Issues 7 and 8) were medium to high priority; this was with the exception of two stakeholders; one who believed there was insufficient data to judge, and another who thought these should be the highest priority

## 9.7 Theme 2: Improving the network / Improving customer service

### 9.7.1 Short and long-term priorities

The Issues of Improving the Network and Improving Customer Service were discussed together.

The session began with stakeholders discussing which Issues relating to these two topics should be WPDs' priorities for the next five years and which should be longer-term priorities.

The outcomes of this exercise are shown in the table below:

IMPROVING THE NETWORK										
Network Improvements	Is this a priority in the next 5 years?					Is this a longer term priority?				
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 1	Table 2	Table 3	Table 4	Table 5
Asset replacement to maintain business as usual	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Installing a "smart network"	N	Y	Y	Y	Y	Y/N	Y	Y	Y	Y
Installing equipment to enable data exchanges and power control	N	Y	Y	Y	Y	N	Y	Y	Y	Y
Future proofing asset replacement	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y



IMPROVING CUSTOMER SERVICE										
Customer Service Improvements	Is this a priority in the next 5 years?					Is this a longer term priority?				
	Reducing power cuts	Y	Y	N	Y	N	Y	Y	Y	Y
Improving service for new connections	N	N	N	N	Y	N	N	Y	N	N
Reducing “dips”	N	N	N	Y	Y	N	N	Y	Y	N
Improving reliability for worst-served customers	N	Y	Y	Y	N	N	Y	Y	Y	N
Being prepared for major emergencies	Y	Y	Y	Y	Business as usual	Y	Y	Y	Y	Business as usual
New methods of communication	N	Y	Y	Y	N	N	Y	Y	Y	N

### 9.7.2 Network / Customer Service Issue 1: Asset replacement to maintain business as usual

**Table 1**

- In response to a number of points raised by a healthcare representative, a WPD representative stated that power cuts often impact worst served areas
- A further point raised by the healthcare representative was that some assets have been around since the 1950s and are nearing the end of their working life. (S)he also added that work needs to be done on these quickly to prevent damage to the network

**Table 2**

- An officer from a conservation agency linked this to the future asset replacement Issue, and thought it should be ranked as high priority due to this

- The group all agreed that this is a high priority to ensure the day-to-day operation of WPD services

### **Table 3**

- Stakeholders agreed that this was a '*no-brainer*' for WPD and that it was something which would be expected of them as a DNO

### **Table 4**

- There was little discussion on the subject of asset replacement. The stakeholders were in agreement that it should be a high priority

### **Table 5**

- Stakeholders stated that Issues 1, 2, 3 and 4 should be combined as they all related to the technological and informational '*evolution of the distribution network*'
- The Welsh Government representative stated that WPD could either leave the distribution network as it is or make it more adaptable to future needs. (S)he asked for examples where future proofing was working and added that WPD should lead in this area
- New equipment was agreed to be an important issue, particularly with regard to areas such as control and renewed cabling to handle increased export
- One stakeholder suggested the mandating of domestic and small commercial metering
- The Table agreed that all four Issues (1,2,3 and 4) were a high priority for WPD in the short-term

## **9.7.3 Network / Customer Service Issue 2: Installing equipment to enable local scheduling of customer generation and storage – 'the smart network'**

### **Table 1**

- A representative of the Welsh Government described this as a medium term priority, less important than 'business as usual'. However (s)he did think this may be needed in future.
- A representative of a preservation organisation added that information in terms of trends was needed before decisions are made
- The issue of the Government wanting all homes to be CSH Level 6 by 2016 was raised by a representative of a city council

## Table 2

- A representative of the charity sector asked whether this would save customers money. If it will not, then there is no point
- A local authority representative asked whether this is a statutory requirement
- The WPD representative responded that certain parts of this would be statutory, but others would not
- The group agreed that this was a high *'ongoing'* priority

## Table 3

- A representative of a major user said that it seemed to be a logical step to take and that it had to *'be a current priority given that the technology is there and available for us to use'*
- A representative of a major user felt that as such technology could improve the efficiency of the business, as investment now *'will eventually drive customer bills down'*

## Table 4

- Stakeholders stated that Issues 2 and 3 are linked
- A representative of an environmental organisation stated that this Issue related to the environmental Issues that were discussed earlier. It was added that if people are increasingly wanting new renewable connections, then the WPD network needs to be able to cope with this
- There was little discussion on this topic. There was a consensus that *'smart metering'* should be a high priority

## Table 5

- The Table agreed this should be discussed as part of Issues 1, 3 and 4

### **9.7.4 Network / Customer Service Issue 3: Installing equipment and systems to enable data exchanges and power control, e.g. remote control switchgear**

## Table 1

- Some key issues were raised by a representative of WPD, who explained that more equipment is needed to restore customers more quickly. (S)he added that this needs to be done in the right way to ensure there are no follow-up interruptions

## **Table 2**

- A representative of an energy supplier was unclear on the distinction between Issues 2 and 3
- The WPD representative clarified this for the group
- A representative of a port authority felt that this Issue should be a priority because it would be so useful
- A representative of an energy supplier said that this is an essential enabler to improving customer service
- A representative of a port authority agreed that it is a high priority in order not to put a strain on the system

## **Table 3**

- A representative of an environmental organisation asked whether the question concerned domestic connections or the network as a whole
- A representative of a major user noted that as low voltage transmission represented the vast majority of WPDs' network, there needed to be a well put together plan for the rollout of such equipment, especially as the process will be very expensive
- A representative of the energy industry stated that it would not be a good idea to separate equipment and system upgrades. (S)he felt that WPD should be carrying out trials and working out exactly what we can do with the information provided by new equipment and systems before installing
- A representative of a major user agreed with this, saying that investment could not be justified unless we knew whether or not this was a worthwhile expense
- A representative of a major user suggested that WPD needed to make the decision based on whether it increased the efficiency of the network. (S)he also suggested that WPD investigate rolling this out on a region by region basis, perhaps starting with an urban area

