



Serving the Midlands, South West and Wales

Supporting Customers in Vulnerable Situations and Fuel Poverty Stakeholder Workshop

23rd October 2019

Welcome

Today's format:

- A quick overview of WPD
- Four sessions
- Each following a consistent format:

Presentation → Table discussion

Objectives of today

First & foremost:

- We would like your help
- Can you work with us to deliver great outcomes for customers in vulnerable situations?

Specifically today:

- Tell you about WPD's current approach and feedback on your suggestions from last year
- Share Ofgem's new Vulnerability Strategy & identify new innovative ideas
- Transitioning from a Distribution Network Operator to a Distribution System Operator
 - What does this mean for customers, in particular the vulnerable?
- What are the key priorities for social obligations in our next business plan?

Agenda

- 10.00 Welcome & overview of the day
- 10.05 **Session 1 – Introduction and our current programme**
- 10.35 Table discussion
- 10.50 **Session 2 – Ofgem’s new Vulnerability Strategy**
- 11.00 Table discussion
- 11.20 **Coffee**
- 11.40 **Session 3 – A smart and fair future: the transition to DSO**
- 12.10 Table discussion
- 12.25 **Session 4 – Priorities for our next business plan**
- 12.40 Table brain storming session
- 13.10 Close
- 13.15 **Lunch & networking**

SESSION ONE

Introduction and our current programme



Serving the Midlands, South West and Wales

Introduction

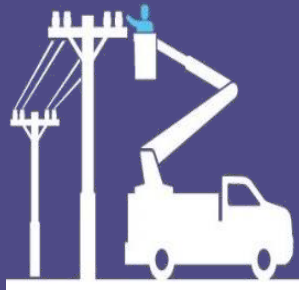
Karen McCalman
Social Obligations Officer

What we do

- Operate the local electricity network, distributing power to 7.9 million homes & businesses (+20 million users)
- Covering the East and West Midlands, South Wales and South West England
- 2.1 million customer contacts a year



Keep the
lights on



Maintain
equipment



Fix the
network



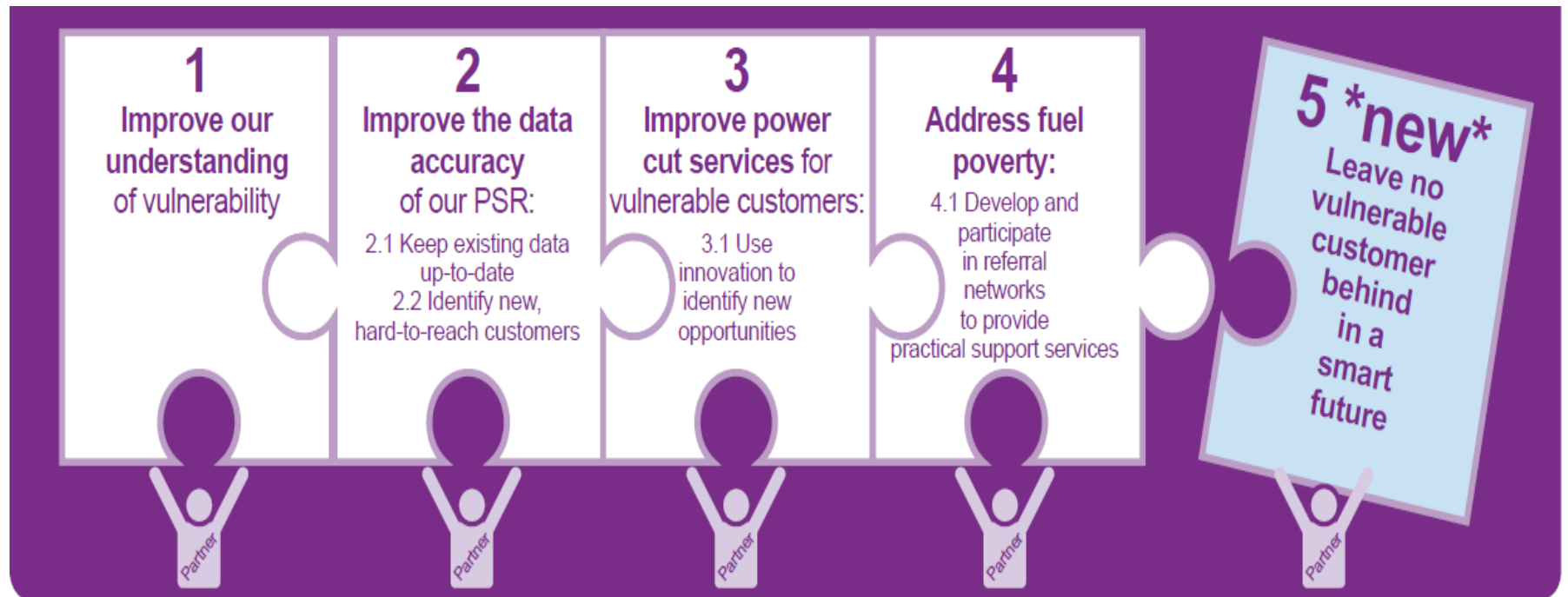
Connect
customers



Operate a
smart system

Partnerships and collaboration are key to our services

- Engagement with stakeholders is essential in helping to build our strategy
- The factors impacting vulnerability can be varied and complex
- Partnerships underpin our strategy:
 - Utilise expert knowledge and trusted services of others as a gateway to engage
 - Combine efforts, resources and messages across utilities to make it simpler for customers

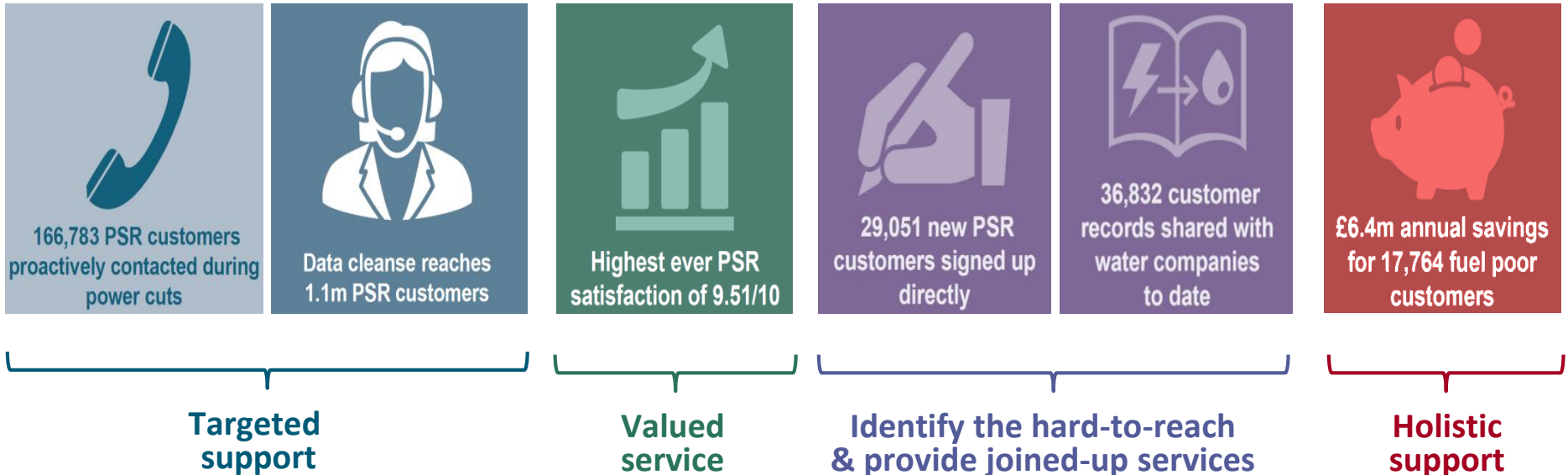


Energy and water working together

- The UKRN (UK Regulators Network) wants energy and water companies to share PSR data using the ElectraLink Data Transfer Network by April 2020
- The Energy and Water Working Together working group is taking this forward, expanding the industry sharing processes progressed by the Safeguarding Customer Working Group in June 2017
 - two way DNO/supplier sharing of data flows
 - New needs codes were implemented
- In the meantime, WPD is keen to establish Data Share Agreements with every water company in its area to send them up-to-date PSR records
- We already share (encrypted) data with Bristol, Wessex, Welsh, South West and Anglian Water
- **To date we have shared over 70,000 records – allowing customers to receive help from their water companies in the event of an emergency**
- We are also happy to receive PSR records should any water company be ready to trial the process in reverse

Improving our understanding of vulnerability

- WPD's core focus is always on the impact of power cuts on customers in vulnerable situations
- Free, confidential Priority Services Register – enabling proactive, tailored assistance during power cuts, e.g. proactive contact and welfare support such as warm meals and drinks
- Eligibility ranges from medical dependencies on electricity to temporary circumstances
- Currently, 1 in 3 eligible customers are registered (1.8 million), up from 1 in 5 in 2015
- **In 2018/19 this service enabled:**



Improving our understanding of vulnerability, cont'd

Priority Services Register (PSR) – 1.8m registered customers

- *Dual role*: 43% of fuel poor customers are also eligible for the PSR (revealed by WPD's research in 2016/17)

1

Supporting vulnerable customers

- Tailored support and advice
- Proactive calls to give information and advice
- Partnerships with agencies such as the British Red Cross (BRC) to provide food/drinks and welfare support
- Bespoke notice and assistance for planned cuts

2

Providing fuel poverty assistance

- Tailored support and advice
- Partnerships with expert organisations like the Citizen's Advice to provide 'interventions' such as tariff switching and benefits checks

Register today

... simply fill in your details IN BLOCK ... seal and send it back to us at no cost ... confirm you have been placed on the ...

... should prefer to register over the phone or ...

... supplier of your place on the register. ... is not to do this.

... ng machine Ventilator
... is machine Nebuliser

... (specify below)

Join our FREE Priority Services Register

How would you cope in a power cut?

