



Part Three Submission

Consumer vulnerability outcomes

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Welcome

Western Power Distribution (WPD) is the Distribution Network Operator (DNO) responsible for delivering electricity to eight million customers across the East and West Midlands, South West England and South Wales.

This is Western Power Distribution's **Part Three submission** to Ofgem's Stakeholder Engagement & Consumer Vulnerability (SECV) Incentive for the regulatory year 2018/19.

2018/19 is the fourth year of the eight year Business Plan period called RIIO-ED1.

This stands for:

Revenue = Incentives + Innovation + Outputs (Electricity Distribution 1)

It is the regulatory framework set by Ofgem and is designed to drive clear outcomes and benefits for consumers, and provide companies with strong incentives to step up and meet the challenges of delivering a low carbon, sustainable energy sector.

Ofgem's SECV Incentive is an annual scheme, which encourages network companies to engage proactively with stakeholders in order to anticipate their needs and deliver a consumer focused, socially responsible and sustainable energy service.

WPD's submission to this incentive is divided into three parts:

Part 1: WPD's stakeholder engagement and consumer vulnerability strategies and key evidence (demonstrating that we meet Ofgem's minimum requirements).

Part 2: Key outcomes resulting from WPD's stakeholder engagement activities.

Part 3: **Key outcomes resulting from WPD's consumer vulnerability activities.**

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OUR SOCIAL OBLIGATIONS STRATEGY

IMPROVE OUR UNDERSTANDING OF
VULNERABILITY

First UK company to fully comply
with the British Standard for Inclusive
Service Provision (BS18477)

IMPROVE THE ACCURACY OF THE
PRIORITY SERVICE REGISTER

Contact every registered customer
every two years

EXTENSIVE SUPPORT DURING
POWER CUTS

4,700 field staff are all trained in
vulnerability and we distribute free
cut crisis packs

REFERRAL NETWORKS TO ADDRESS
FUEL POVERTY

14 core fuel
support over 15
£3.5 mill

WPD's Priorities *Key actions*



Approach
WPD PSR c

- Established 2
- Update custo
resilience adv
support

- ☑ Over 900,000 contacted
- ☑ 9.2 (out of 10) customer

the last 12 months
170,254 proact
targeted welfa

1. Introduction

A disruption to WPD's network can have a huge impact on the lives of the people we serve. We all have the potential to find ourselves vulnerable at one point or another, if a particular set of circumstances arise. It is therefore vital that we identify vulnerable customers, seek to understand their individual needs, and ensure we have the right skills, services and partnerships in place to be able to tailor our approach to match.



Our approach

Vulnerability can be transient or permanent, and the issues facing individuals can be unique and complex. This means that a one-size-fits all approach must be avoided. WPD may be an engineering business, but customers are at the heart of everything we do.

We work tirelessly to build a tailored, customer-centric approach into all of our activities, with staff at every level of the company empowered to do the right thing and equipped with the appropriate knowledge and tools to provide services that are accessible, inclusive and fair for all.

Year-on-year improvement

Independent surveys of the customers supported by WPD's 2018/19 consumer vulnerability projects returned the highest ever average satisfaction of 9.51/10. I am proud of this achievement but we refuse to stop there. In total we've engaged over 9,200 stakeholders on our consumer vulnerability programme in 2018/19 via 97 different activities and forums. Their feedback has helped us to set ambitious goals to further improve, scale-up and embed successful schemes, and develop trials to meet the needs of vulnerable customers in new, innovative ways. As we explain elsewhere (on pages 4-10) we have also focused strongly on understanding and responding to changes in the way customers use the electricity grid - seeking to safeguard our vulnerable customers in particular.

We voluntarily undergo rigorous scrutiny each year as part of the Customer Service Excellence Standard and British Standard Institute's inclusivity standard (BS18477). Assessors review our strategy, action plans and the outputs of our projects; they follow our services step-by-step and, perhaps most importantly, they interview a range of staff to ensure our approach is embedded across WPD.

A programme defined by stakeholders

The stakeholders I meet each year, particularly at WPD's annual workshops and Customer Collaboration Panel, tell me that vulnerability during power cuts must be our paramount concern. We therefore provide a range of support services during outages, maintaining regular contact with Priority Services Register (PSR) customers to enhance their resilience ahead of incidents and working extensively to identify hard-to-reach customers that are in greatest need of our support. As a result, the number of PSR customers we proactively contact each year and the number of new customers added to WPD's PSR are now both at record levels.

Stakeholders sometimes challenge us on how far we should go. Major energy users, for instance, have asked whether it is our role to address fuel poverty. My response is clear: while our core focus must always relate to the PSR, it is imperative we also take action where we discover clear links to other associated issues that WPD is uniquely placed to address. Considering our position in society, during the power cut calls we handle every day, we touch the lives of a significant number of customers who in the process of our service reveal that they struggle to afford energy and heat their homes. While WPD is not the cause of these issues, we have a key opportunity to help address them. As an example, the Competition and Markets Authority revealed that only 1 in 5 households with incomes below £18,000 have switched energy tariff in the last three years. The Welsh Assembly Government tell us that proportionally more Welsh consumers fall into potentially vulnerable groups, including disability, cold homes and low income than anywhere else in Britain.

As a socially responsible business, we build trust by maintaining long-term relationships with customers, providing holistic support and using innovation to deliver the best outcomes possible for customers - that's the company I want to work for and lead.

Phil Swift,
WPD Chief Executive

This 'Part Three' submission



Alison Sleightholm
Resources and External
Affairs Director

A key responsibility within my team is to develop and co-ordinate WPD's consumer vulnerability strategy and ensure that everyone working for WPD understands the role they have to play. I lead by example, meeting with stakeholders at a wide range of forums to understand their views. This year I led workshops to discuss the creation of WPD's first ever "social contract" as part of the upcoming RII0-ED2 Business Planning process - defining the commitments stakeholders expect, including support for customers in vulnerable situations.

Our focus in 2018/19

As outlined in WPD's Part Two submission, WPD faces an unprecedented change in our operations as we become a Distribution System Operator (DSO). For example, we are beginning to roll out flexibility services that reward customers for helping us to manage the network by altering their consumption in response to times of high generation output or constraints at times of peak demand. While this brings exciting opportunities for customers, it carries risks as well. If only those that are digitally engaged and able to use these new services can access the benefits from a transformed energy system, then we will leave the vulnerable behind. This is unacceptable. It isn't enough to simply protect customers, we must make it easy for them to participate and benefit. For this reason, we have added a new pillar to our vulnerability strategy: "leave no vulnerable customer behind in a smart future". Moving beyond aspirations, to deliver demonstrable actions and benefits for customers. We set four initial objectives for 2018/19:

- Know our customers and get the basics right
- Help customers to lower their demand and re-engage them about energy
- Deliver joined-up services with others
- Enable customers to participate in flexible energy services.

These are explained in more detail on page 2. Reflecting the prominence of this new commitment within our consumer vulnerability strategy and the subsequent action plan we devised for 2018/19, the remainder of this submission is therefore structured around these objectives.

Our focus is always to deliver measurable outputs that benefit customers and continually improve our services.

- We work with stakeholders to embed successful projects into our operations while continuing to identify ways to refine them over time. Examples of this are denoted by an "enhanced" symbol.
- At the same time, we collaborate with others to develop "new" innovative approaches, of which there are over 45 examples.



Key outputs we've delivered:



1.1m PSR customers proactively contacted



£6.4m annual savings for 17,764 fuel poor customers



Highest ever PSR satisfaction of 9.51/10



142 total partnerships (including 87 PSR referral networks)



