

Making a Difference

Part Two: Stakeholder engagement outcomes and impacts

Ofgem Electricity Distribution Stakeholder Engagement and Consumer Vulnerability Incentive Scheme 2022/23



SP ENERGY NETWORKS

This is Part Two of our submission to Ofgem’s Stakeholder Engagement Incentive for regulatory year 2022/2023.

Ofgem’s annual Stakeholder and Consumer Vulnerability Incentive encourages Distribution Network Operators (DNOs) to: *‘engage proactively with stakeholders in order to anticipate their needs and deliver a consumer focused, socially responsible and sustainable energy service.’*

Our submission is in three parts:

Part One – Our strategy

Introduces our Stakeholder Engagement and Consumer Vulnerability Strategy, with evidence that we meet Ofgem’s minimum requirements.

Part Two – Stakeholder engagement outcomes and impacts

Details the actions we have taken to meet the needs, preferences and priorities of customers and stakeholders identified through extensive engagement.

Part Three – Supporting vulnerable customers

Details key activities we have delivered to address consumer vulnerability issues and the outcomes achieved during this regulatory year.

Initiatives key

We use our ‘Planned, Developing and Embedded’ (PDE) model to track the life stage of all our initiatives. In this submission we mainly focus on Developing initiatives, but highlight Planned to demonstrate a commitment to continuous improvement, and Embedded to demonstrate trials or pilots which have now become business and usual (BAU).

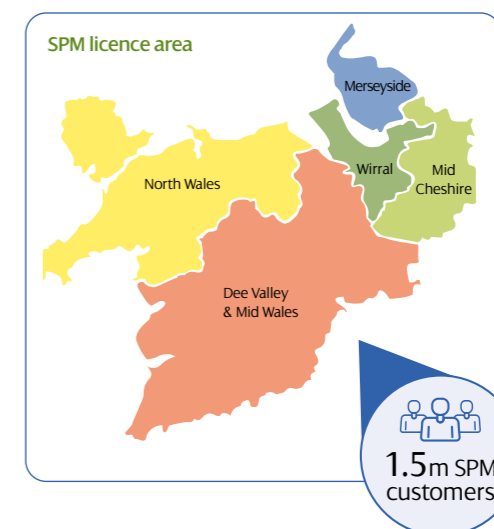
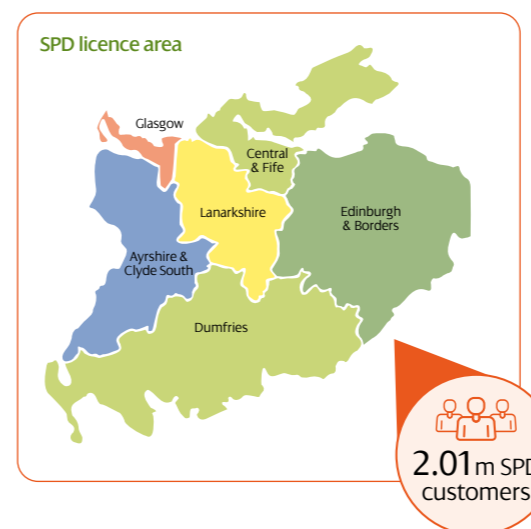
Planned		A project in the planning phase, defining the purpose, desired outcome and associated impact on stakeholders.
Developing		The project has been implemented into the business. Continual monitoring of KPIs to ensure project is on track to achieve desired outcomes.
Embedded		The project has reached maturity as a new initiative within the business and has been adopted as BAU.

Contents

Introduction from Scott Mathieson, Our Network Planning and Regulation Director	01
Delivering maximum value and impact for Customers and Stakeholders	02
How we have developed the SROI tool further this year	02
Developing our network, ready for Net Zero	03
Trusted partners of our customers, communities and stakeholders	07
Readyng our business for a digital and sustainable future	09

About us

SP Energy Networks (SPEN) is the Distribution Network Operator that delivers electricity to homes and businesses in Central and Southern Scotland, Merseyside, Cheshire, North Wales and North Shropshire. We are the only UK network operator to work across three countries – Scotland, England, and Wales. We do this through our two distribution network companies: SP Distribution (SPD) and SP Manweb (SPM). These licences cover **three of the UK’s largest cities (Liverpool, Glasgow and Edinburgh) accounting for 1.6m (43%) of our customers**, as well as three significant rural areas (North Wales, Scottish Borders and Dumfries & Galloway).





Introduction from Scott Mathieson

Our Network Planning and Regulation Director

As an electricity network operator it is our role to maintain, operate and invest in our networks, ensuring a safe, reliable, and economic service to the 3.5 million homes and businesses across our licence areas. We are the only network operator in the UK to operate across Scotland, England and Wales and recognise the fundamental role we play in delivering Net Zero.

We are acutely aware of the complex challenges currently facing the external environment, with the rate and scale of investment required to support large scale decarbonisation across the country unprecedented, and significant economic pressures brought upon customers by the cost-of-living and cost-of-energy crises.

Proactive and meaningful engagement with our customers and stakeholders allows us to get to the heart

of understanding their needs and in turn, allows us to fast track innovative solutions to support a collective effort to Net Zero for all. I'm delighted that our efforts in this space have been recognised once again by AccountAbility, who have awarded us an 89% rating in their 2023 Healthcheck assessment, one of the highest scores any organisation has ever achieved globally.

As we close the final year of the incentive and reflect back on the changes and growth of our stakeholder engagement processes and strategies, we recognise that good stakeholder engagement is better for our business and, fundamentally, better for our customers. Stakeholders are the driving force behind the way we do business, will play an increasingly important role in the future, and we are committed to delivering high quality engagement into RII0-ED2 and beyond.