Working with

BritishRedCross

WESTERN POWER DISTRIBUTION
Serving the Midlands, South West and Wales

...landi plc, registered in England and Wales No 2366923
...landi plc, registered in England and Wales No 2602574
...West plc, registered in England and Wales No 2366894
...Wales) plc, registered in England and Wales No 2366985
Registered Office: Avonbank, Forder Road, Bristol, BS2 0TR

MOISTEN HERE. FOLD SHEET IN HALF AND SEAL

Improving the data accuracy of the PSR

- We cleanse our PSR records once every two years
- Vulnerability can be hard to find - mapping and data analysis is a key first step
- But local knowledge and combined expertise is vital



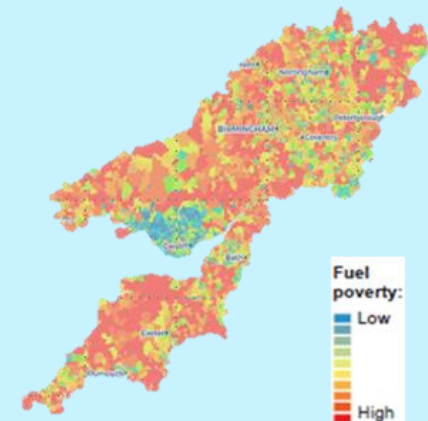
Outputs: Horizon Scan

- 'Horizon Scan' to identify local partners first conducted 2015
- Commitment to update every two years
- Updated in 2017 and broadened to include potential PSR referral partners, as well as fuel poverty schemes
- 159 charities and local authorities identified
- 55 completed an in depth survey about the services they offer
- WPD would like to explore potential new projects, & increase referral partnerships



Outputs: Social Indicator Mapping

- Extensive social indicator maps – 36 vulnerability datasets
- User-friendly tool open-sourced for all
- Working with gas & water to combine with their key indicators (e.g. off gas grid & water social tariffs)



Improving power cut services for vulnerable customers

- Stakeholders, including Ofgem, encouraged us to introduce more granular reporting to ensure data is truly driving targeted PSR services:
 - Welfare support and generators dispatched to incidents
 - Proactive contact during power cuts
 - Field staff trained to register customers, call the BRC and issue crisis packs
 - Website and App functions to report power cuts being improved
 - ‘Report a power cut’ function
 - App being developed to focus on PSR customers
 - PSR hub being introduced online for customers and partners
 - More functionality for customers to update their PSR details using the App, with links sent out after registration and in the event of power cuts

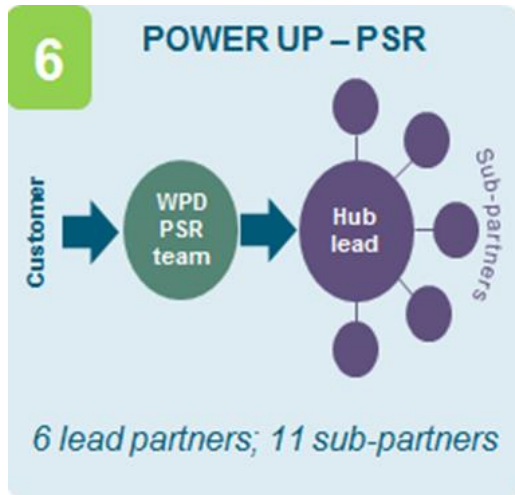
Proactively contacted
166,783 PSR customers
during power cuts
(2018/19)

71% of PSR customers are
called within one hour and
96% within two hours

Almost 4,000 generators
dispatched to incidents in
2018/19 (35% due to a PSR
presence)

Addressing fuel poverty

- 18 schemes – 17,764 customers – £6.4 million saved in 2018/19
- A strategy and action plan annually co-developed with stakeholders

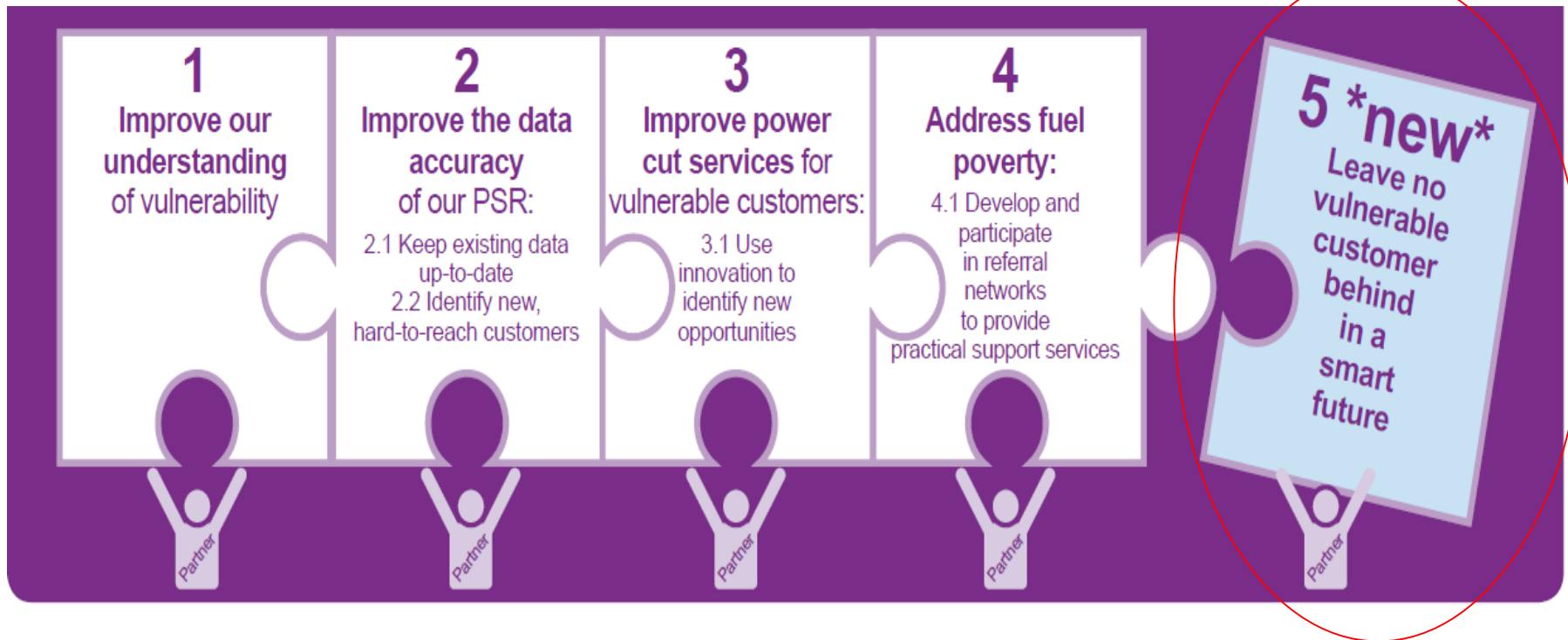


Core interventions:

1. Income maximisation
2. Tariff switching
3. Energy efficiency measures
4. Boiler replacements
5. Behaviour changes
6. Health, wellbeing & befriending measures
7. Managed referrals to water social tariffs
8. CO monitors and FPNES applications

Leave no vulnerable customer behind in a smart future

- We will discuss this in session three



Actions we took following last event

In total your feedback led to 36 actions. For example:

Health	<ul style="list-style-type: none">▪ Advertise PSR in GP surgery TV screens▪ Launch a scheme working with customers with mental health conditions▪ Expand Power Up Health to all licence areas
Existing Schemes	<ul style="list-style-type: none">▪ Pilot Affordable Warmth scheme over 12 months▪ Award Affordable Warmth projects two year contracts▪ Publish a social obligations newsletter twice a year with information and updates about successful projects
PSR	<ul style="list-style-type: none">▪ Remove customers after three years of no contact on our cleanse cycle to keep PSR up to date and relevant▪ Refresh PSR section of the website and work with stakeholders to define language and branding▪ Continue promoting the PSR & how to become a referral partner 87 in place by March of 2019
Innovative approaches	<ul style="list-style-type: none">▪ Investigate additional data sources for the next iteration of the Social Indicator Mapping▪ Offer successful projects from the Energy Affordability Fund the opportunity to extend▪ Publish 'how to' video alongside Social Indicator Mapping

Complete list of actions can be found here:

<https://yourpowerfuture.westernpower.co.uk/downloads-view/23131>

Mental health and financial difficulties: challenges and solutions



Kim Watts
Citizens Advice South Somerset

Overview

- Overview: the link between money and mental health
- Challenges and barriers
 - quality of life
 - suicide and complex mental health problems
 - impact on services
- Actions: how to address deprivation or money problems in local areas
- Case study

Link between money and mental health

Dual relationship between financial difficulties and mental health



1 in 10

Of people with Schizophrenia are in work (8%)

Compared to:

7 in 10

of the general population (74%)

Employment



26.2 per 1,000

First-time offending in deprived areas

Compared to:

15 per 1,000

In least deprived areas

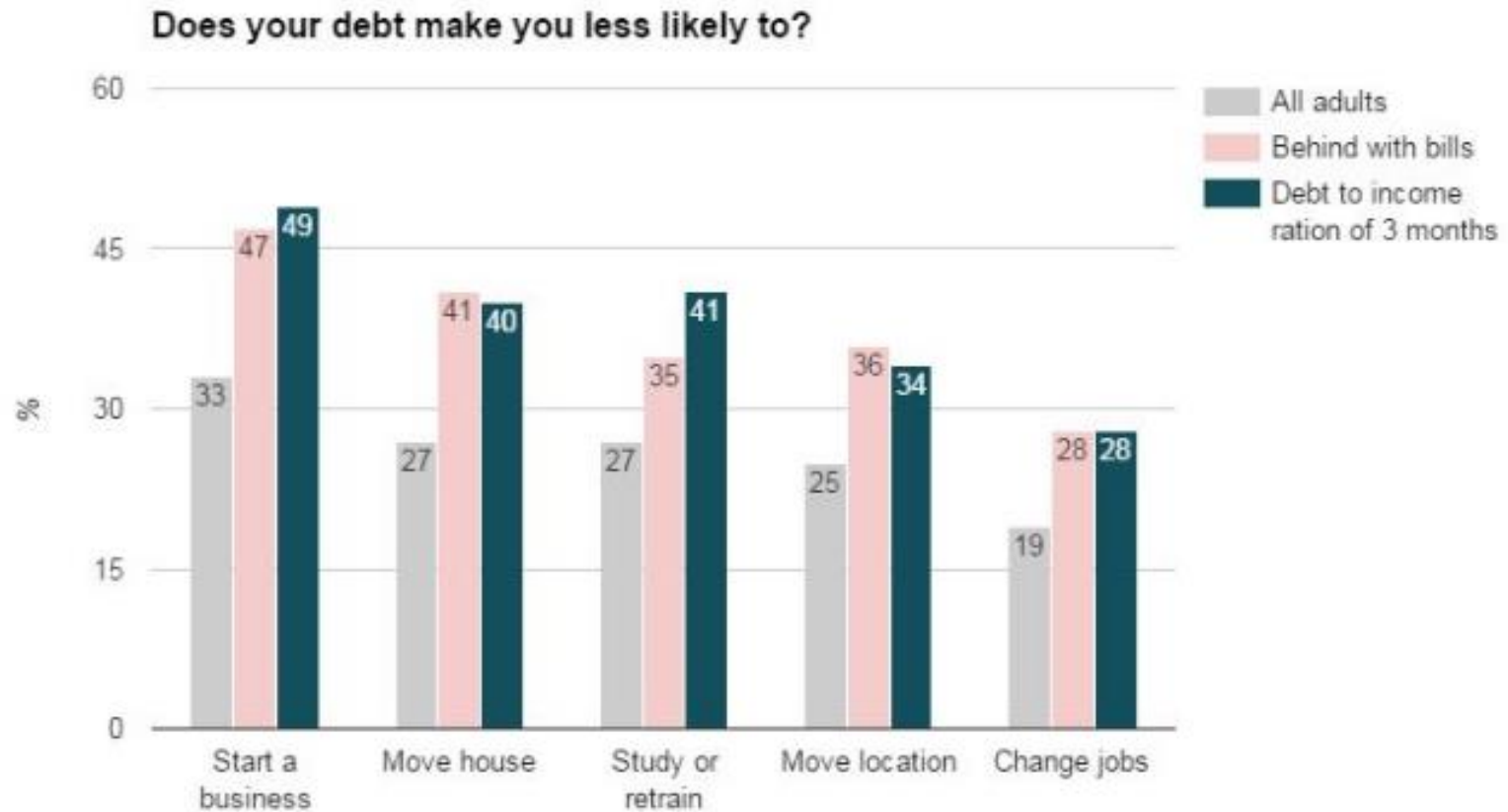
Crime



**Overcrowding
Temporary
Homelessness**

Housing

Financial difficulties affect decision-making



Source: Citizens Advice

People in financial difficulties have poor access to essential services



85%
more likely to
disconnect from their
energy supplier



87%
more likely to self-
disconnect from their
energy prepayment
meter



2 times
more likely to
disconnect from their
mobile phone supply

Debt advice agencies deal with clients with mental health problems on a daily basis

420,000
people struggling with
debt consider taking
their life in England
each year
100,000 attempt suicide

Challenge

1 debt advisor sees 420
clients who disclose a
mental health problem
per year

Debt advisor's
experience



Why is it relevant?

- Service was a prevention to tackle disadvantage and improve mental health
- Identified clients at risk i.e. people recovering from acute mental ill health
- Long-standing advice issues as a result of mental ill health
- Client group needs extra time, confidence and skills
- Clients understated their advice needs (overlooked debt issues)
- Mental ill health left clients unable to manage financial affairs
- Vulnerable clients pay the price – poverty premiums

Project to support Mental Health needs

- All of the above evidence showed additional support needs for clients with mental health issues when dealing with debt in particular
- Project enabled additional time to be spent with client exploring and advising on debt issues
- Mental Health project worker was then able to support the debt advice and help clients to gather further information and/or put into practice the debt advice they had been given
- Project supports clients to access priority services for energy
- Outcomes for clients have been significant in gaining additional benefits, support for energy issues and detailed debts advice and support
- Enabling clients to focus on their mental health without the extra burdens

Outcomes

Outcome	At initial assessment	End of coaching
Confidence about using advice services		
Confident	5%	95%
Day-to-day coping skills		
Overwhelmed	41%	0%
With help I can manage	1%	70%
Barriers to tackle practical issues		
I can't make a decision	26%	21% (I can)
Lack of motivation	21%	34% (I feel motivated)
Mental health: how do practical issues affect your wellbeing?		
Anxiety	70% (anxious)	87% (less anxious)
Depressed	2%	5% (less depressed)

Case study: T's story

Client met on ward: T was aware that back home (2 x children and husband) there were unpaid bills, bank loans, council tax, fuel and water arrears.

T was so distressed by debt that her recovery was not progressing.

T was unsuccessful with her renewal for Personal Independence Payment (PIP). Adviser assisted with mandatory reconsideration and family's Universal Credit application.

T's debts passed to bailiffs. Adviser secured stop on all bailiff action and supported client and husband with debt advice & debt resolution.

T worked with adviser on budgeting and planning – less reliant on husband.

T used coaching support to begin to take a role in communicating with energy suppliers independently.

Key Statistics Summary

Clients helped to manage approximately £65,000 of debts (priority and non-priority)

By working with Mental Health project £17,000 of income maximisation

9 Clients were helped to reduce energy bills and 23 made aware of entitlement to Warm Home Discount

Follow up with clients indicated significant increase in well-being

Clients Progression after Support

Clients using the Assist programme supported by the WPD project were asked key questions at the end of the support

1) at start 21% were confident about switching energy suppliers
at end 62% were confident about switching energy suppliers

2) at start 41% paid bills by direct debit or standing order
at end 82% were paying by direct debit or standing order

Resulting in less likelihood of disconnection or mounting debt

Thank you

Citizens Advice South Somerset:

Kim Watts, Client Services Manager

kim@citizensadvice-southsomerset.org.uk





Serving the Midlands, South West and Wales

**Referral Partners:
Helping people to join WPD's
Priority Services Register**

**Nicki Johnson
Stakeholder Engagement Officer**

Vulnerability – eligibility

- Customers can be added to the register if they
 - are medically dependent on power
 - have specific communication needs
 - are elderly or have vital electrical equipment
 - are ill or disabled, or
 - If they are temporarily vulnerable to a power cut because they have just been discharged from hospital, for example
- Industry agreed reasons for joining

Critical medical dependency	Medical Dependency	Communication needs	Other	
Heart/lung & ventilator Dialysis, feeding pump and automated medication	Nebuliser and Apnoea monitor Oxygen concentrator/use Ventilator Careline/telecare system MDE electric showering	Blind Partially sighted Hearing/speech difficulties, inc Deaf Unable to communicate in English	Stair lift/hoist/electric bed Pensionable age Families with children <five Physical impairment Mental health Female presence preferred Unable to answer door	Developmental condition Learning difficulties Restricted hand movement Dementia Temporary vulnerability Poor sense of smell

What is a referral partner?

- A charity, Local Authority or a health organisation
- “Boots on the ground”
- In the homes/lives of those who could be vulnerable in a power cut situation
- Agreed to work with us to sign customers up to the PSR
- Here you can find our short video about becoming a referral partner: <https://youtu.be/BE2hgGeilil>

E.g. Community
Lincolnshire

E.g. National
Grid

E.g. Nottingham
City Homes

E.g. Bristol City
Council

E.g. Citizen's
Advice

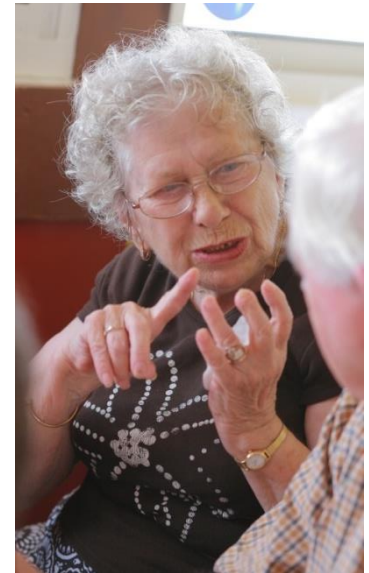
E.g. Age
Concern

What can referral partners do and why?

- During your visit/interaction with customers, rather than just sign-post, you can **help customers register - it takes two minutes!**
 - online at www.westernpower.co.uk/PSR
- Offer power cut preparedness advice
- Hand out crisis packs
- Obtain consent to register customers AND for us to share with other utilities if they wish (*to get them help such as tariff discount - information is **never** shared for marketing purposes*)

Why should partners help WPD in this way?

- Because it is the right thing to do
- We can help and advise them during power cuts (welfare support, informative phone calls, etc.)
- We can give them bespoke notice for planned outages
- They get a direct dial number to an expert team for use during power cuts



If it helps you, WPD can...

- Provide advice and training for you to share with your team
- Provide crisis packs on request

[← Back](#) **Priority Services**

Any other important information

Where did you hear about this Priority Services Registration?

Select one ▼

Would you like to add a nominated contact to act on your behalf? If 'yes' please enter their name and number below

Name

Number



- Add your name to a drop down menu on our joining form (tell your teams)

What next?

- During the roundtable discussion the facilitator will ask if you can become a referral partner, if you are not already
- There is a form where you can complete:
 - ✓ your name & email address
 - ✓ organisation name and type (health, LA, charity)
 - ✓ name for dropdown list
 - ✓ and region covered
- **YOU CAN START REFERRING CLIENTS STRAIGHT AWAY**
- Feel free to email us afterwards for further info and/or crisis packs
 - njohnson@westernpower.co.uk
 - kmccalman@westernpower.co.uk

SESSION TWO

Ofgem's new Consumer Vulnerability Strategy

Karen McCalman
Social Obligations Officer



Ofgem's Consumer Vulnerability Strategy 2025

- There are significant changes ahead in the energy market and Ofgem want to ensure positive and fair outcomes for all consumers, with a particular emphasis on protecting those in vulnerable circumstances
- Vulnerability in society is changing and so is the understanding of barriers to engagement
- Ofgem's Consumer Vulnerability Strategy to 2025 was published in June 2019 detailing new themes and outcomes for vulnerable consumers in the energy market



Consultation

Draft Consumer Vulnerability Strategy 2025

Publication date:	13 June 2019	Contact:	Meghna Tevari, Head of Vulnerability and Consumer Policy Dennis Berg, Senior Manager
Response deadline:	8 August 2019	Team:	Vulnerability and Consumer Policy
		Tel:	020 7901 7000
		Email:	CDconsultations@ofgem.gov.uk

We are consulting on our updated Consumer Vulnerability Strategy (CVS2025). When finalised, the strategy will build upon the already extensive work delivered under our 2013 Consumer Vulnerability Strategy, and will set out our priorities to help protect gas and electricity consumers in vulnerable situations until 2025. The draft strategy is informed by extensive stakeholder engagement, including events held in Cardiff, Glasgow and London, interviews with academics and other experts and responses to our open letter published in December 2015.

This document outlines the scope, purpose and questions of the consultation and how you can get involved. Once the consultation is closed, we will consider all responses. We want to be transparent in our consultations. We will publish the non-confidential responses we receive alongside a decision on next steps on our website at ofgem.gov.uk/consultations. If you want your response – in whole or in part – to be considered confidential, please tell us in your response and explain why. Please clearly mark the parts of your response that you consider to be confidential, and if possible, put the confidential material in separate appendices to your response.