29,051 new PSR customers signed up directly

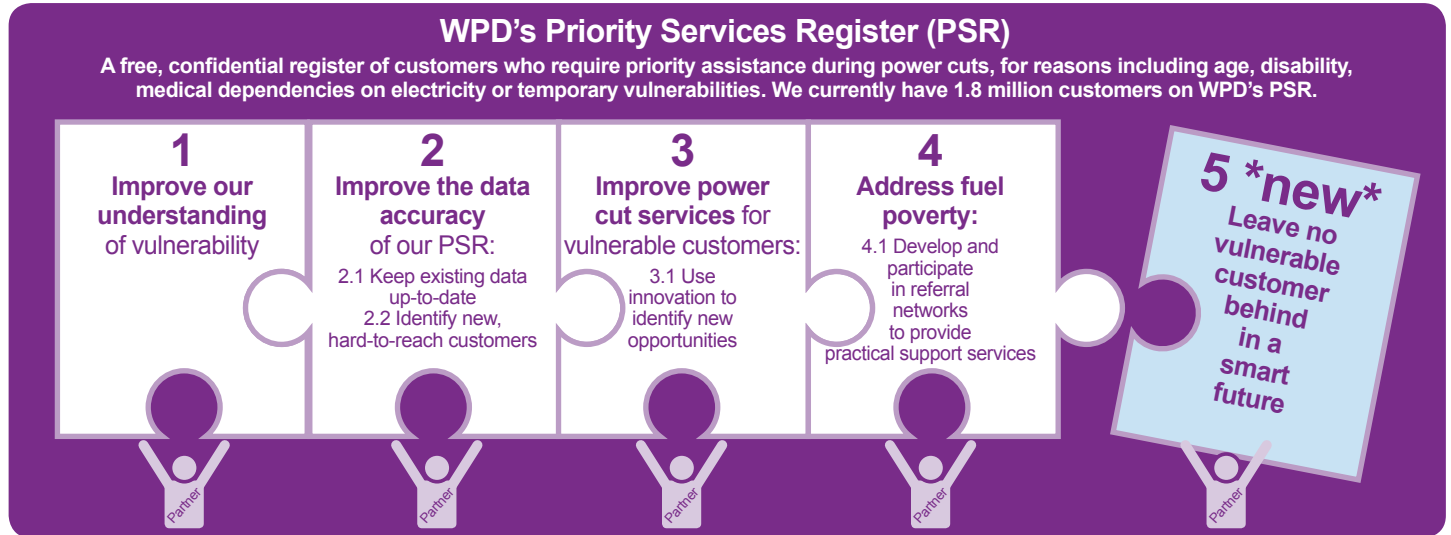


36,832 customer records shared with water companies to date

2. Our consumer vulnerability strategy

“WPD’s consumer vulnerability strategy continues to provide a robust framework for managing an impressive programme of consultation and engagement with customers. The extent to which WPD works with, and contributes to, the wider community is exceptional, particularly in relation to supporting vulnerable customers. Much better outcomes for customers are achieved through a wide range of targeted outreach projects and partnerships.” Customer Service Excellence Standard - Assessor 2019

Our consumer vulnerability strategy in summary:



2.1 Core strategy

A consistent, enduring approach

WPD's consumer vulnerability strategy has been in place since 2013. It is covered in greater detail in Part One, page 3 and summarised in the graphic above. Our strategy's core focus is, and will always be, to protect and support customers in vulnerable situations during power cuts, ensuring they do not suffer detriment and instead receive additional, tailored support. Stakeholders and expert external assessors review this focus each year, and the strategic pillars that support it.

Stakeholders see WPD as having a duty to go beyond this core focus by providing support in related areas including fuel poverty, but they insist there must always be a clear link back to supporting customers in relation to power cuts. Our research in 2018 revealed that fuel poverty is a key route via which WPD can identify hard-to-reach customers for the PSR. Data analysis revealed a 43% correlation between the two issues, with 78% of support agencies across our region stating that the clients they deal with regularly face both issues.

A crucial new pillar to this strategy

We've made a significant addition to our strategy this year in light of our wider business transition from a Distribution Network Operator (DNO) to a Distribution System Operator (DSO) - see Part Two. As we work to deliver a smarter, more flexible, dynamically-operated energy system, it is vital we "leave no vulnerable customer behind in a smart future". We are an essential service provider, and as these services evolve, our responsibility to provide fairness and access to benefits for everyone is more important and relevant than ever.

Dramatic changes in the way energy is generated, stored and consumed brings risks for customers who feel less able to participate. We must guard against unfairness (in terms of the distribution of system benefits and costs) and leaving people behind (in terms of the complexity, confusion and cost to participate in the full range of benefits). To date, at an industry level there has been limited success in spelling out what the principle of "no one left behind" means in practice, so we've made it an explicit strategic priority to do so, particularly in relation to vulnerable customers.

As our understanding of what it means to be a DSO evolves, the impact on customers and the steps we can take to protect, support and benefit them will also change. Reflecting the current progress of our DSO delivery, and most importantly to ensure we move beyond words to practical action, we have set four key objectives to ensure we "leave no vulnerable customer behind in a smart future". As the focus for our 2018/19 consumer vulnerability programme, the remainder of this submission is structured around these objectives.



Know our customers and get the basics right

We proactively contact >1m vulnerable customers a year. This is a chance to build additional insight



Help customers to lower their demand and re-engage them about energy

Build the confidence of customers to manage/use their energy in different ways



Deliver joined up services with others

In particular with other utilities, in order to build trust and create relationships for future whole system services/products



Enable customers to participate in flexible energy services

Develop ways to support participation without complexity or disruption

Partnerships remain critical to our success

There of course remains more to do, but these objectives have helped WPD to get significantly underway. Stakeholder engagement will remain intrinsic to our consumer vulnerability approach - it ensures we are responsive to the changing needs and priorities of vulnerable customers and that we design flexible services to match. We then work with expert representatives to continually refine our approach and maximise the positive impact of our actions. We have a formal approach to partnerships (outlined in greater detail in our full strategies in Part One, pages 2-3) - with contracts and memorandums of understanding in place, containing clear targets and services provided.

The factors influencing vulnerability can be varied and complex. Partnerships therefore underpin our strategy - we utilise their expert knowledge and trusted services as a gateway to engage and appropriately support customers.

We do so in four key respects:

Locate customers:

- Vulnerability can be hard to find
- Mapping and data analysis is a first step
- But local knowledge is vital

Support customers:

- Some funding is available for energy efficiency measures
- But little is available for finding and supporting the fuel poor with a wider range of interventions
- There is an opportunity for WPD to enable more holistic approaches

Engage customers:

- Supporting the vulnerable means engaging with services they trust
- Direct engagement with the health sector is particularly challenging
- Many voluntary sector agencies already have links to other services we can build on

Evaluation:

- Many projects are carried out by agencies, but not all are comprehensively evaluated
- Public funding typically hasn't required full evaluation
- WPD requires extensive evidence of the value we deliver as it is customers' money we're spending

2.2 Priorities for 2018/19

Alongside our strategy we create a new action plan every year. In 2018/19, this action plan was structured according to our four key objectives (left) and was reviewed by WPD's CEO and wider stakeholders at our annual workshops. Acting on their feedback, we identified four principles that should underpin every activity, which you will find at the heart of every initiative outlined in this submission:

Remember our core purpose

The PSR and vulnerability in relation to power cuts must be the core focus of every new project

Target areas where support is most needed

All projects must use WPD's social indicator mapping data to target customers most in need

Deliver maximum value to customers

Set stretching targets for projects, drive consistency, and share learning across our schemes

Develop links with health services

Collaborate with the health sector to target hard-to-reach customers

3. Measuring social value

3.1 Our approach

Why it is needed

In order to deliver a consumer focused, socially responsible and sustainable service for our customers - who pay for everything we do - it is vital that we develop a thorough, sophisticated understanding of how we create and measure social value. Our commitment to take action as a result of stakeholder feedback is paramount, but we must go further by ensuring the actions we take are the most appropriate ones and deliver the maximum possible positive impact for customers. Engaging over 9,200 stakeholders specifically on our approach to consumer vulnerability in the last year is an excellent start, as it ensures we are in tune with their priorities and can shape our programme around them. But when it comes to deciding the specific scale of our actions and expenditure it is important to devise methods to specifically measure value in a robust way.

The outcomes we deliver are a combination of quantitative and qualitative. For example, the combined impact of our 18 fuel poverty schemes led to confirmed savings of £6.4 million for the customers supported. When compared to a total cost of £1.1 million, this represents a cost benefit of £304 per customer referral. However, in many cases benefits are qualitative (e.g. tens of thousands of hard-to-reach vulnerable customers identified and registered on the PSR for the first time; with periodic contact from WPD to enhance their overall resilience). Here we must take additional steps to determine if customers value the outcome sufficiently to justify the cost to deliver it.

Our approach

WPD's approach to measuring social value is set out in more detail in Part Two, page 3. To avoid repetition it is therefore only briefly summarised here. In summary, WPD's attempts to devise an effective, robust way to measure social value for the last four years, including research with Price Waterhouse Coopers to assess a wide range of techniques used across a variety of sectors and industries, has culminated in a three-stage approach:

- 1. Quantitative reporting**
Wherever possible express the impacts of our actions in measurable, numerical terms (see the quantified outputs in green text/boxes throughout our submissions)
- 2. Monetary stated preference research**
Use 'Willingness To Pay' (WTP) survey methods to derive the intrinsic value customers place on a range of possible qualitative outcomes, by asking what they would hypothetically pay to see them delivered
- 3. Qualitative triangulation research**
Test and provide context behind the WTP findings, understand what's driving customers' responses and prioritisations and provide a qualitative source of prioritisation/WTP

Collaboration: This year we achieved industry-wide collaboration for the first time, delivering joint stated preference valuation research to derive consistent values for a number of actions we are all working to deliver in our respective regions. The stated preference method uses specially constructed questionnaires to derive the intrinsic value customers place on a range of outputs we can deliver. Social value is based on the amount people hypothetically state they would be prepared to spend to see them delivered. We are not therefore asking customers to pay more to fund these activities, but using the technique to reveal the intrinsic value to them of the actions we can deliver. In total we tested 18 potential actions, grouped into five categories.