## **Table 4**

- See Issue 2. Stakeholders stated that Issues 2 and Question 3 should be linked

## **Table 5**

- The Table agreed this should be discussed as part of Issues 1, 2 and 4 above

## 9.7.5 Network / Customer Service Issue 4: Future proof asset replacement

### Table 1

- Vocal stakeholders raised similar points and were unanimous in their agreement that this should be at the centre of their business plan, and should be a high priority, especially considering some equipment dates back to the 1950s & 1960s
- A representative of a preservation organisation expressed interest in whether WPD does '*horizon scanning*', and was answered by a WPD representative that this is indeed the case. Furthermore (s)he responded that they also look at other countries' innovation and technology

### Table 2

- An officer from a conservation organisation commented that this is about the long-term lifespan of infrastructure; meeting future demands; and knowing how the network needs to look in the future
- A representative of a port authority linked this to the priority relating to carbon footprint – it is something that is essential
- An officer from a conservation organisation expressed concern that the demand on the future network is uncertain. He questioned the value in investing in something so uncertain
- A representative of a port authority responded that not investing could be risky, especially with technology progressing as fast as it is
- An officer from a conservation organisation noted that nobody predicted the uptake of solar energy, or the advent of feed in tariffs
- A local authority representative disagreed, referring to the fact that it is now a requirement that housing developments are at BREEAM standard 4, and so the need to upgrade may be more urgent than previously thought
- The group reached the consensus that this should be a medium priority for both the short and long term

### Table 3

- A representative of a major user asked what WPD meant by future proof and for examples of specific projects and technologies
- A representative of the energy industry asked whether WPD was not already installing new equipment at substations as standard practice

- An energy industry representative stated that in the future WPD would want to be able to control and monitor all substations remotely. (S)he made the point that *'if not installing that equipment now, WPD needed to make sure it can be fitted at a future date.'* Stakeholders around the table agreed with this point
- A representative of a major user asked where the UK was at present with this technology and how it compared to other countries. (S)he felt that it made sense to ensure that any refurbishments carried out now remained at least adaptable into the future – this was a *'common sense approach'*
- Another representative of a major user felt that the best strategy would be to carry out a *'continual risk assessment review process'*

#### **Table 4**

- A local authority representative wanted to discuss how involved WPD is in local developments and the planning process
- The representative stated that the planning process, such as the local plan, will show where growth will occur
- Stakeholders felt that when planning for the future, WPD need to be *'joining the dots'* with regard to where new developments are planned

#### **Table 5**

- The Table agreed this should be discussed as part of Issues 1, 2 and 3

## **9.8 Theme 3: Improving customer service**

### **9.8.1 Network / Customer Service Issue 5: Reducing power cuts**

#### **Table 1**

- There were issues raised regarding this question by a representative of the Welsh Government who argued that this should instinctively be a part of WPD's core business and that Issues of maintaining or improving the network depend where you live
- A representative of a conservation organisation made the point that an ordinary consumer can cope with a power cut, but if a manufacturer were to lose business that would be unacceptable
- Furthermore (s)he also made an additional point that people in remote areas tend to be more accepting of difficulties and have a higher tolerance of them, but that doesn't mean that it is acceptable for remote areas to tolerate more difficulties

- An in-depth discussion arose involving many stakeholders about the difference in quality between urban and rural infrastructure and service and whether people in urban areas should subsidise those in rural areas to achieve the same service levels
- Stakeholders agreed that prioritising services during power cuts was difficult to do and a complicated issue, with more research needed in this area

### **Table 2**

- A representative of a port authority felt that this has got to be a basic *'benchmark'* for WPD on its day-to-day business
- A representative of the charity sector commented that as people are reliant on technology for a variety of tasks nowadays, power cuts of *'an hour'* are unacceptable
- The group felt that reducing power cuts is key to WPD service delivery

### **Table 3**

- Generally, stakeholders were satisfied with current performance
- One representative of a major user asked if WPD was subject to statutory regulations on this point. (S)he felt that steady and continual improvement was all that was required, and that ratcheting up resource level might not be the best solution
- While most stakeholders had never experienced a power cut, one stakeholder mentioned that as a rural dweller, (s)he had experienced around 5 per year
- A representative with a particular interest in commercial development noted that in his / her position he had not received a large number of complaints about power cuts, as might be expected if they were a particular problem
- A representative of the energy industry asked if WPD was subject to regulation in terms of minimum standards

### **Table 4**

- A representative of a local emergency service stated that if WPD does not continue to maintain looking at reducing power cuts then they may increase
- One stakeholder stated that it depends on how much it costs to achieve adding that *'WPD has to be realistic'*
- A representative of the charity sector said that improving WPDs' standard should be different for different levels of vulnerability
- It was also stated by stakeholders that whilst the standard was good that was the average and that there are some that experience a lot higher level of power cuts

- The stakeholders felt that WPD should be focusing on vulnerable people and businesses
- It was added by one stakeholder that it depended on the type of customer and the network spread
- Stakeholders felt that WPD should continue to strive to reduce power cuts

## Table 5

- While most stakeholders were generally sanguine about the current level of power cuts and accepted them as unavoidable (though a representative of a government agency felt this depended on duration) responses seemed to be governed by stakeholders' personal experiences of power cuts and the level of service they had received
- A representative of an environmental company stated that power cuts were a major issue and that as more customers relied more heavily on electricity and became computer / internet based, power cuts would be more acutely felt in the future than now. (S)he argued that the power supply couldn't be interrupted and that people were *'expectant of instant power'*
- The Table agreed that customers' level of expectations had changed in the past 20 to 30 years, when power cuts were more common
- The stakeholder from the health sector suggested that if the frequency of cuts was two in 20 years or one in 2 years then it wasn't a great problem and (s) he felt that was a good level of performance. (S)he also commented that WPD could spend a disproportionate amount on reducing power cuts and asked what percentage was caused by external forces out of WPDs' control, such as the weather or third party damage
- There was general agreement that, as weather conditions were outside WPDs' control, it would make sense to concentrate on what was within the company's control, such as replacing assets when old
- The point was raised by a Welsh Government representative that if businesses were forced to stop production because of power cuts, it caused them significant costs
- This was further discussed around the Table and the majority of stakeholders felt that it should be the customer's responsibility rather than WPDs' to supply an alternative energy source in the advent of a power cut
- However, in conclusion Table 5 felt that reducing power cuts was not a high priority for WPD