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Ofgem's Consumer Vulnerability Strategy 2025

- The updated vulnerability strategy has five new themes and outcomes
- We want you to help identify ways that we can improve our services to align them

Ofgem's New Themes

- 1. Improving identification of vulnerability and smart use of data**
2. Supporting those struggling with their bills
3. Driving significant improvements in customer service for vulnerable groups
- 4. Encouraging positive and inclusive innovation**
- 5. Working with partners to tackle issues that cut across multiple sectors**

Ofgem's Consumer Vulnerability Strategy 2025

Improving identification of vulnerability and smart use of data

Energy companies to act swiftly to provide support to the people who need it. We want them to regularly maintain and proactively update the data they hold on their customers, including their Priority Services Register data



To see evidence that there has been an improvement to support consumers to self-identify, for example through best practice guides that are easy to access and understand



To see better use of data across regulated sectors to enable more holistic and targeted support for consumers in vulnerable situations

Supporting those struggling with their bills

Outcomes primarily aimed at suppliers / gas networks

Ofgem's Consumer Vulnerability Strategy 2025

Driving significant improvements in customer service for vulnerable groups

Energy companies to have a corporate culture that focuses their efforts to identify and support consumers in vulnerable situations



The industry to have systems to better target and tailor their customer service to consumers with specific needs, and



Consumers to be effectively identified as eligible for priority services; and for them to receive consistent and high-quality priority services in a timely way



Encouraging positive and inclusive innovation

All consumers (particularly those in vulnerable situations) to have access to affordable energy and suitable services. We want products and services to be designed to meet the needs of a wide range of consumers (including the most vulnerable)



Suppliers and networks to demonstrate innovative measures to support consumers in vulnerable situations

Ofgem's Consumer Vulnerability Strategy 2025

Working with others to solve issues that cut across multiple sectors

We want to achieve greater understanding and consistency across essential services markets for more joined up action to improve the experience of consumers in vulnerable situations

We want to further improve our information sharing approach with the third sector, which will help target our policy, compliance and enforcement actions and support organisations who provide advice to energy consumers



We will work with government on common consumer challenges to complement its social policy measures



What more can we do to help achieve these outcomes?

To see better use of data across regulated sectors to enable more holistic and targeted support for consumers in vulnerable situations

Suppliers and networks to demonstrate innovative measures to support consumers in vulnerable situations

We want to achieve greater understanding and consistency across essential services markets for more joined up action to improve the experience of consumers in vulnerable situations

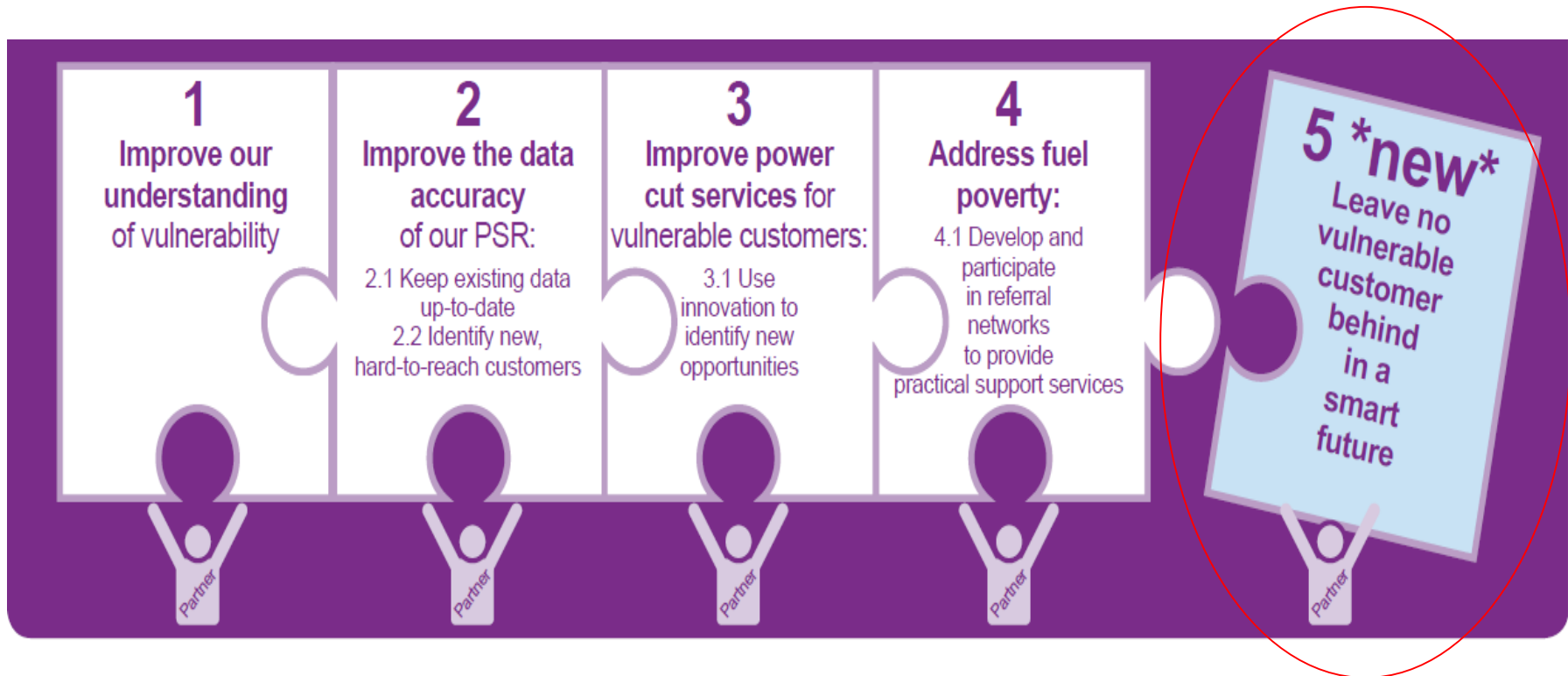
SESSION THREE

A smart and fair future: the transition to DSO

Matt Watson
Innovation & Low Carbon Networks Engineer

Our Social Obligations Strategy

- The change in our operations as we become a DSO has the potential to place vulnerable customers at a disadvantage
- We have therefore updated our consumer vulnerability strategy, committing to **‘leave no vulnerable customer behind in a smart future’**



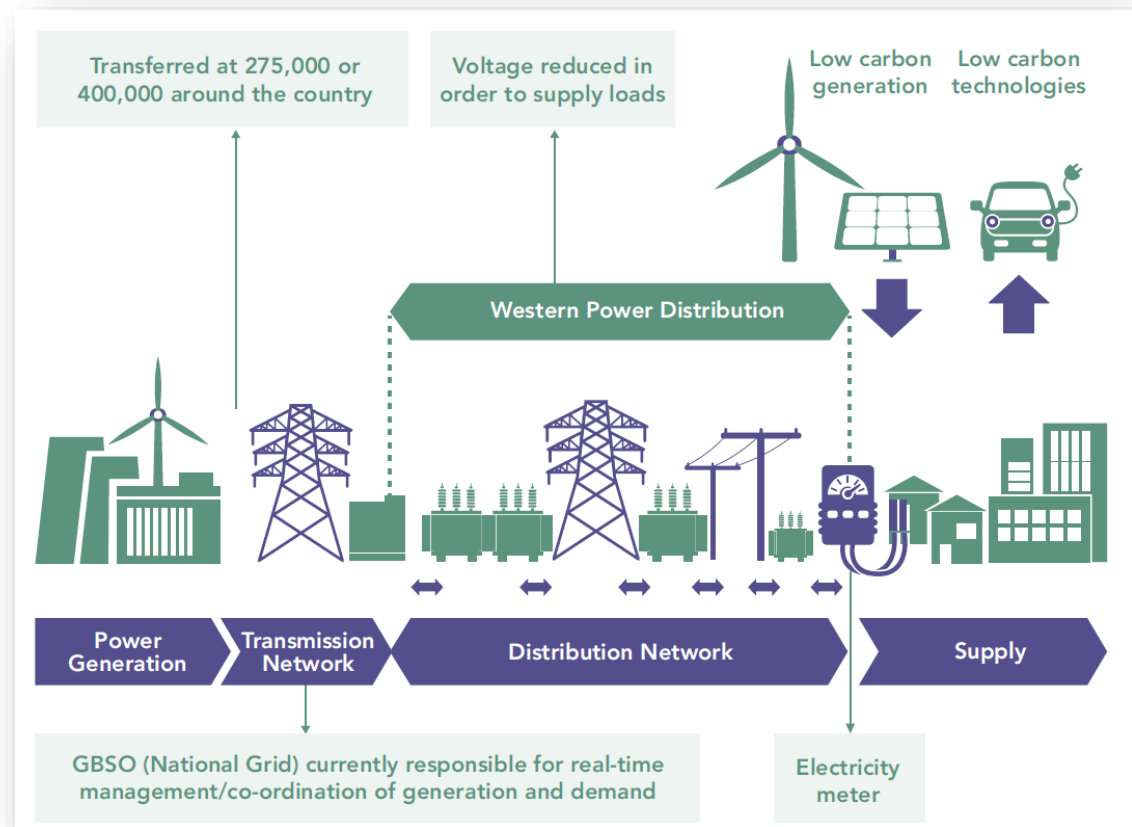
The energy system is changing

More renewables on the distribution network will displace the larger transmission connected generation.