The derived values should not be used in isolation to justify expenditure. The research should be used as a mechanism to prioritise actions based on the value placed by customers on the benefits each action is likely to bring.

Triangulation: In addition to these quantitative surveys, we commissioned eight focus groups with customers (weighted to ensure even representation across ages, social grades, genders and urban/rural dwellers) to test the results via qualitative research. This revealed that when more time is spent with customers to help them understand the terms used, wider context and existing performance levels, some of the values they state change. For example, upon learning that WPD's PSR currently contains 1.8m customers (much higher than they initially anticipated) the action to maintain contact every two years to keep

details up-to-date and provide advice increased significantly in value. This, in turn, will inform our future social value research to be undertaken later this year. We plan to reverse the order with qualitative research taking place before the quantitative exercise so we can refine the phrasing, context and technical explanations provided to customers ahead of the surveys. This will enable them to feedback from a more informed position than ever before.

3.2 Values revealed

Of the 18 actions tested in total, four are pertinent to this Part Three submission, and are shown below:

Action	Value per customer	Value per customer	
		Quant.	Qual.
1 Identify customers likely to be vulnerable during a power cut and sign them up to the PSR	£2.35	★	★
2 Provide support to vulnerable customers also impacted by fuel poverty via a range of outreach support and advice services	£1.85	★	★£1
3 Develop a wide range of partnerships to ensure vulnerable customers receive holistic support and advice beyond power cuts	£1.09	★	★£2
4 Contact all existing PSR customers every two years to update their details	£0.86	★	★£1

Key: ★ = High value; ☆ = Medium; ☆ = Low (but still valued)

The reasons given for greater value attribution at the triangulation stage included:

Action 2	Fuel poverty perceived as an increasing problem by many, especially those with family/friends affected. Some concern this isn't WPD's responsibility (should sit with suppliers) but high value attribution when the potential impacts of WPD's schemes understood (e.g. existing levels of savings achievable)
Action 3	Felt this could negate the need for action 1 and would be more cost effective in the round. Removes duplication of effort and expenditure across different utility bills
Action 4	Less of a necessity than identifying new potentially vulnerable customers (onus should then be on customer to keep updated) but significant value in light of scale of PSR (1.8m) and need to remind customers and refresh advice and offers of additional support

3.3 Cost benefit of our actions

This research is helping us to develop a programme with stakeholders that not only delivers service improvements, but returns maximum value to customers. The network portion of bills is agreed and won't change, but it helps us to prioritise actions, resources and expenditure, ensuring the outcomes we deliver are significantly cost beneficial. Where there is a range in potential value, we always take the lowest figure to avoid any risk of overstating the benefits. For example:

Value	Outcomes delivered by WPD (incl. any additional savings)	Cost	Cost benefit
Identify customers likely to be vulnerable during a power cut and sign them up to the PSR £2.35 per customer	29,051 direct sign-ups to WPD's PSR. Also: <ul style="list-style-type: none"> • 87 PSR referral networks identifying hard-to-reach customers • All 18 WPD fuel poverty support schemes (50% of total funding considered in this action area and 50% within the fuel poverty action below) • Specialist empathy training for front-line staff from a range of organisations (e.g. Parkinson's UK, Royal National Institute for the Blind, Kidney Wales, Dementia UK) to identify warning signs of vulnerability during all inbound calls • Social indicator mapping to identify high deprivation areas, including regions with high PSR eligibility but low take-up • PSR videos created for referral partners (explaining benefits for range of hard-to-reach groups) 	8p per customer (£600k total)	£2.27 per WPD customer
Provide support to vulnerable customers also impacted by fuel poverty via a range of outreach support and advice services £1.85 - £2.85 per customer	17,764 fuel poor customers supported to save £6.4m a year: <ul style="list-style-type: none"> • Four Power Up schemes (customers identified via WPD's PSR data cleanse) - 8,693 customers saved £1.8m • Four Affordable Warmth schemes (customers not known to WPD support via existing outreach organisations/services) - 6,478 customers saved £3.9m • Power Up Health (recent launch) - 239 customers saved £139k to date • Affordable Warmth Off-Gas (with Scotia Gas) - 335 customers saved £87k • Power Up Boost (Bristol Council) - 555 customers saved £108k • SAVE Energy (Walsall Council) - 539 customers saved £96k • Six Consumer Vulnerability Innovation Fund (recent launch) - 925 customers saved £269k to date 	7p per customer (£547k total)	£2.59 per WPD customer
Contact all existing PSR customers every two years to update their details £0.86 - £1.86 per customer	Proactively contacted 1.1m PSR customers (946,127 data cleanse team, 166,783 during power cuts). Also: <ul style="list-style-type: none"> • PSR customers texted ahead of data cleanse call (leading to 10% increase in successful calls) • Self service weblink sent to customers offering quick easy updating of PSR details • Wrote to 327,595 PSR customers who had not had any contact with us in 3+ years 	16p per customer (£1.2m total)	70p per WPD customer

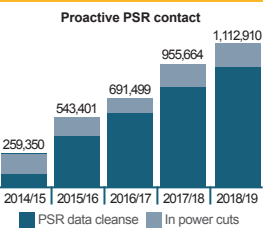
4.1 Know our customers and get the basics right

SUMMARY

Reach: 1,112,910

Cost: £1.4m

Track record:



65
OUTPUTS
OVERALL

For example:



166,783 PSR customers proactively contacted during power cuts



Data cleanse reaches 1.1m PSR customers



Improved Social Indicator Mapping open-sourced for partners



App promoted to 5,930 sleep apnoea customers



Strategic intent: A fundamental component of WPD's approach is "fairness" - ensuring equal access to services and benefits for all customers, where no one suffers detriment. Our efforts historically have focused on fairness during power cuts. However, the shift to a decarbonised future, with increasingly decentralised generation and services that incentivise flexible energy use, will present a significant change for customers. We must be mindful that vulnerable customers can participate fairly in these services, and mitigate the risk of leaving them behind as a result of complexity or cost.

As an essential service provider with a clear aspiration to be the best, WPD's starting point must be to know its customers - understanding their needs and building services that respond accordingly. For consumers in vulnerable situations, whose needs vary and for whom the consequences of getting it wrong are more severe, this is crucial. WPD's efforts to improve the data held on our vulnerable customers has led to significant increases in trust, satisfaction and the overall scale of outputs and benefits delivered for customers (see summary on page 1). As we now face a significant change in our network operations we will build on our efforts to date, by developing a more holistic view of vulnerable customer requirements, specifically in relation to their abilities to participate in a smart future. This is the first step, enabling WPD to remove barriers and develop the specialist services and projects required to make it easy for them to benefit.



Stakeholders said: *Citizens Advice, Sustainability First and Centre for Sustainable Energy (CSE):*

Understanding customers' needs, and keeping this up-to-date by building long-term relationships, is an essential first step. This will allow us to understand the capacity of customers to participate in a smart future and enable WPD to develop bespoke, tailored opportunities to help vulnerable customers to do so.

Workshops and Vulnerability Conference: *Where customers cannot participate, WPD must offer ways to protect them. But this must start from the basis of knowing who WPD's vulnerable customers are. The process of doing so will help to build relationships and levels of trust so that customers are more likely to accept support, while the data itself can be used to identify those in areas where smart operations are being rolled out.*

In the last 12 months WPD's focus has therefore been to:

- **Improve the quality of existing data** on vulnerable customers
- **Improve the targeting of our existing services** by identifying areas with high concentrations of customers requiring support and broadening our definitions of vulnerability (beyond ability to cope in power cuts)
- **Identify new hard-to-reach customers** not already known to WPD but who would benefit from our support.

We did:

4.1.1 Improve existing data quality



Objective:

- Contact at least 850,000 PSR customers a year to update their records and give power cut advice (with an overall target to call every PSR customer every two years)
- Work with stakeholders to identify ways to refine our data cleansing processes, maintaining our industry-leading standards while increasing efficiency.

PSR data cleansing hits one million contacts a year



Poor quality PSR data can restrict our ability to contact customers efficiently during power cuts. As we look to the future, if we are to offer services that are truly bespoke and tailored to individual needs, especially new smart services such as 'flexibility' (see Part 2, page 7), then building a full, accurate and up-to-date picture of customer requirements is key. If we deliver an excellent service when doing so, we also stand to build long-term relationships where customers know WPD and trust us to deliver.