## 9.8.2 Network / Customer Service Issue 6: Improving customer service for new connections

### Table 1

- Stakeholders on Table 1 were in agreement that as long as the service is maintained then this is satisfactory

### Table 2

- An officer from a conservation organisation asked whether it is a standard obligation on WPD to connect within a certain time
- The WPD representative outlined the process of new connections, and the issues that come with it
- An officer from a conservation agency thought that a five-day connection period is good
- A representative of an energy supplier questioned whether there should be a trade-off between reducing power cuts and improving speed of connection
- A local authority representative observed that if this connection is for new developments, then surely the customer would know in advance that they would need connection
- The Table felt that this is not a big issue – improving overall service was deemed more important

### Table 3

- A representative of a local authority stated that (s)he had never personally experienced a problem in terms of connections services
- A representative of the energy industry was of the view that WPD was the best performing network operator and the emphasis should be on maintaining current performance
- An environmental representative asked what WPDs' role was in connections and whether that position affected its service and reliability
- A representative of the energy industry suggested that WPD should potentially look to open up its connections department – as it was such a large connector it could be seen to inhibit competition. (S)he suggested that maybe Ofgem should be looking at this area to set guaranteed standards

#### Table 4

- One stakeholder stated that it is not acceptable if people want a connection but it is too difficult for them to get one
- Another stakeholder wanted to know how long a new connection can take
- A representative of an environmental organisation stated that this is where the importance of communication is highlighted. (S)he stated that the most frustrating thing is when customers can not get in contact with someone to talk about the possibility of a new connection
- It was added that accessibility of information was an important aspect in improving customer service for new connections
- Stakeholders stated that improving customer service for new connections is a low priority as long as it is linked with Question 6 and customer communication

#### Table 5

- Table 5 stakeholders were in agreement that domestic forms were *'vastly overcomplicated'* and the requirements were different to industrial connections - *'most people don't need to know about the meter'*
- A stakeholder from the health sector suggested that WPD should act as a facilitator to help with connections and the chair asked for this point to be minuted
- In addition, the Welsh Government representative commented that new customers were often shocked at the cost and (s)he believed there should be transparency at an early stage about the approximate costs; (s)he suggested this information could be made available on WPDs' website and considered it was an *'education programme'*
- One stakeholder made the point that WPD was *'easier to deal with than Scottish Power'*
- The Table agreed that while WPD had made some progress with improving customer service for new connections, this issue remained a medium priority in the short-term

### 9.8.3 Network / Customer Service Issue 7: Reducing short duration interruptions – 'dips'

#### Table 1

- A representative of health sector was of the opinion that the expectation of service is there, in much the same way that if you turn the tap on you expect water

- Stakeholders were in agreement that 'dips' are potentially a problem for SMEs and businesses such as restaurants, and that such a problems are potentially more serious than power cuts

### **Table 2**

- A representative of the charity sector felt that the impact of 'dips' is fairly low compared to power cuts overall
- The group agreed that 'dips' are not a major service issue and that this Issue should not be a high priority

### **Table 3**

- One stakeholder noted that the only way to fully eradicate this problem would be to build '*back up*' into the network
- A representative of a major user asked whether 'dips' were increasing or decreasing
- A stakeholder who lived in a rural location stated that this was an issue for him / her, as (s)he had had 6 interruptions in one day. (S)he felt that the problem was line clearance rather than new infrastructure
- A business representative said that short interruptions were still better than long interruptions
- A representative of the energy industry suggested that WPD should focus on the worst served customers and areas. Other stakeholders agreed with this point of view
- A representative of a major user asked whether these types of 'dips' ever caused issues in industrial or business situations

### **Table 4**

- Stakeholders at Table 4 felt that when discussing reducing 'dips' WPD should distinguish between domestic 'dips' and 'dips' experienced by businesses and public buildings
- The stakeholders felt that domestic 'dips' were a low priority
- Stakeholders stated that reducing 'dips' for businesses and public buildings should be of more importance

### **Table 5**

- The consensus around Table 5 was that the issue was a medium priority for the short-term

- A representative of a Government agency stated that in order to reduce ‘dips’ it would be necessary for WPD to invest in automated equipment but raised the question of whether all equipment should be automated
- The Welsh Government stakeholder made the point that if customers were generally happy with the current service, then future costs would be disproportionate; (s)he added that in geographic areas where there was a higher probability of ‘dips’ occurring, critical industries knew about the risk and would hopefully feed this back to WPD. (S)he believed that reducing ‘dips’ would either not be achievable or be too expensive

#### 9.8.4 Network / Customer Service Issue 8: Improved reliability for worst-served customers

**Table 1**

- A healthcare representative of WPD explained that statistically 3000 customers in South West Wales are ‘worst served customers’ and on average the cost is £500 per worst served customer
- It was then agreed by stakeholders this aforementioned cost /number ratio raises emotive and difficult questions about the fairness of other customers covering the cost of this

**Table 2**

- A representative of a port authority pointed out that if customers have to use generators, WPD is ‘*failing*’
- The WPD representative explained in brief the nature of unreliability in rural areas
- A local authority representative remarked that this should be classified as a business interest. Customers are not likely to want to spend a disproportionate amount on improving the service for such a small number of customers
- A representative of the charity sector commented that the rural community should receive the same service as everyone else if they are paying for it
- An officer from a conservation agency felt that unreliable service is an accepted part of living in a rural area
- An officer from a conservation agency asked whether as services improve, ‘*does the standard definition for ‘the worst served customer’ change?*’ i.e. will there always be a ‘worst served customer’?
- The WPD representative explained that there is a quantifiable definition for the worst served customer

### Table 3

- Stakeholders reiterated the comments made on 'dips'. They felt that any action to reduce power outages and short interruptions should focus on worst served customers