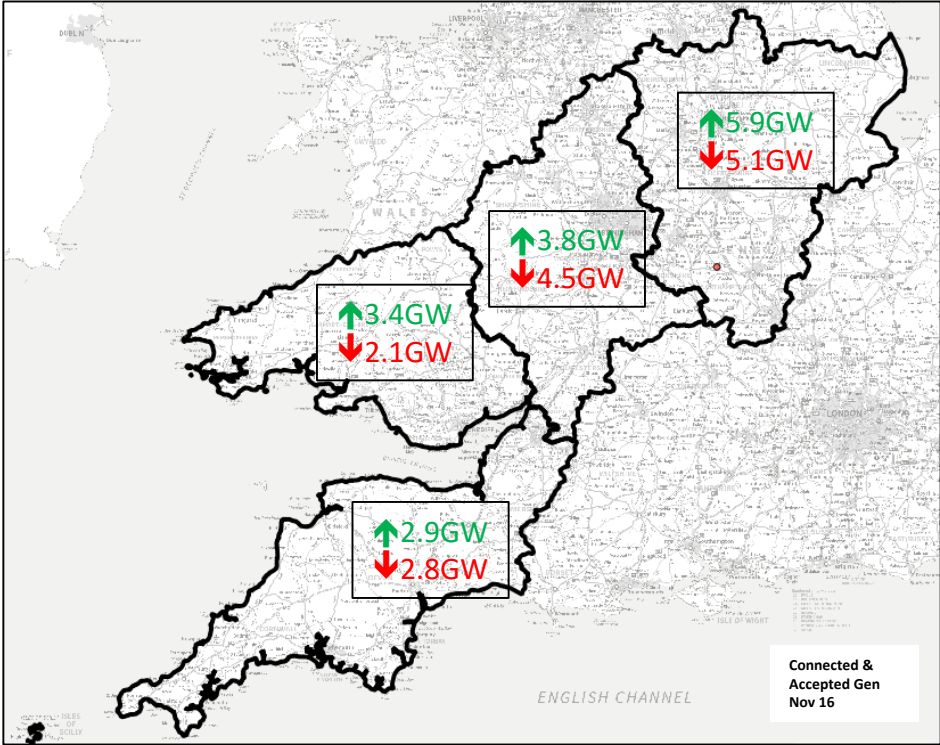
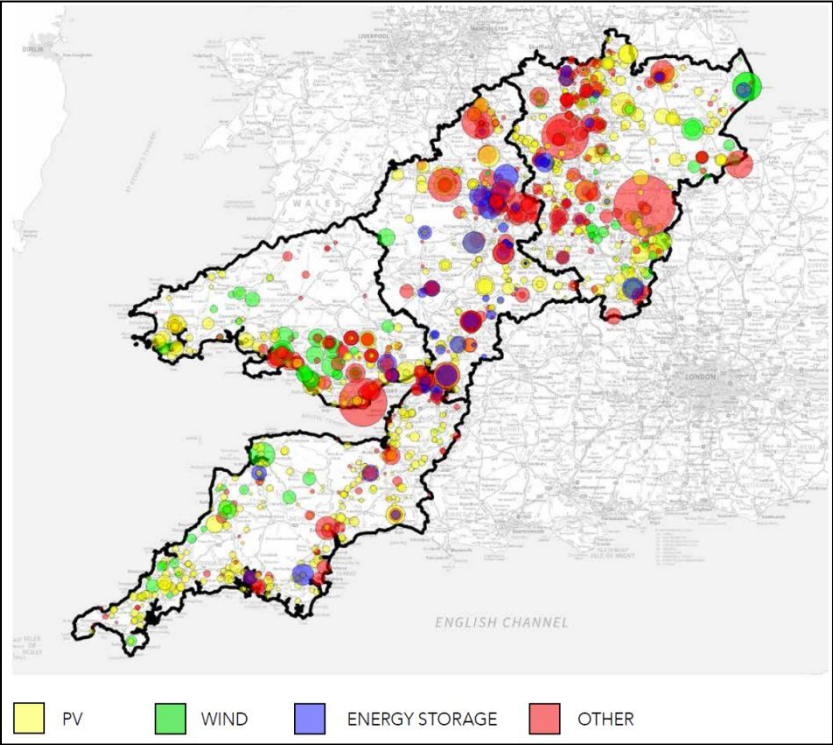
New low carbon technologies are changing the way our customers use energy, making the system more complex and variable.

Our networks are becoming smarter and more active to enable greater volumes of generation, storage and LCTs to connect.

Creating a more efficient and flexible system will benefit customers empowering them to be at the centre of the energy revolution

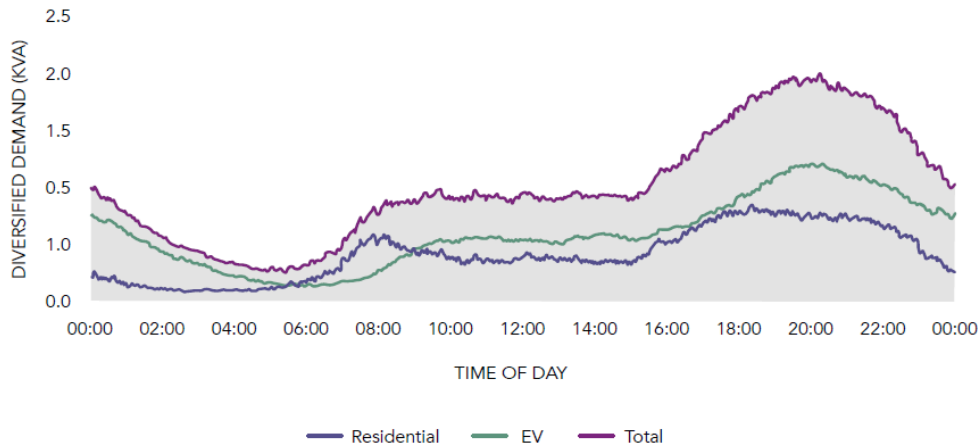


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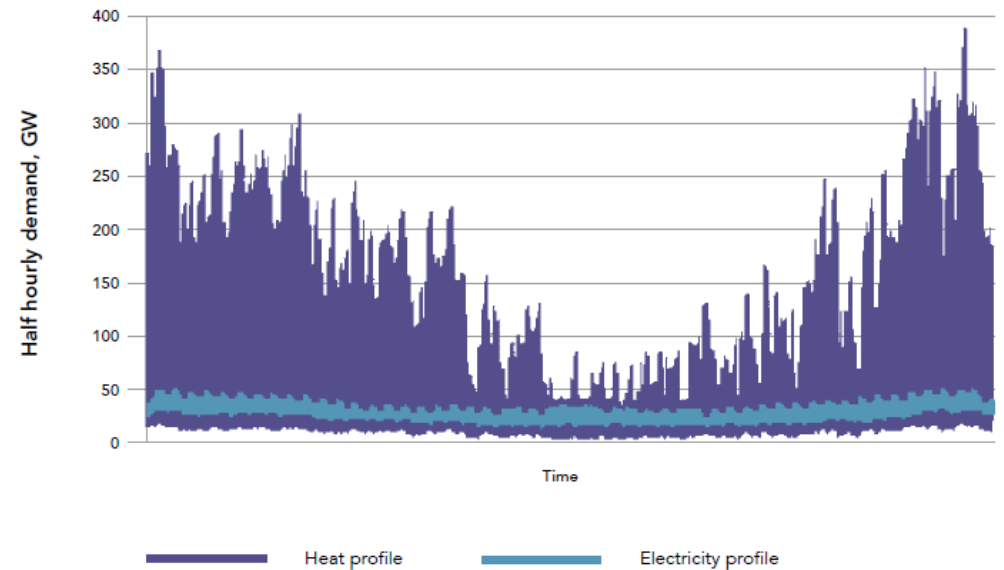


Background

Diversified domestic demand including EV charging



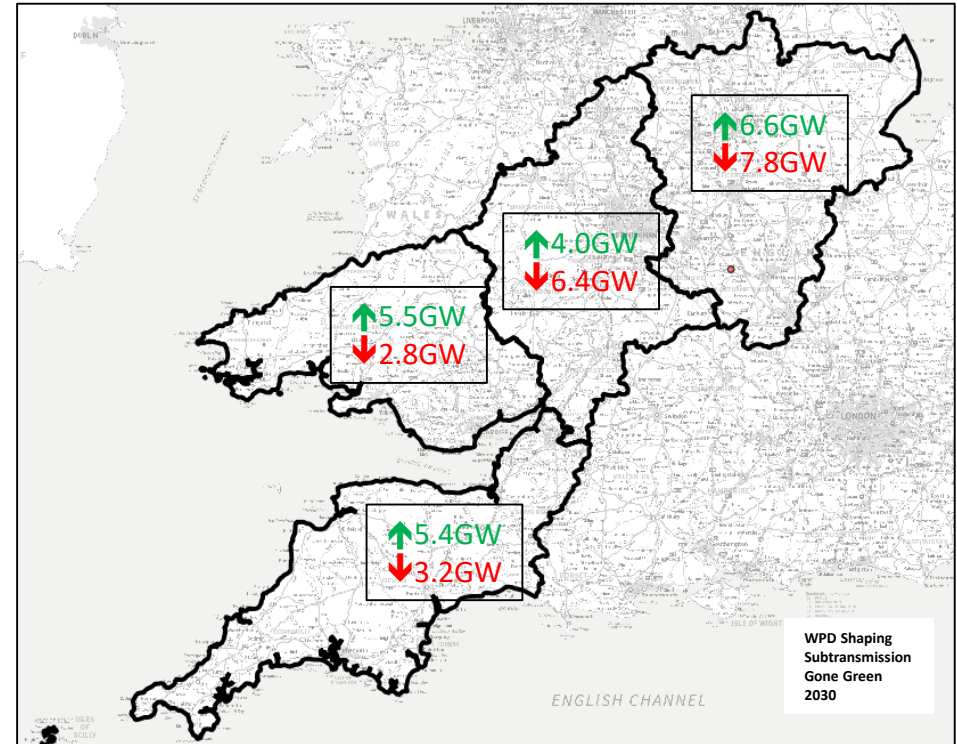
Half hourly heat and electricity demand profiles over 12 months period (from 1 January to 31 December '16)



The need for flexibility during uncertainty

Traditional DNO operations would require very substantial investments in passive grid infrastructure, which would be underutilised much of the time.

- There is a risk that we would invest in assets that we don't need
- Traditional investment planning may not be able to deal with new scenarios
- Asset replacement and traditional reinforcement will be supplemented by increasing the agility of networks and enabling customers to deliver additional flexibility when required



What is a DSO?

- A Distribution Network Operator (DNO) provides a network sized to support times of maximum demand and/or generation output. It is sufficiently large to enable the market to consider it having infinite capacity
- A Distribution System Operator (DSO) exploits information community technology to deliver a network that makes optimal use of capacity

Distribution
Network
Operator

Passive networks managing
maximum power flows



Distribution
System
Operator

Active networks managing
real-time energy flows

Network operators are changing

As WPD moves from being a Distribution Network Operator to a Distribution System Operator, it will carry out its existing functions and take on some new ones so as to:

Existing

- develop and maintain an efficient, co-ordinated and economical system of electricity distribution;
- facilitate competition in electricity supply, electricity generation

New Roles

- facilitate flexibility services;
- improve the resilience and security of the electricity system at a local level;
- facilitate neutral markets for more efficient whole system outcomes;
- drive competition and efficiency across all aspects of the system; and
- promote innovation, flexibility and non-network solutions

What does flexibility look like?



Generation turn up or turn down



Demand turn up or turn down



Shifting consumption forwards and backwards



Storing energy for later consumption



Network Flexibility

Our Four Point Plan

1



Expand the existing roll out and application of smart network solutions to the higher voltage networks, prioritising areas which are the most likely to benefit.

From this we will optimise investment decisions, deliver greater network flexibility and maximise customer connection choice (flexible connections for demand, generation and storage). The prioritisation will also be influenced by the amount of benefits endowed to the lower voltage networks.

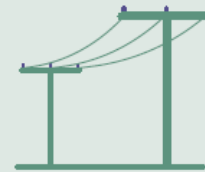
2



Contract with customers and aggregators for non-network solutions.

Co-ordinate with other parts of the industry by helping to establish visibility platforms for suppliers, aggregators and customers. This will include the requirement to raise the awareness of DSR and to help customers to value stack where appropriate.