WPD has two dedicated data cleanse teams (20 staff) that proactively contact every PSR customer by phone to update their details, give power cut advice and offer additional fuel poverty support. 55 wider Contact Centre staff are trained to top-up this activity during quiet periods (increased by eight this year). Stakeholders strongly encourage us to favour direct, in-person contact. This enables us to provide essential context and reassurance, give clear explanations and be best placed to identify the nuanced needs and preferences of each customer that sit behind the standardised industry needs codes. For those we don't reach by phone, we send an easy-read letter and pre-paid update form in the post.

The sources of our success are: 1) continually reviewing and improving our processes based on feedback from expert stakeholders (over 9,200 consulted on vulnerability in 2018/19); and, 2) constantly training our staff to enable them to identify and support customers' needs as empathetically and knowledgeably as possible.

☑ **Output (enhanced):** In the last year we've added to sessions on dementia and visual impairment, with training events for all of our PSR team staff with Parkinson's UK, on mental health issues including innovative suicide awareness training and with Kidney Wales (enhancing our approach to those dependent on electrical equipment such as dialysis machines). This is in addition to the vulnerability training delivered to all WPD engineering staff.

☑ **Output (new):** An example of the increasingly tailored nature of our service: we promoted WPD's smartphone app with power cut alarm feature to 5,930 customers with sleep apnoea (it will alert them if their equipment stops).

This embedded, long-term commitment to PSR data quality is delivering huge benefits:

Impact delivered:

- **Enhanced:** 1.1m PSR customers proactively contacted in 2018/19 - our highest ever, increasing by 61% in two years (85% via data cleanse teams, 15% via PSR calls during power cuts)
- **Enhanced:** 30% of records successfully updated
- **Enhanced:** Highest ever PSR customer satisfaction of 9.5/10 - increased for the fourth consecutive year demonstrating our ambition despite the established nature of the process
- **Enhanced:** 251,693 out-of-date records removed
- **Enhanced:** WPD has increased the accuracy of the information held on the PSR by 25% since 2016, with no records older than three years without successful contact



▲ Members of WPD's PSR data cleanse team following a training session from Parkinson's UK

Given our extensive efforts to identify new, hard-to-reach customers, the overall size of the PSR is increasing every year. This brings a service challenge - we set the commitment to contact all PSR customers every two years when we had c.750,000 registered in 2013. Stakeholders value the service so highly we have maintained this target despite the overall PSR more than doubling to 1.8m in six years. To achieve this, we've engaged at our Customer Collaboration Panel and consumer vulnerability surgeries to devise smarter ways of working. As a result:

☑ **Output (new):** Learning from our Power Up scheme partners, who find more customers respond to their contact if a sign-posting message is sent beforehand, we now send a text or email ahead of every data cleanse call or letter. This has led to a 10% increase in successful calls.

☑ **Output (new):** 14% of customers chose to update their details via self-service, using the weblink included, freeing up call handlers for customers that prefer to speak in person.

☑ **Output (new):** Stakeholders tell us that, ahead of a power cut, customers tend to be optimistic about their resilience levels, so we should promote the PSR to every customer during incidents. We added details on how to register to every power cut incident pin on our online power cut map, and discussed the PSR when we contacted 255,210 customers after a power cut to offer an explanation and apology. We have also recently begun to include a link to sign up to the PSR within every text message we send during incidents, of which there were 647,063 in 2018/19.

Enhanced power cut services as a result



Stakeholders, including Ofgem, encouraged us to introduce more granular reporting to ensure data is truly driving timely and targeted PSR services, and to track annual improvements going forward. This increase in data quality enables better day-to-day services, such as:

☑ **Output (enhanced):** Last year we proactively contacted 166,783 PSR customers during power cuts (an increase of 44% over two years, despite lowest ever frequency and duration of power cuts).

☑ **Output (new):** Beneath our longstanding target to call all medically dependent customers within three hours of an incident (100% in 2018/19), we now record the profile of these calls: 71% were called within one hour and 96% in less than two hours.

☑ **Output (new):** Dispatched nearly 4,000 generators to incidents in 2018/19 – 35% due to there being PSR customers affected. This led to quicker restoration for 3,318 PSR customers.

4.1.2 Targeted services



Objective:

- Identify hotspots of high vulnerability so we can target services to where there is greatest need, making the most effective use of expenditure
- Consider the widest possible range of indicators that impact consumer vulnerability, including the potential of customers to participate in smart services
- Ensure our vulnerability data is complete, and it is available and formatted in a way that benefits all our partners, large or small
- Locate gaps in PSR coverage and plan where to focus recruitment initiatives, including partnerships with organisations already working in those areas.

Best-in-class data mapping empowers partners



It is vital we take steps to continually update and improve our understanding of the nature, scale

and distribution of vulnerable households across our region. Only then can we devise and target appropriate outreach schemes and strategies to address them. We therefore conduct extensive data mapping to identify areas with the highest concentrations of vulnerability. Drastically improved outcomes for customers are achieved through the ability to target outreach projects to areas of the highest vulnerability or deprivation.

Working with Centre for Sustainable Energy, we have undertaken analysis, using the widest possible range of publically available datasets. While social indicator mapping is now conducted by a number of DNOs, we've consulted extensively with stakeholders via workshops, our Customer Collaboration Panel (CCP) and a specific consumer vulnerability conference, to refine our approach and set ourselves apart by providing the best and most accessible mapping possible. We have:

☑ **Output (enhanced):** Expanded our mapping in 2018 to include 36 unique data sets. In particular we worked with CSE to understand key factors that impact customers' ability, knowledge and confidence to manage their energy, in light of the range of smart services coming in the near future. Recognising age, health, financial capability and the existing energy efficiency of properties as key factors, we included a range of datasets to match.

☑ **Output (enhanced):** While first developed to improve the targeting of WPD's schemes, engagement with WPD's 142 partner agencies revealed that our data had the potential to deliver wider benefits by identifying people for support from the wider services offered by these agencies, often unrelated to energy. For instance, the Fire Service can utilise the data to identify communities with low resilience levels (to emergencies) and target those areas for home fire safety checks. Moreover, Mind, Age UK and British Red Cross can utilise data on age, disabilities and people living alone (increasing the likelihood of poor mobility and social isolation) to target their in-home support and befriending services. As a result, in early 2018 we made our data publically available to download in excel format.

☑ **Output (enhanced):** We actively promoted this to a wide range of stakeholders - sending details to 156 agencies identified via our biennial "Horizon Scan" exercise to identify active, relevant outreach services in our region that share common objectives with WPD and have potential for collaboration.

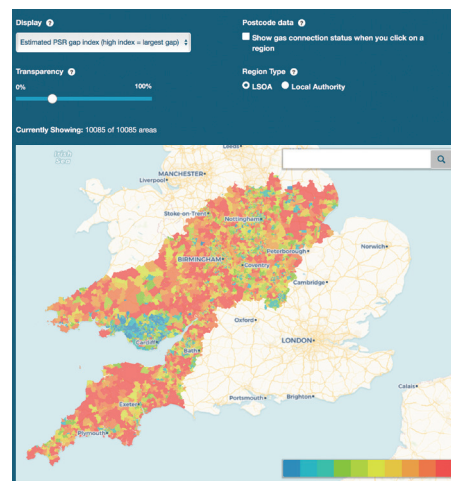
☑ **Output (new):** While commending our intent, stakeholders told us the data tended to be useful mostly for larger agencies with staff with analytical expertise. By contrast, smaller organisations that are skilled to deliver care and support in the community but not to analyse high volumes of data, often found the data too complex at a granular level to drive improvements. Learning from this, we have significantly enhanced the accessibility of our data. In October 2018 we launched a new, interactive web-based facility which presents the analysis in an easy-to-view format.

We consulted our CCP and ran workshops with 20 existing partner agencies to understand their requirements and shape the features of our new site. The main feedback was to enable users to apply bespoke filters to tailor the data to fit with the services their agencies provide.

Key features of the website now include:

- Maps with zoom-in feature, to view data down to street level
- Regional view options via local authority or LSOA (Lower Super Output Area)
- Optional overlay to show the gas connection status (revealing electricity-only areas)

- Ability to filter data by 28 different criteria, from traditional areas of DNO concern such as "PSR eligibility" and "fuel poor households" to newer areas that may impact consumer vulnerability in relation to future smart services, such as "private rental dwellings", "poor EPC (Energy Performance Certificate) ratings", "long-term unemployment", "mental health benefit claimants" and "distance from key services"
- An option to export the data into a variety of formats to enable it to be overlaid with partner agencies' internal databases.