### Table 4

- A representative of the charity sector felt that it is unfair for the worst served customers to be paying the same amount of the bill and the getting a worse service
- A local authority representative stated that worst served customers can't vote with their feet like they can with a supplier
- A stakeholder wanted to know what WPDs' rate of improvement is
- The representative from a charity stated that for him / her it is a high priority as it is an unequal billing system. It was added that vulnerable customers needed particular attention
- Stakeholders stated that improved reliability for worst served customers should be a priority '*but within a reasonable budget*'

### Table 5

- A community group representative stated that his / her local area was among one of the worst served with four to five 'outages' a year mostly due to swans damaging local power lines. The representative felt that it was a bigger problem for the predominantly farming-based commercial users than for domestic supply but that in general people accepted the situation. (S)he felt that alternative power was an option as opposed to improved reliability
- The point was raised that the worst case scenarios tended to be in rural areas
- WPD representatives provided information on current compensation for 'outages' and the healthcare representative claimed that compensation would improve as assets were replaced and trees cut
- As a consequence of the discussion, the Table considered the priority to be low

## 9.8.5 Network / Customer Service Issue 9: Being prepared for major emergencies

### Table 1

- A representative of a conservation organisation made the point that expected problems, but with a contingency plan for the unexpected, is a '*difficult balance to strike*'
- A representative of the Welsh Government expressed the view that this shouldn't be number one priority but should be high on the agenda

### Table 2

- The WPD representative gave examples of potential emergencies and options for mitigation and contingency plans
- A representative of an energy supplier thought that for high-risk events, the priority should be high
- A local authority representative asked what happens to the infrastructure for an emergency that does not occur
- The WPD representative explained that everything is kept in waiting
- An officer from a conservation agency queried how significant the investment would be
- The WPD representative informed the group that the cost would be '*considerable*'
- A local authority representative responded that the cost of not preparing for an emergency would far outstrip the investment
- A representative of a port authority felt that not preparing could put unnecessary stress on the system
- A representative of an energy supplier remarked that WPD receives funding to do this
- The group agreed it is important for WPD to have some processes built in for emergency planning, and that it should be an ongoing and medium/high priority

### Table 3

- It was suggested that WPD needed to link in better with the resilience community and provide better communications
- The example was given of false rumours during the Gloucester floods that South Wales was going to lose power which could've been counteracted by more effective

co-operation, and the fact that WPD had sent a media liaison when it should have sent a more technically minded liaison

- Several stakeholders stated that it is equally important to continually review these action plans and carry out dry runs to test them

#### **Table 4**

- A local authority planning officer stated that (s)he wouldn't want WPD to *'plough'* a lot of money into something that may or may not happen
- A representative of a local emergency service stated that WPD has to plan but that it should be subject to constant review
- Stakeholders stated that it is a high priority but that it should be based on an informed view, achieved by working with multiple agencies

#### **Table 5**

- Stakeholders on Table 5 were in agreement that this issue was a low priority as WPD were already preparing for major emergencies and that in the short-term it was *'business as usual'*
- The point was also made that this was a legal requirement and anything above and beyond this, such as natural disasters, etc, was guesswork

### **9.8.6 Network / Customer Service Issue 10: New methods of communication – email, text and other – website, online**

#### **Table 1**

- It was established by stakeholders that there are now many ways for customers to communicate and they are all catered for
- An important consideration is socially excluded groups and older people according to the Campaign for National Parks. In response to this a representative from Western Power Distribution explained that older people are indeed contacted pro-actively
- (S)he also added that the emergency number when the network goes down is WPDs' number
- A representative of the health sector advised that in his / her experience, using text message communication was liked by some but other customers were *'irritated by it'*

## Table 2

- A representative of a port authority informed the group that as a business, it is difficult to contact WPD, which is problematic
- A representative of the charity sector commented that although WPD should use new communication methods, it is important to note that the elderly, for example, do not always have access to new technology
- It was discussed that people do not always know who to call when they have a problem – most people would call the supplier in the first instance, and not the distributor
- One stakeholder stated that WPD should raise awareness about who to contact. Also, WPD should always remember to offer bilingual services in Wales

## Table 3

- Generally, stakeholders felt that this was not a high priority but that it might provide added value if it could be done cheaply, as stated by a business representative
- A representative of a major user said that it felt like an ‘easy win’ and suggested that all that was needed was a good website and an easy to find contact number
- An energy industry representative said that this was a difficult issue to overcome and that in the end it came down to the supplier communicating this effectively on the bill. (S)he felt that it was also important for WPD to differentiate its communications between domestic and commercial users, as commercial users may be more important in an emergency situation

## Table 4

- Stakeholders stated that new methods of communication should be ‘*in addition to, rather than replace*’ other forms of communication
- Stakeholders stated that it is a medium priority

## Table 5

- Table 5 was in agreement that this was a medium priority but not for the short-term
- As before, responses were linked to stakeholders’ personal experiences, including one who had received essential information from WPD via a recorded message linked to the geographic area (s)he was ringing from; the stakeholder added that (s)he didn’t know what more WPD could have done

- The Table generally considered it important for WPD to keep up with new technologies and felt this would improve business efficiency and increase visibility, suggestions included website and proactive messaging

## 9.9 Further Network / Customer Service Issues

### Table 1

- Stakeholders on Table 1 felt that other Issues to be considered in future would be addressing material thefts and security

### Table 2

- Stakeholders had no further network / customer service Issues

### Table 3

- Stakeholders had no further network / customer service Issues

### Table 4

- One stakeholder wished to reiterate the importance of smart meters
- A representative of an energy company stated that smart meters are currently installed by suppliers but felt that WPD is exceptionally placed to take over this role
- Table 4 stakeholders felt that WPD should look into installing meters rather than suppliers. It was added that it would be much more efficient if WPD places the meter rather than 10 different supplier companies coming and supplying one street
- A representative of an environmental organisation asked '*what about a move to DC?*' The stakeholder stated that (s)he realises that this is a radical note but as WPD are discussing so far into the future that its a possibility