3



Co-ordinate with GB at the T/D interface.

Share data and forecasts in multiple time horizons. Maintain overall system security. Consider whole system issues and propose solutions. Secure additional flexibility through prosumer awareness – actively support Power Responsive. No exclusivity in DSO flexibility contracts.

4



Protect the integrity and safety of lower voltage networks.

We will maximise the use of smart meter data, apply additional network sensing where relevant and implement simple control schemes. We aim to develop wider flexibility for the use of import/export capping as an alternative to conventional solutions only reinforcing the networks when these solutions cannot deliver what is required. We will accelerate the deployment of smart technology on networks where high penetrations of LCTs are anticipated and where whole system benefits are greatest.

Our Four Point Plan

2



Contract with customers and aggregators for non-network solutions.

Co-ordinate with other parts of the industry by helping to establish visibility platforms for suppliers, aggregators and customers. This will include the requirement to raise the awareness of DSR and to help customers to value stack where appropriate.

Customers will continue to be at the heart of developing our network. We will contract with customers and aggregators who can provide non-network solutions.

By signposting for these services in areas of our network which would benefit, we will help establish missing markets and widen the number of solutions available to us to develop the network.

Through facilitating customers to stack multiple revenues with our own services, we will deliver a co-ordinated, economic network. Our current flexibility contracts do not require exclusivity arrangements.

What does this mean?

The changing world poses questions for customers in vulnerable situations and the fuel poor:

- How do we support vulnerable customers to manage the complexity of the future system?
- What level of control will vulnerable customers want / are they able to cope with?
- What level of information will vulnerable customers want / are they able to cope with?
- How do we ensure that the cost savings filter down to those who need it most?
- How do we ensure that fuel poor customers are not paying disproportionately for grid upgrades for customers who can afford electric vehicles / heat pumps?

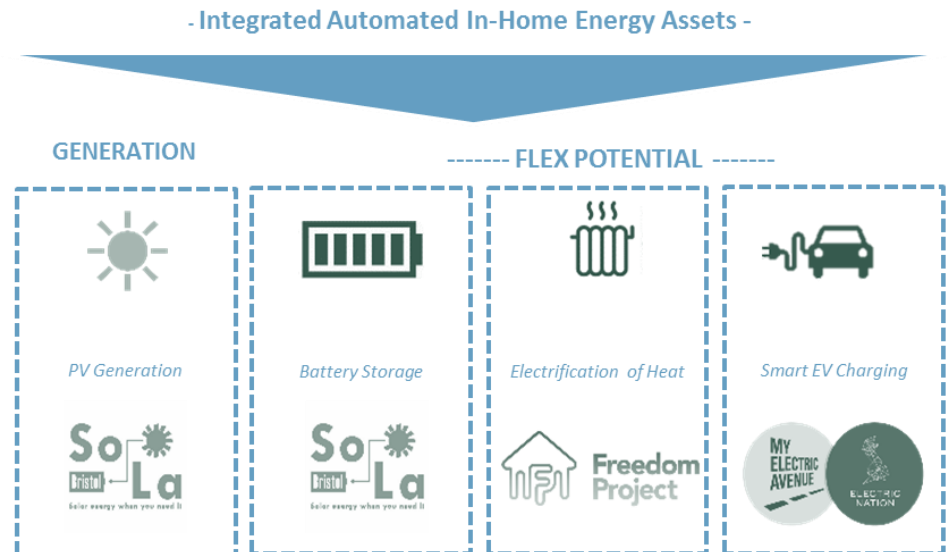
The Made Project

This project investigates the network, consumer and broader energy system implications of high volume deployments of the combination of:

- Domestic Electric Vehicle charging;
- Hybrid heating systems (domestic gas boiler and air-source heat pump) or heat pump heating systems; and
- Solar photovoltaic generation and storage.

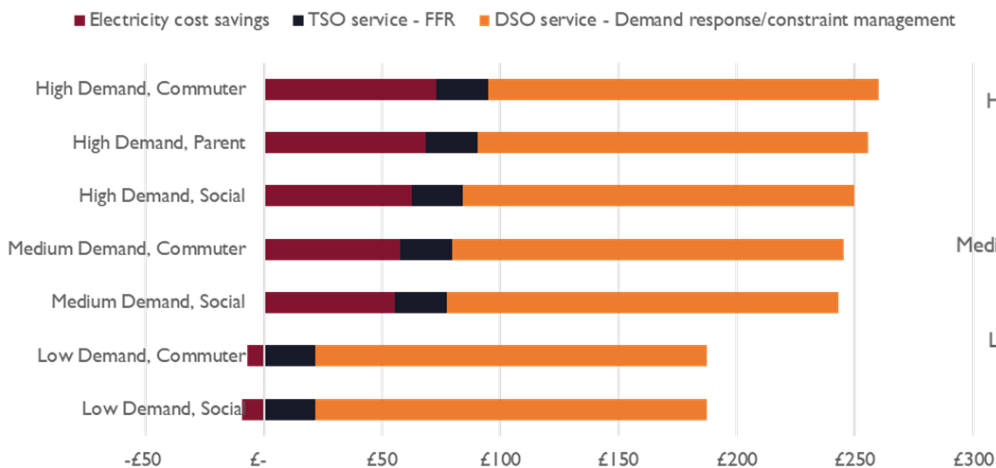
The research objective is to better understand the feasibility of managing and aggregating multiple Low Carbon Technology assets affordably through the use of advanced algorithms to unlock value from energy markets.

MADE is a £1.6m project, between March 2019 and July 2020 with a 5 home technology trial in based in Bridgend and the South West

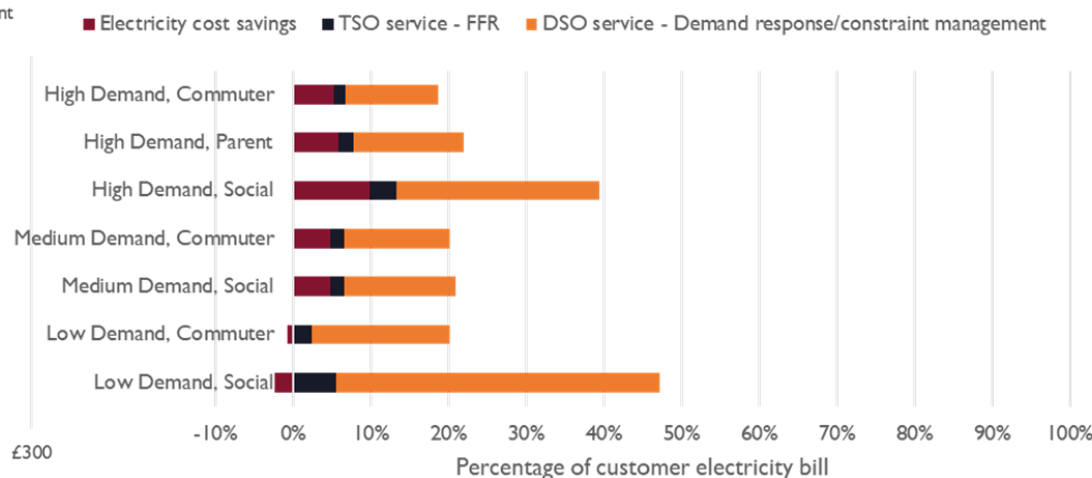


The potential cost savings

ELECTRICITY COST SAVINGS AND ANCILLARY SERVICES REVENUES



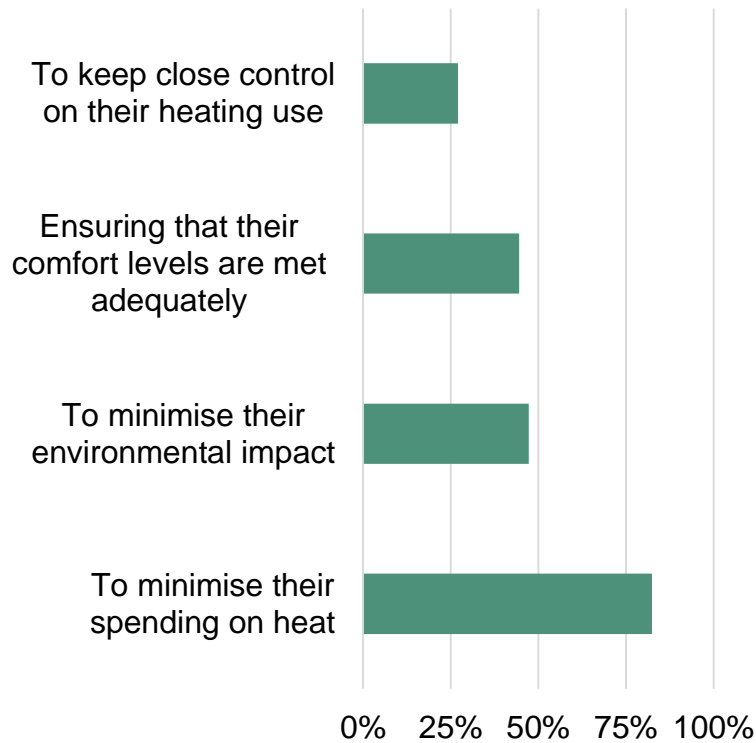
ELECTRICITY COST SAVINGS AND ANCILLARY SERVICES REVENUES



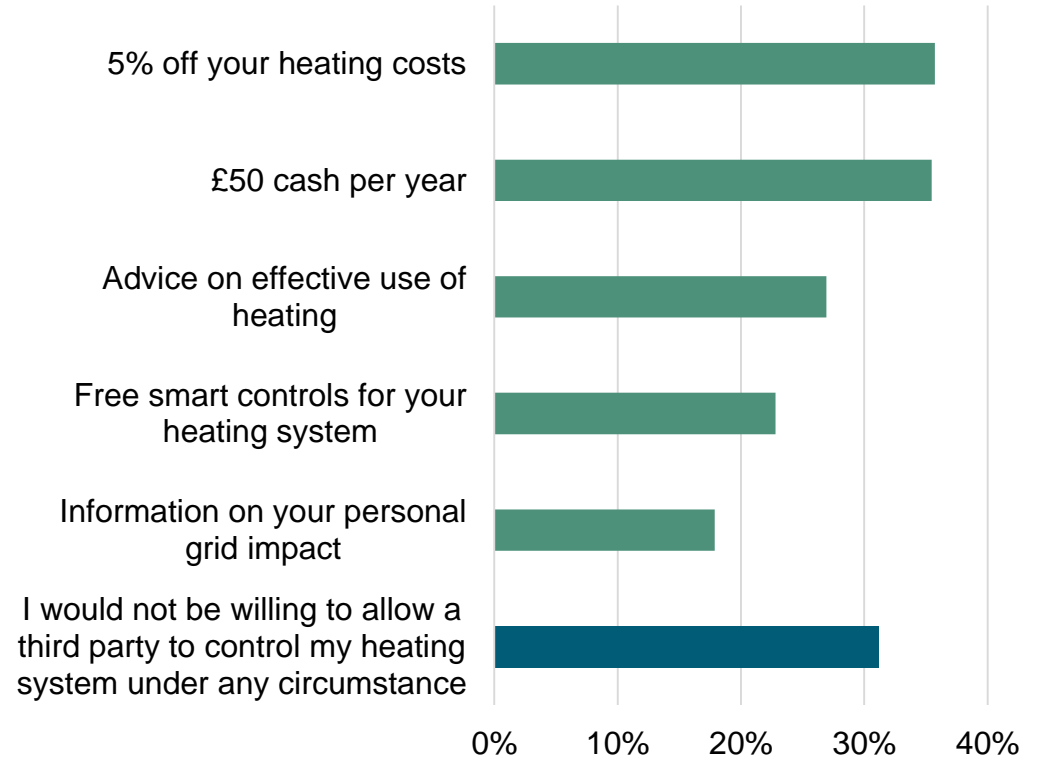
- The graphs above present the net customer benefit of coordinated asset control across a range of consumer groups
- All groups modelled see financial benefits
- The energy benefit is heavily linked to the total energy usage
- The DNO is fairly even across groupings but varies heavily depending on the location
- The absolute level of benefit is higher for bigger energy users, however the percentage benefit is more variable