Impact delivered:

- **New:** Promoted the new tool to 156 existing agencies in our region (identified via WPD's latest Horizon Scan) and 1,414 wider vulnerability stakeholders on our database
- **New:** Stakeholders tell us the new site helps them to better identify vulnerable customers, target their services and deliver wider benefits. It is encouraging agencies to collaborate with WPD to develop new innovative services

"Having recently launched our fuel poverty strategy, we've keen to build up our insight capabilities to ensure we can better understand the specifics of the problems around fuel-poverty in the city, and more effectively target resources. Your vulnerability map dataset is very helpful." - Nottingham City Council

- **New:** In the first five months the tool has been used 1,555 times
- **Enhanced:** WPD now uses the data to drive every project in its consumer vulnerability programme, ensuring support is always directed to areas of greatest need. This delivers significant benefits to the customers supported and improves the effectiveness of WPD's expenditure. As a result, the average saving per customer via WPD's fuel poverty schemes (see pages 7-9) has increased by 86% since 2016, while the average cost per referral has halved to £63.

4.1.3 Identify the hard-to-reach



Objective:

- Data only has value if it is used to improve services for vulnerable customers. Therefore, WPD's social indicator data is collected with the following uses in mind:
- Identify areas with high PSR eligibility, but low current take-up
- Identify partnership opportunities to target hard-to-reach customers via trusted agencies in those specific areas
- Prompt new innovative approaches to address the specific deprivation issues revealed.

Vulnerability conference prompts innovation



To launch WPD's social indicator mapping tool and discuss how it can be used to develop new collaborative approaches, in October WPD hosted a consumer vulnerability conference with 31 stakeholders from a wide range of consumer representatives, charities, community groups, local authorities and emergency services. Demonstrating the value of WPD's approach, at the outset of the day attendees identified "finding those in most need of support" as the joint biggest challenge their organisation faces.

In addition to introducing stakeholders to the new web-based tool, the event sought to:

- Identify the key challenges for vulnerable customers and service providers and seek views on WPD's role to address them
- Present WPD's existing programme and identify areas for improvement and progress
- Discuss new innovative approaches that WPD's social indicator mapping may enable.

Output (new): As part of the latter, WPD used the conference to launch our Consumer Vulnerability Innovation Fund (see page 9 for further details).

When planning the conference, we recognised similarities in the characteristics of the stakeholders in attendance to those involved in WPD's community energy scheme events (see Part Two, page 8), many of whom do not have an in depth understanding



Care and Repair Cardiff's Operational Manager explains WPD's Affordable Warmth scheme

of WPD's role but share our objectives to support customers in their communities. We learned from this, asking three existing project partners to share case studies of their work, to stimulate ideas and encourage participation. Coordinating the event in this way allowed stakeholders to seek views on how to refine WPD's and their own approaches and identify opportunities to build on or replicate these with others.

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WPD delivered 37 outputs as a result of this forum. For example:

Impact delivered:

- **New:** Launched a scheme with a mental health organisation to sign up customers to the PSR and provide training to WPD's PSR team
- **New:** Added new partners to WPD's Power Up and Affordable Warmth schemes with expertise to assist customers to understand Universal Credit
- **New:** Trialled expanding an Affordable Warmth scheme to 12 months to test the value of year-round support (previously targeted to winter only)
- **New:** Implemented a policy to award partners with two-year contracts, providing greater certainty over funding and enabling more strategic planning and opportunities to explore innovative approaches
- **New:** Launched an online demonstration of how to use WPD's new, interactive social indicator maps



Expanded PSR referral networks show the value of enhanced targeting



Stakeholders tell us that working with trusted agencies to identify hard-to-reach customers has a much greater impact than direct outreach from WPD. In response, three years ago, WPD began to develop a network of partners with existing outreach services to support customers in a variety of vulnerable situations. The agreements utilise their diverse range of relevant, front-line services to identify customers. Most importantly we go beyond signposting (which stakeholders tell us is easier to do and raises awareness, but is ineffective in resulting in new PSR customers) to gain informed consent to directly sign-up customers.

Initially WPD did this with agencies already known to us, irrespective of their location. This successfully proved the value of our approach but led to patchwork geographic coverage, with support provided only within the territories historically covered by these agencies. Last year, we devised a new strategy to utilise WPD's social indicator mapping to identify areas of high PSR eligibility and low present take-up, to proactively reach out to new agencies in those regions. Aiming for three schemes in each of WPD's 27 operational districts, we set a target to have 81 partnerships in place by March 2019. We achieved this target, ahead of schedule, in December 2018.

This year we successfully put that strategy into action and, in addition, sought to:

- Achieve a better balance in the types of referral agencies we work with (between charities, local authorities and health services). Each grouping tends to work with different demographics of customers, so we aimed to reduce the risk of overlap and broaden the types of hard-to-reach customer we can engage
- Encourage joint analysis of our social indicator data. We can use this to support partners in expanding the areas they traditionally target to those where PSR eligibility is greatest. This will maximise the positive impact of both their PSR outreach and their wider services.

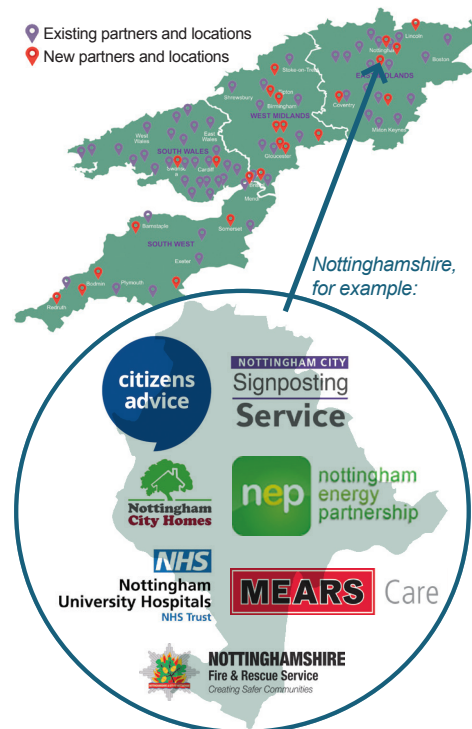
Output (new): We've added 24 new PSR referral partners - each one identified to strategically address a top area of vulnerability within WPD's overall region. This has taken our total to 87 PSR referral network partners, working across 91 locations - a 156% increase in two years.

Impact delivered:

- **New:** The best measure of the effectiveness of this approach is whether it successfully identifies hard-to-reach PSR customers that would otherwise have remained unknown to WPD. In 2018/19 our schemes led to 29,051 direct sign-ups to WPD's PSR - an increase of 56% in two years
- **New:** WPD provided training to all 87 referral partners in 2018
- **New:** Listening to their feedback, we introduced five short animated videos to explain the benefits of the PSR for key hard-to-reach groups: carers, ventilator users, hearing impaired, recent hospital leavers and sufferers of mental health issues
- **Enhanced:** Once agreements are in place, we continue to engage partners regularly to identify new opportunities. In 2018, this led to the expansion of our Fire & Rescue partnerships from three to 12, and the introduction of two-way referrals for the first time. As well as receiving new PSR sign-ups via targeted outreach efforts in low take-up areas, WPD gives every customer spoken to as part of our annual data cleanse the option to be referred for a home fire safety check. 6,661 fire service visits were conducted as a result

Output (enhanced): We've also greatly improved the diversity of the types of agencies we partner with. Following feedback at our annual workshops, this expansion has included several new health-related services, including for example, Mears Care who provide in-home health care services across the UK.

Partner type	Number of partners
Health	11 (13%)
Local authorities	29 (33%)
Charities	41 (47%)
Utilities	6 (7%)



Learning from trials that don't always work



WPD attempted an innovative trial in Bristol, partnering with services provided by local authorities (LAs). The trial included PSR sign-ups as part of renewal services for bus passes, blue badges and assisted bin collections. As an extension, we then planned to fund enabling works such as loft clearance for customers unable to do so themselves, in order to open up ECO measures like home insulation.

However, a combination of stretched local services and GDPR concerns caused the project to over-run and generate only 555 new PSR sign-ups. Considerable time was spent engaging LA Officers who, while sharing our motivation, were unable to identify LA departments that could participate on a consistent basis. While the scheme successfully identified a number of hard-to-reach customers, the scale was a poor return against the £35k investment and it failed to identify a replicable model as hoped.

Output (new): Recognising early in the project the challenges we were facing, we worked with CSE to devise a solution. We gained consent from the registered customers to be referred into WPD's Power Up fuel poverty schemes (see page 7). As a result we were able to deliver value for the investment - saving customers £108k a year through interventions including tariff switches and the installation of energy efficiency measures.

Although we did not achieve the model we had initially hoped for, we came away with actionable feedback on the importance of aligning our PSR partnerships with services that deal face-to-face with hard-to-reach customers wherever possible.