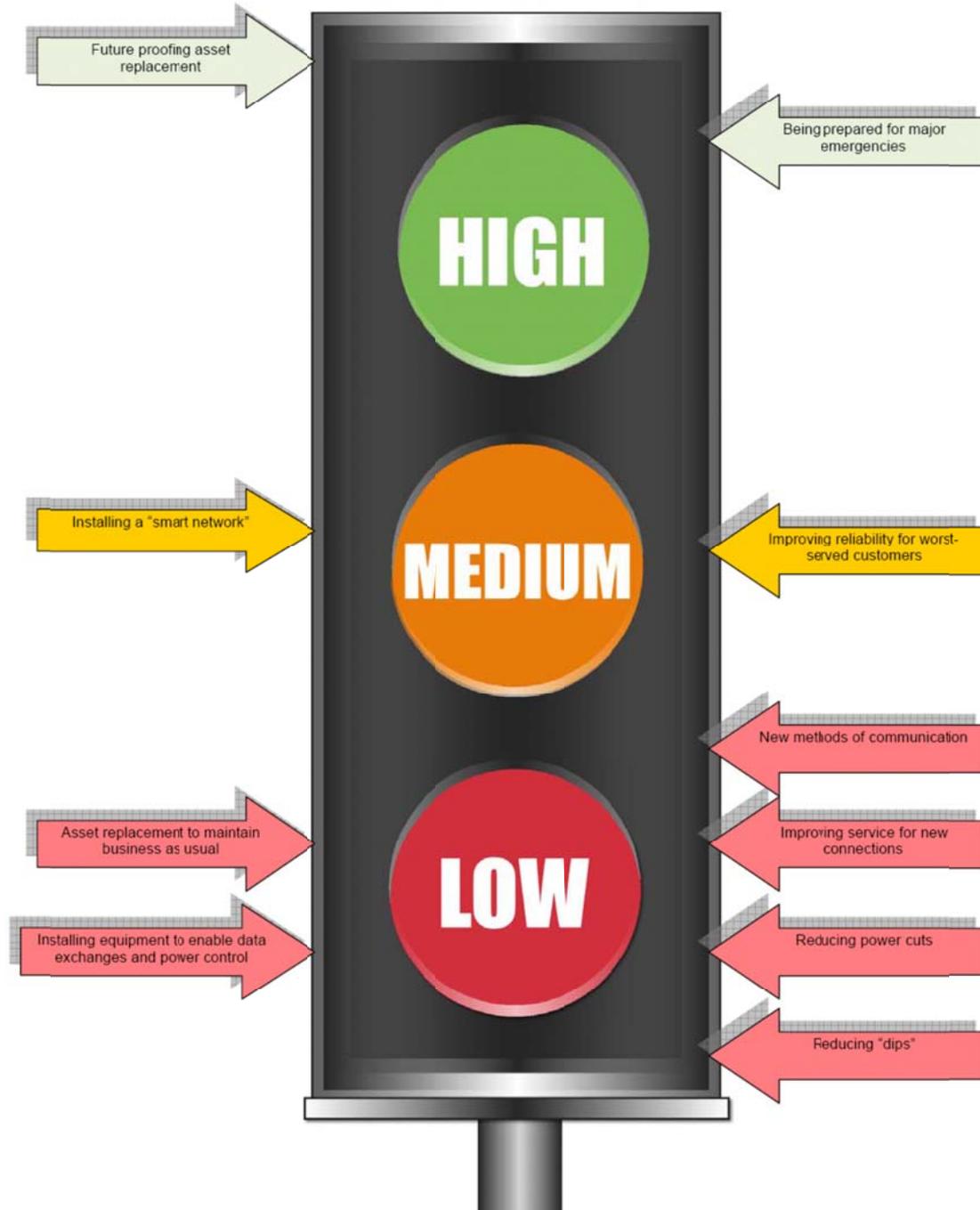
### Table 5

- The Issue of innovation was raised again on Table 5 and a community group representative argued that everyone was looking at energy alternatives but not at storage and usage, and suggested this might be a possible marketing exercise for WPD
- The Table agreed that storage education was an important customer service issue and discussion ensued concerning this subject and included debate on whether the customer or WPD should pay for storage

- 
- A health sector stakeholder felt there was no benefit for his / her company to store energy as they were passing it on to the customer, while another highlighted the importance of *'hardwiring'* houses to store energy. A Welsh Government representative asked how this fitted in with Government energy reforms
  - The local authority stakeholder recommended that WPD should *'take out options of storage'* to avoid future costs and suggested this might be a good business case for WPD
  - There were no further network Issues discussed