Customer research

Reasons given as to why respondents pay attention to the amount of heat they use:



Types of incentives that would encourage homeowners to allow third party control of their heating system:



Business model framework

It is important to look beyond technology to support the MADE concept in the long-term.

These propositions are built upon a well used framework for developing business models and customer propositions, and build on insight taken from studying similar business models

Fixed monthly costs



Energy supply

Included within a fixed monthly fee

Customer value stream

Low fixed monthly price for energy
(based on level of existing usage or similar)

Low price energy tariffs



Included - paid per unit used

Low price tariff for energy

Credit payments



Bought separately by customer

Monthly or periodic credit payment
for being involved in the project

Social housing



Any of the three previous

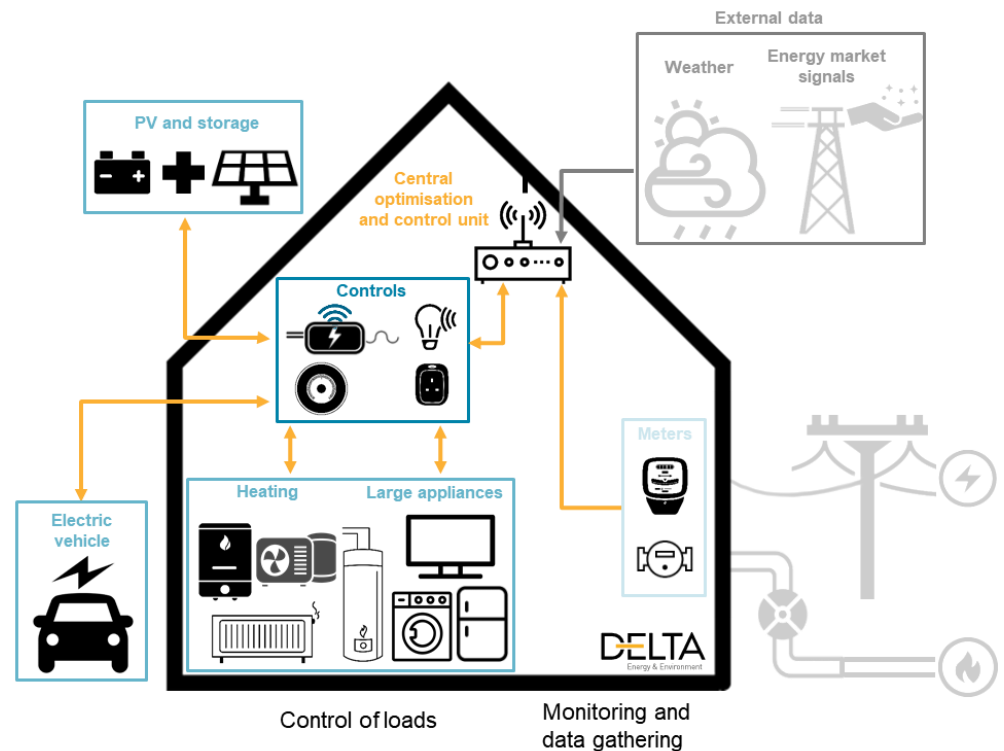
Monthly or periodic credit payment
for being involved in the project
NB – social housing provider owns all the technologies

Project Made – next steps

Initial modelling is complete.

The next steps are to:

- Test the technology in a 5 home deployment
- Monitor and gather data
- Re-model: home level, local level and national level based on real world performance data
- Publish learning
- Feed into a larger scale trial



Conclusions

- There are considerable cost savings to be unlocked through the coordinated use of flexibility
- The cost savings to individuals will vary
- The path to realising the cost savings is still being developed through a number of projects
- There are important questions to be raised along the way
- There is further work to be done to make sure we leave no customers behind



smart and fair?

Exploring social justice in the future energy system

A new research programme led by:



With funding from:





Background

- ‘Fairness’ in the provision of an essential service (energy) is a key condition for the social licence to operate.
- The energy system is changing (and needs to change) fast – decarbonisation, decentralisation, digitisation and decreasing consumption are all disrupting current arrangements.
- These changes bring with them completely new ways to generate unfairness (in terms of the distribution of system costs and benefits) and to leave people behind (in terms of the complexity and costs of participating).
- Principle of *‘No-one left behind’* in the energy transition.



What we're trying to do

- Consider potential social impacts of system changes. *“What are the ways in which unfairness could be created in different future system scenarios?”*
- Explore different strategies to mitigate the risk of negative social impact. *“How could the risk of such unfairness be mitigated while enabling the system change needed?”*
- Design a programme of pilot activities to test the effectiveness of different approaches emerging.
- Develop a set of guidelines for putting the ‘no one left behind’ principle into practice in the design, operation and regulation of the future energy system.



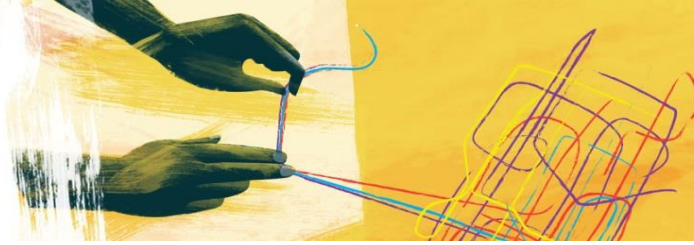
‘Keeping up’ vs ‘Left behind’: Time-of-use tariffs

Keeping up

Savvy switchers who seek out the tariff and use automated appliances to shift their electricity use to take advantage of cheaper off-peak electricity.

Left behind

Pensioner households not being offered a Time-of-Use tariff even though their usage pattern is ‘system friendly’ as using off-peak electricity.



‘Keeping up’ vs ‘Left behind’: Electric Vehicles

Keeping up

Home owners with capital to purchase electric vehicle, and off-street parking where they can charge it benefiting from reduced fuel prices and taxes.

Left behind

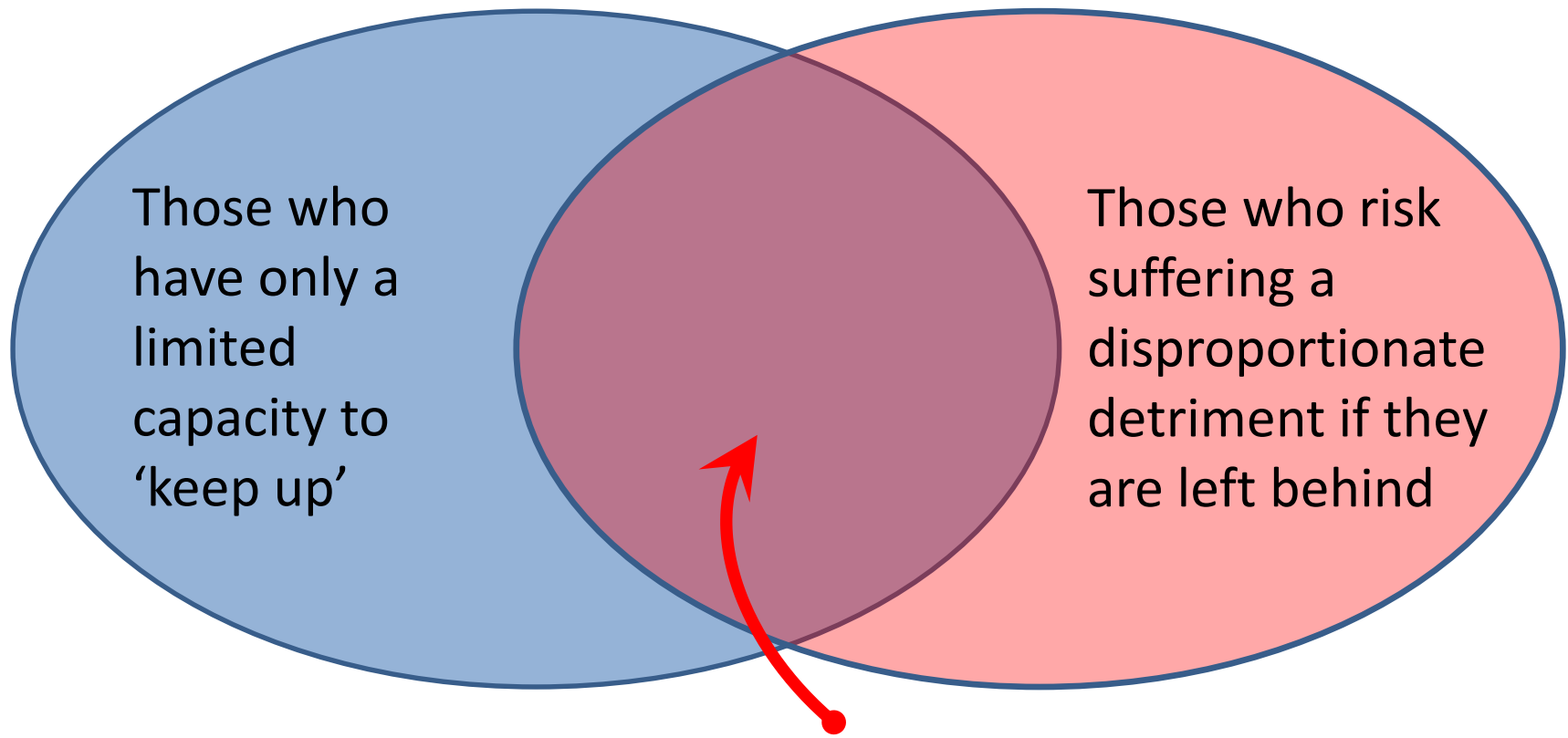
Families without capital to purchase electric vehicle / in rented accommodation with nowhere to charge vehicle, paying for grid reinforcement for others to charge vehicles.