4.2 Help customers to lower their demand and re-engage them about energy

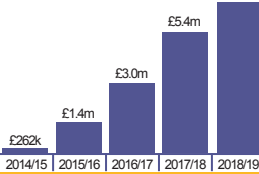
SUMMARY

Reach: 17,764

Cost: £942k

Track record:

Total savings by all fuel poor customers (across pages 7-9)



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OUTPUTS
OVERALL

For example:



17,764 fuel poor customers supported in total



£6.4m saved by customers annually



Highest ever PSR satisfaction of 9.51/10



Customers saved £96k through new social landlord project



Strategic intent: Customer benefits in a smart future will revolve around being rewarded for offering to use electricity flexibly. Services that offer these opportunities to “earn value” are not yet available on a widespread basis. We therefore have an opportunity to take preparatory steps now, via engagement and effective early interventions, so that vulnerable customers are better placed to take part when opportunities are fully rolled out.

With some exceptions, our experience from dealing directly with over a million vulnerable customers a year is that overall levels of confidence in dealing with their energy is low.

Although separate issues, research shows there is a 43% correlation between heightened vulnerability during power cuts and those living in fuel poverty. For customers struggling to afford their energy and in need of extra support during power cuts, their first priority is understandably to lower their bills and live warmer by heating their home for longer. Taking part in smart solutions and ways of using energy more flexibly is not necessarily viewed as essential. Levels of distrust in energy companies also tend to be high. Our priority must therefore be to tackle these core issues that may place limitations on households in a smart future. We must build capacity for customers to participate and benefit from a smart future. This includes supporting:

- Customers on low income, and those with limited capability to assess emerging opportunities to lower their bills, gaining greater control over their energy use
- Customers that cannot easily change their current demand (e.g. pensioners at home throughout the day) who would not be the target market for new services.

We always comply with data protection regulations and only share customer data where they have given their explicit informed consent for us to do so.



Stakeholders said: *Workshops:* WPD does not cause fuel poverty, but has a key social responsibility to address it. In light of the shift to a DSO and the new services this may bring, WPD’s fuel poverty schemes should add a new objective to help customers lower their demand, but only where it is appropriate (e.g. a customer previously using bare minimum energy and heating their home inadequately as a result should be encouraged to utilise financial savings to live warmer, not use less).

Consumer vulnerability conference: WPD should award longer contracts for successful partnerships as the additional certainty will provide the conditions to explore more innovative solutions. We must always ensure schemes are efficient, but not to the detriment of delivering the most effective support (e.g. there remains a role for face-to-face outreach which, while more expensive, delivers greater benefits to customers). Schemes should be expanded to include rental properties.

We did:

4.2.1 Engage and build trust by saving customers money



Objective:

- 10,000 referrals a year via WPD’s eight flagship fuel poverty schemes
- 100% of these referrals must achieve a measurable, reported outcome, and 85% will result in an “in-depth” intervention
- Include new measures to reduce customer demand
- Strike a balance between maximising effectiveness and minimising the cost per referral.



‘Power Up’ schemes

For WPD’s existing PSR customers: To provide the most holistic service possible, every customer contacted via WPD’s PSR cleanse is given the opportunity to be referred for fuel poverty support. WPD’s staff undergo specialist training to pick up on warning signs throughout calls, and where these signs are identified, will tailor the offer of support specifically to the customer’s individual needs. We arrange a best time for them to be contacted and gain informed consent for their details to be shared. This significantly increases take-up and goes beyond simply signposting services, which relies on the customer then making a follow-up call (which rarely happens).

We operate one scheme per licence area to ensure coverage for all of WPD’s customers. Working with stakeholders we designed a “hub” model, where we work with one lead agency that receives all referrals and carries out an initial triage assessment with the customer to review their needs. The ‘Hub Lead’ then works with a pool of sub-partners, each with differing core expertise, to ensure the customer receives support in all the areas they need but via a single point of contact to avoid multiple hand-offs. Every referral is tracked to completion, with quantifiable outcomes reported back to WPD each month.

While around 80% of referrals are handled by telephone, every customer is given the option of a face-to-face visit to ensure the service is fully inclusive. At consultation events, where we review our approach every year, stakeholders’ top concern remains that the schemes tackle root causes and aim to permanently lift people out of fuel poverty rather than offer quick fixes that only temporarily mask the symptoms, such as one-off rebates and hardship funds.

Growing from five initial service capabilities in 2016, every scheme now delivers seven key interventions:

- **Income maximisation** (e.g. benefits/ debt advice)
- **Tariff switching assistance**
- **Energy efficiency measures** (e.g. access to local insulation schemes)
- **Boiler replacements**
- **Behaviour change advice** (e.g. efficient use of heating systems)
- **Health and wellbeing measures** (e.g. NHS referrals, mobility aid installations, etc.)
- **Managed referrals to water company social tariffs.**

Continued engagement with partners and expert stakeholders ensures the support provided by the schemes continues to increase, as do the scale of the outputs delivered for customers. When we report outcomes, WPD only considers “hard” savings for customers, meaning confirmed, quantifiable measures.

Impact delivered:

- **Enhanced:** 8,693 customers supported to save £1.8 million - our largest impact ever, for the sixth consecutive year (up by 9% in one year)

	Hub Lead	Sub-partners	Referrals	Cost per head	Savings
East Midlands	Northants citizens advice	Age UK, British Gas ECO	1,339	£60	£539k
West Midlands	Coventry citizens advice	Warm Front, Macmillan	1,535	£90	£354k
South Wales	energy saving trust	Nest, Care & Repair	2,816	£52	£368k
South West	Centre for Sustainable Energy	Cosy Devon, Homemaker Southwest	3,003	£75	£532k

- **Enhanced:** Highest ever customer satisfaction achieved, with a score of 8.99/10

'Affordable Warmth' schemes



To identify and support hard-to-reach customers not already known to WPD: Delivering the same seven interventions, WPD's schemes utilise existing, trusted, outreach services to identify customers, struggling to afford their energy or to heat their homes, and provide fuel poverty advice. Rather than receiving referrals from WPD, partners use their fuel poverty outreach as a way to identify new customers for the PSR who are then referred to WPD.

The schemes follow the same hub model as 'Power Up', with one Hub Lead coordinating multiple sub-partners with the diverse expertise required to offer a fully holistic support service. While these local agencies are established and embedded in their communities, WPD's schemes specifically fund new, expanded services, to specifically target only the top deprivation areas revealed by WPD's social indicator mapping.

Output (enhanced): The introduction of WPD's new, interactive webtool to enable easier and more granular use of our fuel poverty hotspot data has significantly improved the scale of outputs delivered for customers. Savings per customer have increased by 86% since 2016/17.

Impact delivered:

- Enhanced:** 6,478 customers supported to save £3.9 million - our largest impact ever

	Hub Lead	Referrals	Cost per head	Savings
East Midlands	nep nottingham energy partnership	1,342	£63	£814k
	+10 sub-partners			
West Midlands	marches energy agency	1,438	£59	£614k
	+4 sub-partners			
South Wales	Cora & Repai Cardiff and the Vale Gofal a Threos Caerdydd a'r Ffio	2,102	£48	£2m
	+13 sub-partners			
South West	Plymouth Energy Community	1,596	£44	£508k
	+6 sub-partners			

- Enhanced:** Achieved an overall customer satisfaction score of 8.77/10

Bringing our outcomes to life: A single customer saves £9k a year

Mrs G of Bude described herself as "energy conscious" but was struggling to afford to heat her home. Our scheme revealed she had separate suppliers for gas and electricity, both on standard tariffs. She saved £200 by switching to a dual fuel, direct debit tariff, plus an additional £140 by claiming Warm Home Discount for the first time.

This led to a wider discussion about the customer's financial situation, revealing she relied solely on her pension, despite hearing loss and breathing difficulties indicating eligibility for Attendance Allowance. Mrs G was referred to sub-partner, Homemaker Southwest (HMSW), to help her with an application via a home visit.

She was awarded £86 per week (£4,451 a year). In addition, she was eligible for the Severe Disability Premium element of Pension Credit worth £56 per week (£2,889 a year), and back-dated payments of £1,399.

Innovation boost for our established schemes



WPD's enduring fuel poverty schemes have directly saved customers over £14 million in the last three years. Stakeholders tell us that we must never pursue new trials for the sake of it; WPD must first ensure successful projects are expanded, embedded and the scale of benefits are maintained and increased over a sustained period. A continual cycle of engagement with expert stakeholders each year helps to identify ongoing improvements and innovations to maximise the effectiveness of our schemes, leading to more targeted and holistic support for customers. In the last year we have:

Output (new): Introduced measures to help customers reduce their energy demand
Customers that may not feel able to participate in flexibility services in the future can mitigate the risk of suffering detriment, by sustainably lowering their use of energy. Customers should never be forced to "self-disconnect" or minimise their usage to the extent that they do not heat their home sufficiently. However, there are clusters of customers identified by our schemes that waste energy through inefficient use, misconceptions and bad habits. We've therefore worked with expert stakeholders, Energy Savings Trust, to monitor the impact of our interventions to help reduce energy demand, including energy efficiency installations and education leading to improved energy behaviours. Across WPD's schemes 4,573 customers reduced their energy consumption by a combined 13MWh, saving £1.2 million a year.