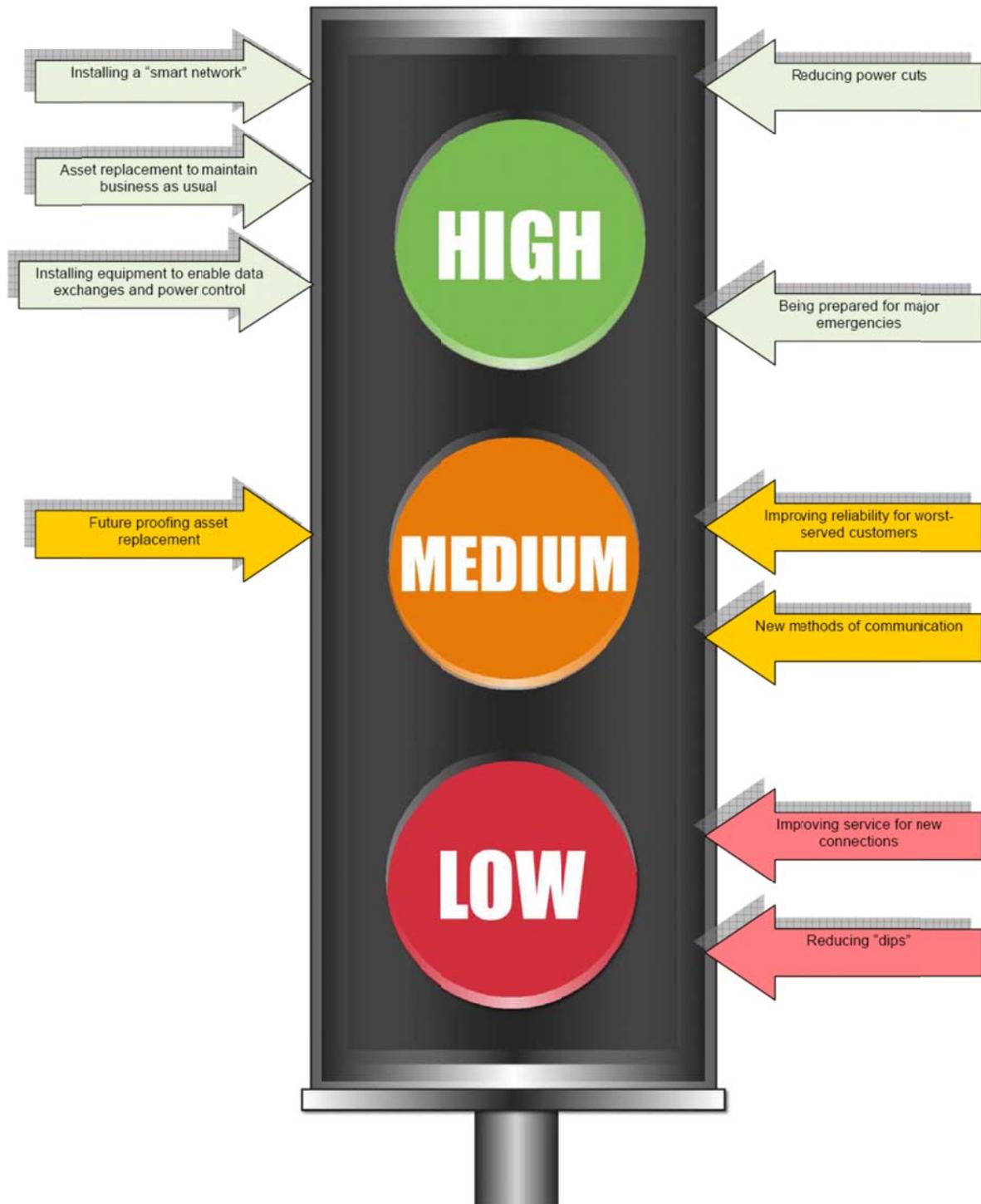
## 9.10 Conclusions and top three priorities

Table 1



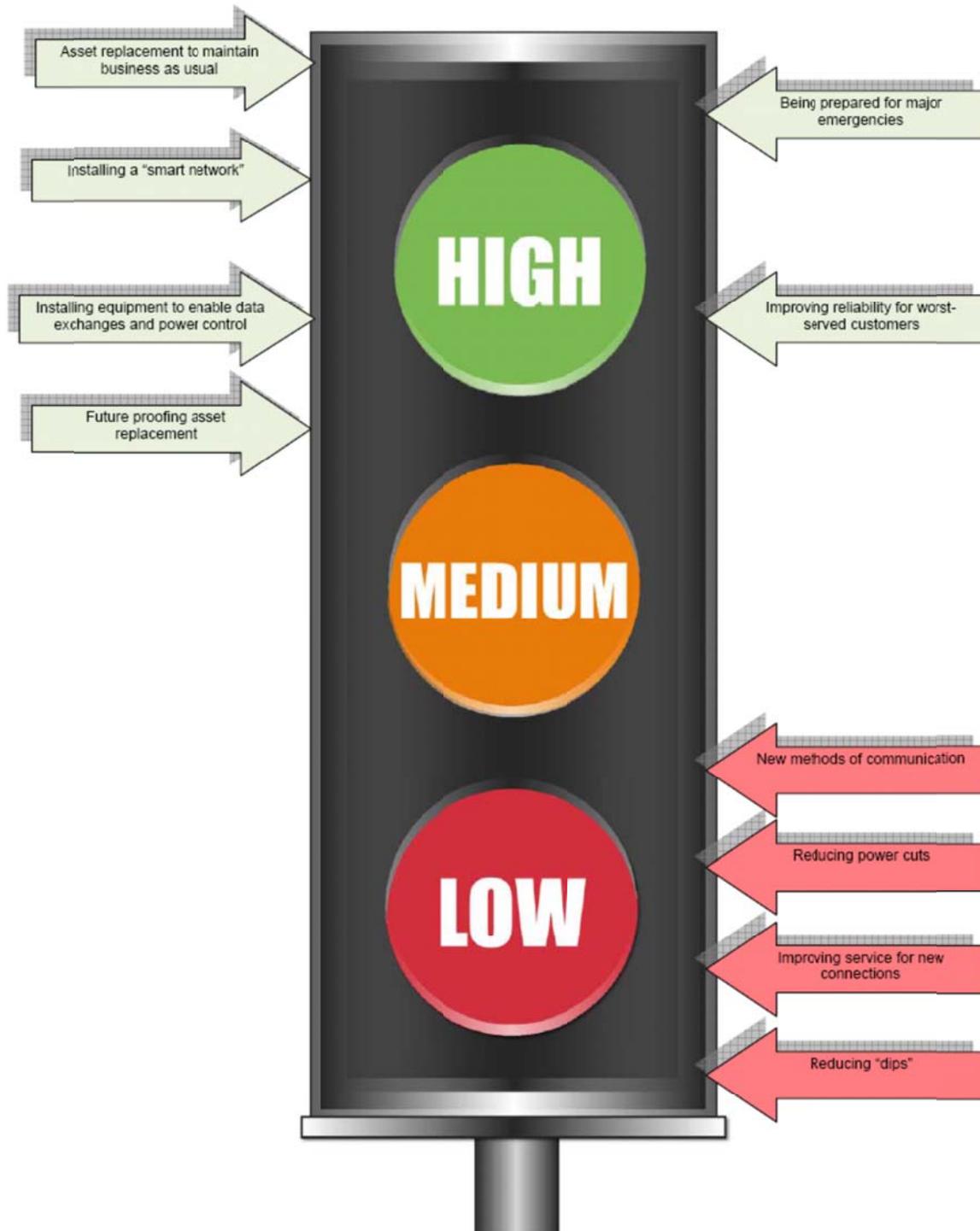
- The top two priorities were for Table 1 were: Future Proofing Asset Replacement and Being Prepared for Major Emergencies
- Table 1 also stated that Installing a 'Smart Network' and Improving Reliability for Worst-Served Customers were also priorities for WPD