What if vehicle is leased?

What if there public charging points locally?

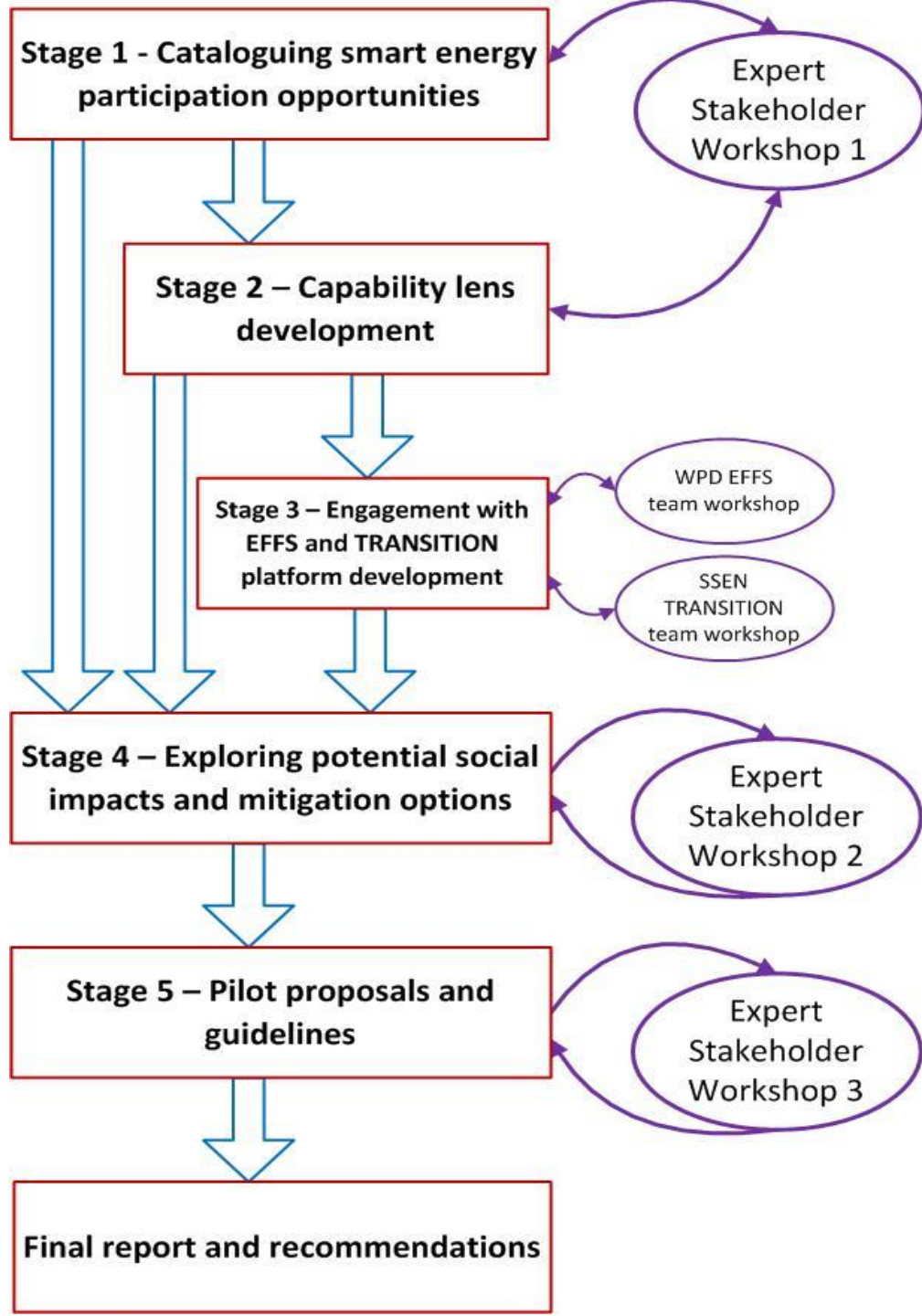


Which 'ones' should be our focus?



How large is this overlap?

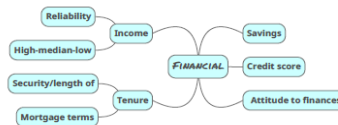
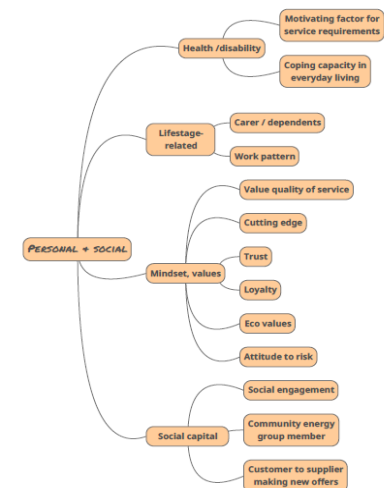
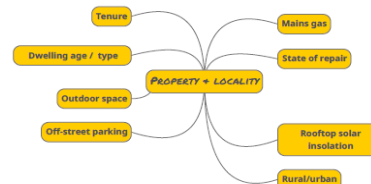
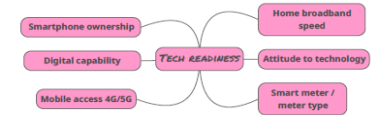
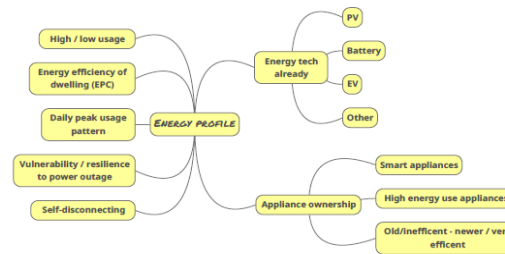
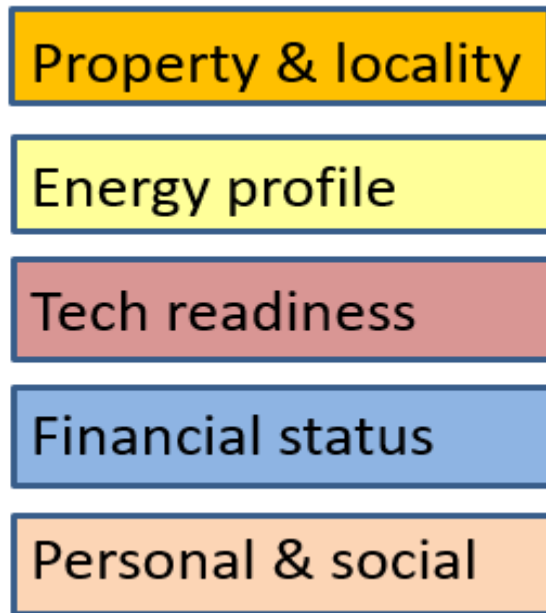
(very probably larger than shown here)





The Capability Lens

- Five categories of 'capability', each with many elements!





Next steps

- Identify aspects of system change that are likely to exclude consumers, and cause a burden to those unable to participate
- Explore the social impacts and identify which consumers are most at risk, and what are the main capabilities they lack to keep up
 - Map the overlap of vulnerabilities using datasets of household characteristics
- Explore options to:
 - Design out aspects of offers that exclude and disproportionately burden some
 - Support those left behind to take part in more offers
 - Protect those unable to take from negative impacts

Thank you

Daisy Broman

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To keep in touch with CSE's work, sign up for our e-news at

<https://www.cse.org.uk/contact/enews-sign-up>

Leave no vulnerable customers behind in a smart future

We have added four new objectives under this theme:

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

Anything missing?



SESSION FOUR

Your priorities for our Business Plan

Eleanor Sturges
Regulatory Analyst

THE RIIO Framework

$$R_{\text{evenue}} = I_{\text{ncentives}} + I_{\text{nnovation}} + O_{\text{utputs}}$$

Electricity
Distribution
2 (2nd price control using this framework)



Incentives to drive leading performance



Focus on driving innovation



Clearly defined commitments to deliver

Current price control (RIIO-ED1) ends in 2023

RIIO-ED2 runs between 2023 and 2028

Ofgem may remove the Consumer Vulnerability incentive in the next Business Plan

RIO-ED2 outputs

The Ofgem framework for ED2 sets out three high level output categories:

Meet the needs of consumers and network users:

Network companies must deliver a high quality and reliable service to all network users and consumers, including those in vulnerable situations.

Maintain a safe and resilient network:

Network companies must deliver a safe and resilient network that is efficient and responsive to change.

Deliver an environmentally sustainable network:

Network companies must enable the transition towards a smart, flexible, low cost and low carbon energy system for all consumers and network users.

We will develop a series of commitments within these categories based on stakeholder feedback.

Ofgem and vulnerable customers

Ofgem's framework for ED2 highlights the importance of DNOs addressing the needs of **“those consumers who are fuel poor and/or most vulnerable in the event of a supply interruption”**

Ofgem have asked DNOs to consider how to ensure that they continue to **“protect the interests of vulnerable customers, particularly in the light of the energy system transition”**

Business plan engagement

We will undertake five stages of engagement:

Stage 1 Preliminary engagement - identifying initial stakeholder priorities

Stage 2 Willingness to pay – understanding the value that stakeholders place on specific improvement levels

Stage 3 Business Plan development – first draft of our business plan commitments communicated to stakeholders

Stage 4 Business plan refinement – negotiate output levels and clarify our commitments

Stage 5 Business plan acceptance testing – stakeholder approval of the final plan

Where will we be in 2023?

- Will we have made great strides towards having a smart network?
- Will we have a decentralised energy system where communities are in control?
- Will we have started to electrify heating and transport in our drive towards net zero?
- Will local authority budgets have gone up?
- Will poverty levels have improved? What about welfare benefits?
- What about the ageing population?

What will this mean for our consumer vulnerability strategy?

- What is reasonable for network companies to deliver in this area?
- Will Ofgem remove the incentive and what will this mean?
- Ultimately, everything we include in the plan costs money - what will customers be willing to pay for?

Close

Thank you for attending

- Slides and feedback will be posted on the website www.westernpower.co.uk
- We would appreciate feedback on any of the areas discussed today.

- Please contact:

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