Output (new): Happiness index introduced
WPD only record "hard", financial savings for confirmed, quantifiable measures such as completed tariff switches. We know from the narrative outcomes we receive for every referral that our interventions also deliver extensive qualitative benefits, including customers living warmer, reduced stress and improved health (alleviating factors caused by cold homes that can exacerbate certain conditions.) In relation to this, stakeholders at our vulnerability surgeries saw a key role for WPD's schemes in tackling the barriers to participation in smart energy services in the future. This should be done by first building greater trust in WPD, re-engaging customers about energy and improving their ability to manage their energy use more efficiently.

If we are to increase our focus on actions to deliver these outcomes going forward, we must first devise an effective way to measure our ability to deliver them. We therefore worked with our Customer Collaboration Panel to expand our monthly research and enhance the outcomes reporting by partner agencies in order to better understand the impact of our schemes. We conduct detailed follow-up with customers two months later to assess the enduring impact from their perspective, now specifically including the impact on their happiness and well-being. The results showed:

- 80% felt more confident managing their energy
- 83% had a better understanding of how to use their heating system more effectively
- 58% were now living warmer (with 16% stating their health had improved as a result)
- 54% were permanently financially better off
- 61% felt happier as a direct result of WPD's scheme.



Output (new): Removing barriers to energy efficiency works
Workshops with the Hub Leads across WPD's eight flagship schemes identified the issue that customers cannot afford key enabling works such as loft clearances, without which energy efficiency measures cannot be installed. Discussing this issue as part of our ongoing engagement with numerous Fire and Rescue Services last year led to us now sending "hoarding" referrals for customers in need of support from their clearance schemes. This builds on our established processes which sent them 6,661 home fire safety check referrals in 2018/19.

"SAVE Energy" Project for social landlords



Responding to feedback at our conference, that identified "supporting people in the rental sector" as a key challenge facing customers in relation to fuel poverty, we devised a new innovative trial to test the best way to engage customers. We teamed up with social housing provider Walsall Housing Group, who operates in one of the most deprived areas in the West Midlands, as revealed by our social indicator data. We funded the recruitment of three Energy Champions, to identify PSR customers and deliver fuel poverty support. We identified 539 vulnerable customers all electrically dependant for heating.

Output (new): This trial, working with a network of local partner agencies, led customers to directly save £96k a year.

Output (new): With a mind to the smart energy future, we worked with Smart Energy GB to combine their data with WPD's social indicator data mapping to identify and deliver advice to 66 vulnerable customers that recently had a smart meter installed.

In light of the significant benefit delivered via this small trial, we are currently preparing to engage with the appropriate stakeholders on how best to scale this initiative to reach an increased number of customers next year.

4.2.2 Maximise the effectiveness of our schemes

Contract re-tender sees a shift in lead partners



While we have a duty to run low cost, efficient schemes, stakeholders are clear this must not cap our effectiveness, particularly for customers with complex issues who are in greatest need of support. For our Affordable Warmth schemes for example, we increased annual targets for each partner (750 referrals in 2016, to 1,250 in 2018), and our average cost per referral fell from £120 to £44. While customers continued to save significantly more than the cost of delivery, this led to more complex cases only receiving partial support. We since worked with partners to identify an efficiency "sweet spot" with an average cost per referral of £52, enabling time for necessary follow ups.

Output (enhanced): Home visits have risen from 5% to 10%, with the average cost benefit per customer increasing from £281 to £314.

Output (enhanced): To drive value and ensure greater consistency across all schemes in terms of costs, outputs and reporting standards, in November 2018 we ran a tender exercise to award two-year contracts for our Power Up partners for the first time. This provides stability for agencies that understand WPD's focus on delivery. It resulted in a change in Hub Lead for the East Midlands (now Auriga).

Output (new): The process identified two strong new agencies that will now lead WPD's expanded Power Up Health (page 9) and newly created Power Up Smart schemes (page 10).

4.3 Deliver joined-up services with others



Strategic intent: For many customers in vulnerable situations energy can be confusing enough without the need to engage with several different utilities about similar issues. To build trust and confidence in WPD, and the wider sector more broadly we can make it much easier for customers to join the PSR, gain their consent to share their data with all other relevant parties to save them duplicating effort, and then deliver joint services to prepare them for emergencies and to address fuel poverty. This helps to build the customers' awareness of the various utility services they rely on, while ensuring our efforts, knowledge and resources are combined to maximise the effectiveness of our projects. This, in turn, enables company budgets to go further by avoiding duplication, and ensures new innovative ideas are explored across the industry (not in isolation), scaling and rolling out successful approaches quickly.



Stakeholders said: *Workshops and bilateral meetings with water companies:* WPD should design and deliver a "one-stop-shop" PSR service where customers only have to register with one party for all to be informed. Now the industry-wide needs codes are more fit for purpose, WPD should reach agreement with every water company in our region to share data. After doing so we then build on these relationships to deliver joint services, particularly to address fuel poverty.

Consumer vulnerability conference: Health issues will be a major barrier to the capability of some customers to participate and benefit in a smart future. WPD must align with expert organisations to provide support, trial new approaches that have the potential for roll-out alongside wider smart services in the future, and target homes that rely solely on electricity for their heating.

We did:

4.3.1 One-stop-shop services



Objective:

- Establish plans with every water company in our area to send them up-to-date PSR records, including trialling two-way data flows
- Deliver cross-utility fuel poverty schemes.

Over 35,000 PSR customer records shared with water companies to date



In 2017 WPD worked with the cross-industry 'Safeguarding Customers Working Group' to implement updated, broader PSR needs codes and establish two way data flows between networks and suppliers. By April 2020 the UK Regulator's Network expects all water companies to be included, so that customers vulnerable to a power, gas or water outage only have to tell one organisation. When updating our vulnerability strategy each year, stakeholders tell us they expect WPD to lead in this area. They see the considerable improvement in the accuracy of our PSR (a result of four years of company-wide data cleansing) as an opportunity to begin sharing data with every willing water company in our region. In 2017/18 we launched the UK's first DNO to Water PSR data share process with Welsh Water. Building on this, in 2018/19 we engaged every water company in our region to share advice and best practice to assist them as they establish and enhance their PSR offering.

Output (new): Launched new agreements with Bristol, Wessex, South West and Anglian Water (adding to Welsh Water), meaning we now have processes with five of the eight companies in total. We are currently waiting for the remaining water companies to implement internal systems capable of receiving this data, engaging where appropriate to assist with this process.

Impact delivered:

- Enhanced:** To avoid unnecessary delay, we took a pragmatic approach and have successfully shared 36,832 records via manual processes in two years
- New:** Having tested and proven the concept on the largest scale achieved by any company in the industry, we're now working collaboratively to improve and automate these processes so they can be embedded long-term. WPD and Anglian Water have trialled sending and receiving automatic data flows via the industry gateway run by ElectraLink
- New:** Water companies are establishing PSRs and associated systems for the first time. Given the high future data volumes, to first prove the concept we've launched agreements in a controlled way. At their request we only send data for new PSR customers that join after the date our agreement commenced. As a result of this alone we now share over 2,000 records per month. However, WPD has also gained informed consent from customers to share historical data with other utilities back to 2017. This means as soon as water PSRs are established, they can take WPD up on our offer to receive thousands of back-dated records

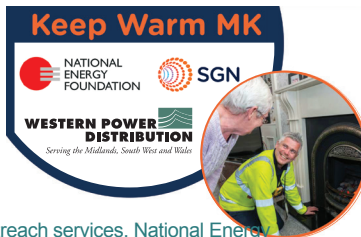
Cross-utility outreach schemes



A smart energy future, built on a whole-system approach to services, will require a holistic view of vulnerability. Moving towards this, we're building new relationships and trialling new approaches. Engagement with Scotia Gas has helped us to avoid duplicating efforts when identifying hotspots and led to a new collaborative initiative.

Output (new):

Using WPD's social indicator mapping to identify the most deprived area in our shared regions, we launched "Keep Warm MK" working with an existing provider of local outreach services, National Energy Foundation who are based in Milton Keynes.



Impact delivered:

- New:** Working together enabled us to deliver a broader range of support than if we had acted alone - offering WPD's seven fuel poverty interventions, plus referrals for facilitated connections to the gas network and carbon monoxide detectors. The scheme also identified hard-to-reach customers and signed them up for WPD and Scotia Gas PSRs, via a single registration
- New:** Training 60 front-line staff also enabled us to go further and ensure our scheme had a lasting impact by supporting local agencies to embed gas and electricity related interventions into their services on an enduring basis
- New:** 335 fuel poor customers saved a combined £87k

4.3.2 Aligning with 'Health'

Innovation fund creates six new schemes



Acting on feedback from our CCP to strike a balance between embedding established schemes and developing new innovative approaches, we launched an £80k innovation fund. Recognising health as a key factor in customers' ability to cope during power cuts that may also lead to reticence to participate in smart services in the future, we aimed to create new schemes that align with local health services to support vulnerable customers specifically living in off-gas, electrically heated homes. 40 applications led to six new approaches.