Table 2



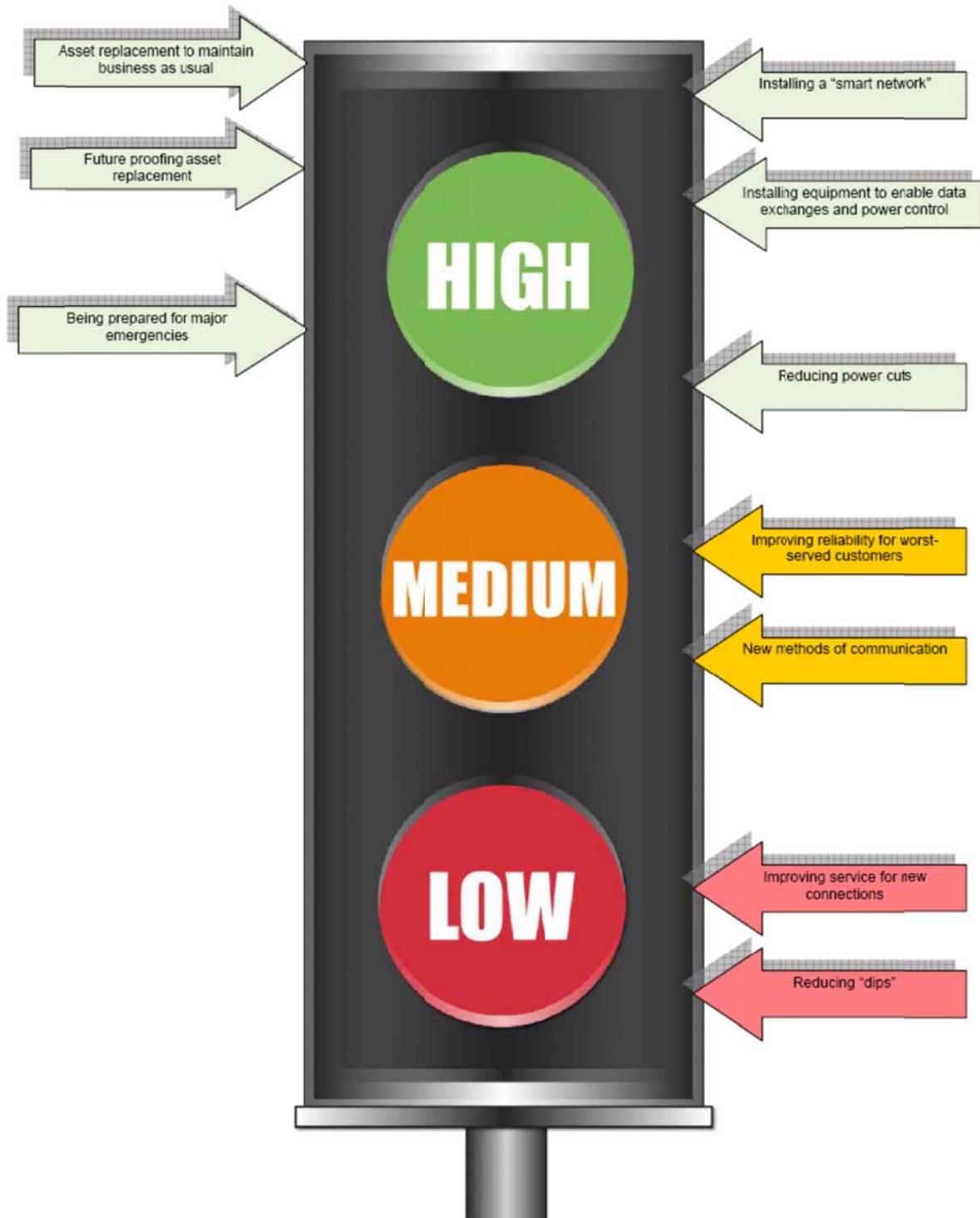
- Reducing Power Cuts; Asset Replacement to Maintain Business as Usual; and Installing a 'Smart' Network were considered the top three priorities

Table 3



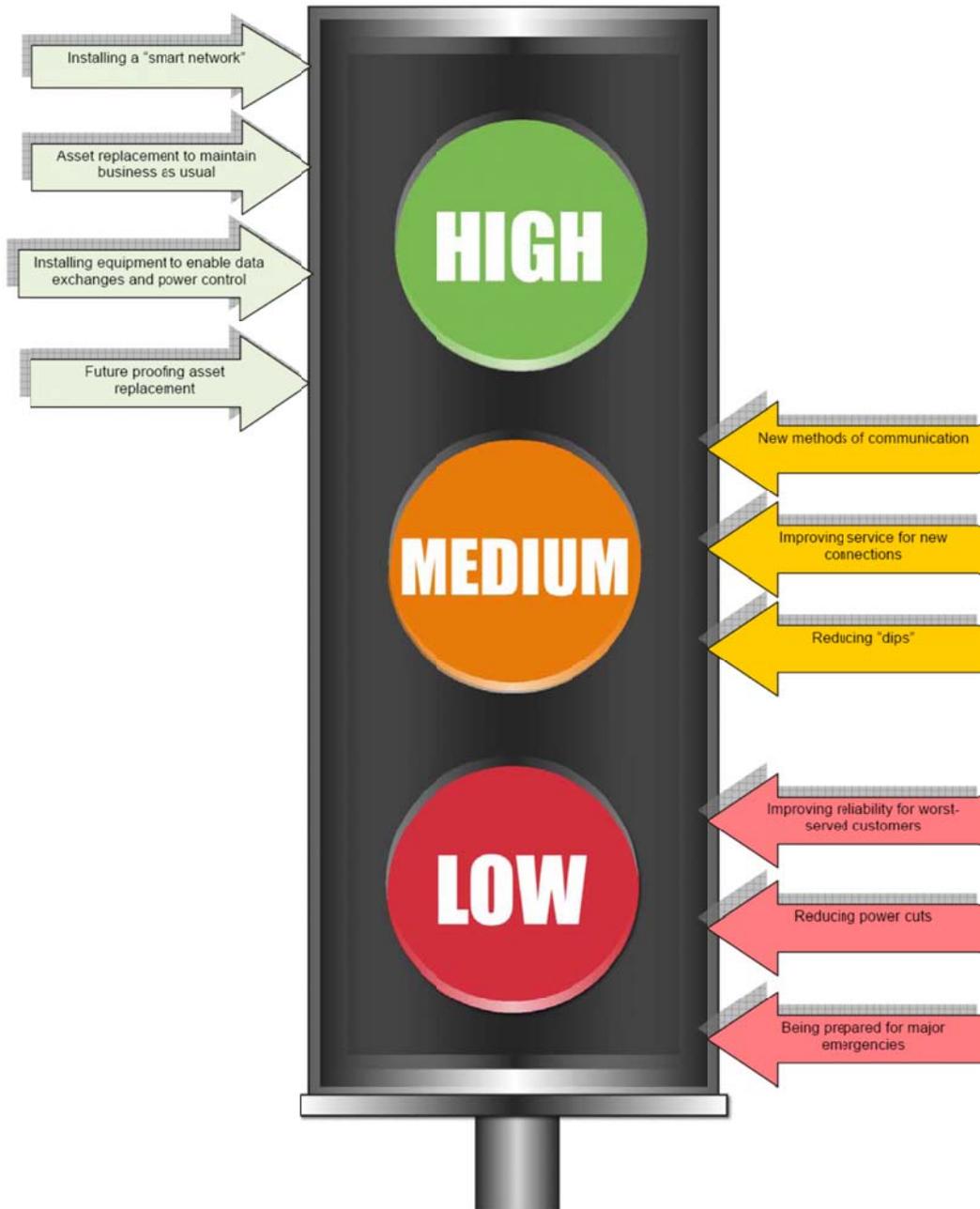
- Stakeholders generally rated Network improvement Issues as a higher priority than Customer Service Related Issues
- The top three priorities identified were; Asset Replacement to Maintain Current Standards; Being Prepared for Major Emergencies; and Installing a 'Smart Network'

Table 4



- Stakeholders on Table 4 stated that Asset Replacement to Maintain Business as Usual and Installing the 'Smart Network' were the top two high priorities
- The stakeholders felt that Installing Equipment to Enable Data Exchanges and general 'Future Proofing' should be linked and rated as third priority

Table 5



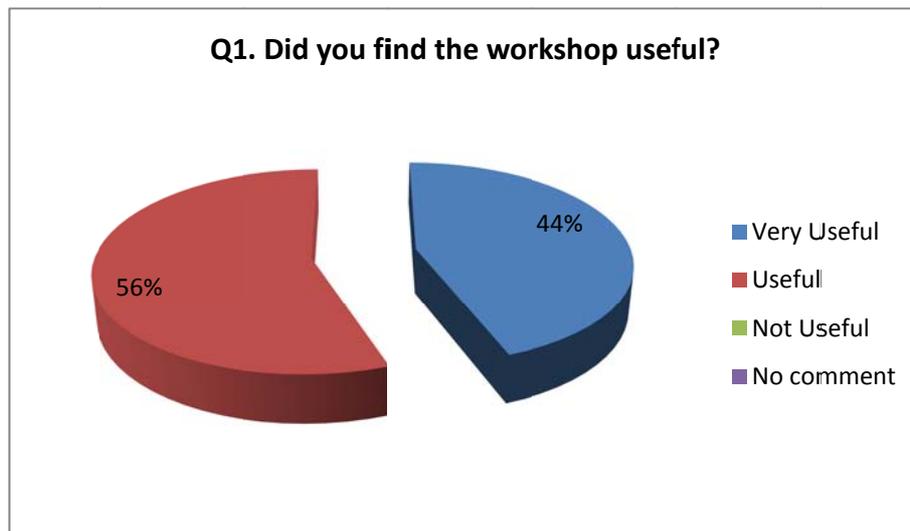
- Table 5 ranked Installing the 'Smart Network'; Asset Replacement to Maintain Business as Usual; Installing Equipment to Enable Data Exchanges and Power Control; and Future Proofing Asset Replacement as their four top priorities. All other Issues were rated 'medium priority'

## 9.11 Cardiff stakeholder workshop: feedback

Stakeholders were asked to fill out a comment card following the workshop. The comments we received are shown below.

### 9.11.1 Question 1: Did you find the workshop useful?

All respondents were positive about the workshop, with 8 stating that the workshop was 'very useful' and 10 stating that it was 'useful'.



### 9.11.2 Question 2: Was the venue conveniently located for you?

17 out of the 18 respondents stated that the venue was conveniently located for them.

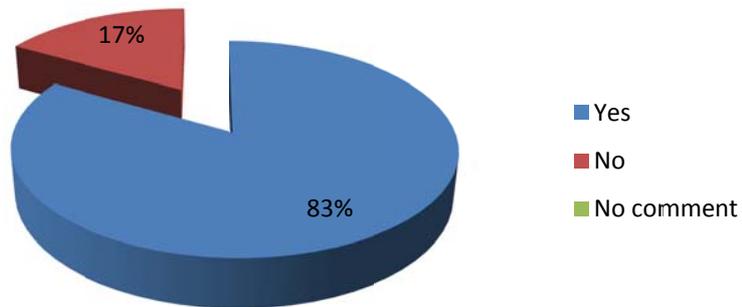
### 9.11.3 Question 3: Did we provide you with enough information at the workshop?

All respondents stated that WPD had provided them with enough information at the workshop.

### 9.11.4 Do you want to be kept informed of WPDs' plans in the future?

15 respondents stated that they would like to be kept informed of WPDs' plans in the future, whilst 3 did not want to be kept informed.

**Q4. Do you want to be kept informed of WPDs' plans in the future?**



**9.11.5 Do you have any other comments on the workshop or the venue?**

A sample of the comments received is shown below.

- *'The presentations were clear and the issues easily understood'*
- *'Effective facilitation and excellent organisation'*
- *'Overall a useful workshop'*
- *'Difficult to make meaningful [comments] on certain aspects because of lack of knowledge and information'*