Output (new): While the priority is to trial new approaches (not all of which may work as planned), it is intrinsic to WPD's approach that we also deliver tangible benefits for customers from the outset. In total we've supported 925 customers to save a total of £269k in the first four months.

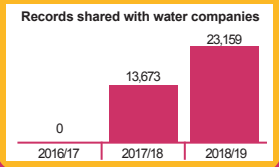
For example: A £10k project with Exeter Community Energy has built a network of existing health support groups spanning diabetes, asthma, Asperger's, autism, dementia and cancer to deliver drop-in energy advice clinics. Working in GP surgeries, the scheme addresses links between poor health and cold, damp homes by offering home visits to fit a variety

SUMMARY

Reach: 38,391

Cost: £116k

Track record:



11

OUTPUTS OVERALL
For example:



Data sharing partnerships
in place with five water
companies



Six new health schemes

of measures from radiator reflectors and LED lighting to draught excluders, while at the same time discussing their energy in order to deliver tailored, face-to-face advice and sign them up to the PSR.

Power Up Health expanded



A successful trial in 2018 with Air Liquide (AL), who provide oxygen apparatus to almost every medical user in our region, has now been rolled out across WPD's four licence areas. Engagement with AL revealed they encounter many customers on prepayment meters and/or living in cold, damp homes as part of their services. We replicated our Power Up model where AL refer customers to a Hub Lead who manage a network to deliver our seven fuel poverty interventions, but particularly focusing on warmth and affordability.

Output (new): Our South West trial supported 239 customers to save £139k, delivering a cost benefit per head of £512 in 2018/19.

Output (new): WPD's companywide scheme will be led by Nottingham Energy Partnership, identified via WPD's overall Power Up tender exercise (see page 8), who are on track to support 1,250 customers to save over £700,000 a year.

4.4 Enable customers to participate in flexible energy services

SUMMARY

Reach: 41,086

Cost: £75k

Track record: ALL NEW

9

OUTPUTS OVERALL



Strategic intent: WPD's first three objectives to achieve the commitment to "leave no vulnerable customer behind in a smart future" focus on enabling actions that address potential barriers to customer participation - e.g. low levels of trust, confidence and knowledge in relation to energy. In addition to removing these barriers, it is vital that we develop a series of test projects to demonstrate, in practical ways, how customers can take part and benefit from flexible energy services, making it tangible and easy to understand in all instances. We must also apply smart technology and new techniques more broadly, to safeguard customers that are unlikely to directly participate in services by keeping bills lower overall (so they do not bear the cost of paying for the smart network used by others) or enabling them to benefit from local, peer-to-peer energy supply (through local generation) to secure lower than typical retail prices.



Stakeholders said: *Workshops and DSO consultation:* The benefits of a smart future should not be limited to those living in new build housing where the infrastructure is designed to support their aspirations, or demographics of customers that are likely to have an electric vehicle (EV) charging point and smart household appliances sooner than the average. WPD must find workable solutions to share the benefits with all customers and come up with practical, easy to understand case studies that help customers who would otherwise be put off by the seemingly complex nature of smart products and services.

We did:

4.4.1 Benefits shared by everyone



Objective:

Facilitate technical solutions that deliver benefits directly for customers in an easy way without disruption or a requirement for an in-depth understanding of energy.

Community solar project tackles fuel poverty



Working with a range of local stakeholders WPD has supported an innovative community solar scheme that feeds surplus energy onto the network, reducing the bills of council tenants who would otherwise be facing fuel poverty.

Cannock is the second most deprived area in Staffordshire. Chase Community Solar, in partnership with the local council, had fitted solar PV onto social housing in the area, but missed the Government's feed-in-tariff subsidy deadline, so residents only benefit when they use power directly from their own panels. As around 60% of solar power is not used at point of generation, the community group were keen to collaboratively develop a more innovative model to support residents.

The community energy group did not have the time or resources to form an Energy Service Company (ESCO) that would allow them to provide all of the licenced activities associated with generation and supply of electricity. Forming part of Ofgem's "innovation sandbox" initiative, a trial was led by Green Energy Networks to test new arrangements (residents can either use the generation, or store it to sell back to the grid). They did this by creating a "SESCO" (Social ESCO) which manages the demand and generation to benefit all residents without causing them any disruption, by installing batteries that can be automatically controlled to discharge at times of peak network demand and/or cost.

Output (new): Overall, WPD:

- Assisted the application to Ofgem by explaining the current industry rules and codes
- Identified the technical requirements to enable residents to share generation across properties
- Provided monitoring at the local substation to determine the import and export levels.

Output (new): The network in the area is also constrained, so WPD was able to work with the stakeholders involved to highlight opportunities to earn additional money by selling flexibility services, on top of the direct benefits of directing surplus energy to the fuel poor in the community.

Impact delivered:

- New:** The scheme guarantees an annual 20% energy bill saving for 36 residents (£200 per customer, per year)
- New:** Helped Green Energy Networks to develop a new market model for the social housing sector, with scope to be rolled out to similar communities. This model could become an initial template for councils and housing associations to partner with community energy groups and innovative energy companies to deliver renewable energy within local communities, while at the same time protecting and saving vulnerable residents' money

Smart network design tackles fuel poverty



The government's carbon reduction policy, including last year's Road to Zero Strategy, means that Building Performance Regulations are changing significantly in April 2020; at the very least every new building will have to have an EV 7kW, mode 3, charge point. Given that an average EV uses the same volume of electricity as a domestic house, coupled with high expected volumes of other low carbon technologies (LCT), we must use our longstanding experience in network design to amend the network to suit new customer use cases such as this. As we do so, we are utilising stakeholder engagement to create new services and operating models that specifically support vulnerable customers.

Output (new): WPD are involved with various partners in three innovative projects in South Wales to facilitate a range of LCTs using three phase low voltage service cable supplies, rather than traditional single phase cables. The projects are partly WPD-funded and are designed to explore how we can reduce losses and utilise LCTs to reduce fuel poverty. They are not part of any of other incentive scheme, so are eligible for inclusion in this submission.



WPD is working in partnership with Pobl, a Welsh social housing association, and Sero Homes, firstly in Blaen-y-Maes, near Swansea where around 800 existing homes will be retrofitted with LCTs; and secondly in Tonyrefail where 250 new homes are being built. Thirdly, WPD is working with Welsh Government, Monmouthshire County Council, Cenex, and Wales and West Utilities on the feasibility of producing a carbon neutral estate in Caldicot.

Impact delivered:

- New:** The projects seek to incorporate all available innovative energy management solutions including solar PV generation, battery storage, EV charging, heat pumps, smart dishwashers and washing machines. All the LCT devices and smart devices feed into an innovative Programme Logic Controller (PLC) which minimises the electricity used from the grid and maximises what is being generated and stored at each individual house. The schemes are using this to target social housing/fuel poor tenants by reducing energy consumed from the network automatically, whilst maintaining the lifestyle and criteria set by the customers
- New:** The trial also seeks to de-risk and simplify the householder's energy costs by placing the landlord as the bill payer, with the tenant paying a fixed cost included in their rental. This will enable Sero Homes to setup a SESCO and use a combination of solutions including, PV generation, storage and new "vehicle to grid" facilities (where a charged EV can power the home to avoid using energy from the network for a time) to maximise efficiency of 'Time of Use' tariffs and potentially also offer flexibility services back to the grid. Monies earned will then be fed back into the joint electricity fund within the community, thereby keeping a cap on the overall electricity cost for the entire housing estate
- New:** WPD hopes to prove to Ofgem that switching policy as standard to three-phase service cables will result in a reduction in network losses, whilst at the same time encouraging flexible and innovative use of devices that could reduce fuel bills for the fuel poor by using a SESCO model

4.4.2 Smart meters

Smart meters (SM) offer a golden opportunity to engage vulnerable customers about energy and avoid added complexity or confusion. Currently WPD has 40,000 PSR customers with a SM. We contact every one to ask them to set bespoke times to be contacted proactively during power cuts (e.g. rules during "unsociable" hours).

Output (new): In addition, we've create a brand new scheme using our Power Up model. Citizens Advice Derbyshire will lead a local hub to provide follow-up care directly to 1,000 customers a year after a SM installation - advising on how to use the SM, change behaviours to reduce energy waste and, where appropriate, to either stay warmer for longer or reduce energy use and cost.

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