Our stakeholder-driven business priorities

Engagement with customers and stakeholders on their priorities for a network operator led directly to the development of three strategic focus areas covering our entire networks business. Our strategic pillars encourage conversation among teams and individuals, ensuring all levels of our organisation understand the role they play in delivering in the areas our customers and stakeholders have told us to prioritise. Throughout the rest of this Part Two submission we have presented actions, case studies and projects in line with these three strategic pillars.

<p><i>Develop a network that's ready for Net Zero</i></p>  <ul style="list-style-type: none"> Invest strategically for Net Zero, focusing on the 'last mile' LV network. Unlock the grid's potential through flexibility and the Distribution System Operator model. Continue to lead in managing risk on network; ensure safety and security of supply. 	<p><i>Be the trusted partners of our customers, communities and stakeholders</i></p>  <ul style="list-style-type: none"> Partner with communities and regions around Net Zero ambitions. Maintain industry-leading customer service. Ensure no customer is left behind, particularly the vulnerable. 	<p><i>Readying our business for a digital and sustainable future</i></p>  <ul style="list-style-type: none"> Harness the full opportunities of data and digitalisation. Be a sustainable and environmentally responsible organisation. Drive better outcomes for customers through innovation.
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Summary of initiatives

Strategic Pillar	Initiative/Project	Project stage	Page
<p><i>Develop a network that's ready for Net Zero</i> £70.1m* of customer value</p>	Taking a stakeholder-led approach to green investment: Green Recovery Investment	Embedded	3
	Driving the decarbonisation of transport: ConnectMore	Developing	3
	Helping customers reduce their bills while delivering zero carbon heating: Re-HEAT	Developing	4
	Unlocking energy storage to balance the network: Heat Balance	Developing	4
	Delivering customer led flexibility: Flexibility Demand Shift Trial	Developing	5
	Creating flexibility opportunities for all: FUSION	Developing	5
	Breaking down barriers to connect renewable generation: Active Network Management	Developing	6
Accelerating the development of low carbon homes: ADMD Calculator	Embedded	6	
<p><i>Be the trusted partners of our customers, communities and stakeholders</i> £2.6m* of customer value</p>	Partnering to deliver the UK's first low carbon industrial cluster: NZWN Cluster Plan	Developing	7
	Collaborating to improve our responses to extreme weather: Storm Arwen Response	Embedded	7
	Guiding local authorities to reach their low carbon ambitions: LHEES & LAEP	Developing	8
	Creating the tools to help deliver exceptional customer experience: Total Customer	Planned	8
<p><i>Ready our business for a digital and sustainable future</i> £3.3m* of customer value</p>	Improving our ability to identify and respond to faults on the network: LV Support Room	Developing	9
	Sharing our data to meet stakeholder needs: Open Data Portal	Developing	9
	Leading the way in the just transition: our Just Transition Strategy	Developing	10
	Driving sustainability throughout our supply chain: Climate Action Hub & SmartWaste	Embedded	10

*Customer value is the expected gross benefits delivered by the selected projects over the next five years.

Delivering maximum value and impact for Customers and Stakeholders

Since 2017, we have worked diligently to find a robust and innovative way to measure the value we deliver to our customers and stakeholders. This incentive in particular has supported us in finding new ways to evolve and develop our approach, with each year improving the accuracy of our social value calculations.

Our Social Return on Investment (SROI) tool not only considers the financial return of an investment, but the benefits to our stakeholders and wider society. We strive for all the investments we carry out to have a positive SROI so that the communities we serve are considered in all investment decisions we make.

We use this method in two ways:



To make decisions: Once we have identified a customer or stakeholder need through our engagement, we work with them and our subject matter experts to define different options for how this could be addressed. Once a set of feasible and desirable options have been firmed up, we put each of these through the SROI tool. This tells us which of the options delivers maximum value for society. We weigh this information with the preferences of customers and stakeholders as well as operational factors in deciding the best way forward.



To ensure value was delivered: Once a project is underway, we gather data on the results delivered and the outcomes enjoyed by customers and stakeholders. Putting these through the SROI tool allows us to ensure that value was delivered and to continually improve our ability to measure and forecast the impact of our actions. Continuous improvement plays a crucial role in our mission to do what's best for customers as we move towards Net Zero.

How we have developed the SROI tool further this year

Once we developed a solution, we didn't simply stop there. Each year we look to better our approach to delivering additional social value through our business activities. Below we have detailed the work we have carried out within the last year to support this continued evolution:



We led the development of a common SROI tool across all DNOs. We developed a single approach, with full governance around it as part of the development of a new Vulnerability Incentive Framework. This was shared with GDNs as part of the development.



We have now appointed expert consultants to carry out this work, ensuring we have accurate and up-to-date proxies and a clear set of guidelines we must all work towards.



Over the last year we have worked to expand this approach to TOs, GDNs and the ESO, bringing all companies together to work on a new proposal which supports further development of the methodology, to be used by all networks to provide consistency and improve accuracy in our SROI calculations.



We have also developed SROI support guides and forms for our business to support their SROI calculations, with the aim of further embedding SROI into project delivery.

Summary of economic value we have delivered

10 years

Total benefit delivered by services referenced in the SECV 22/23 submission within ten years.

£132,841,435

5 years

Total benefit delivered by services referenced in the SECV 22/23 submission within five years.

£76,018,143

1 year

Total benefit delivered by services referenced in the SECV 22/23 submission within one year.

£13,464,353

Developing our network, ready for Net Zero



Taking a stakeholder-led approach to green investment

Embedded

Following the COVID pandemic, the country embarked on a programme of investment aimed at stimulating the economy while progressing towards Net Zero. Capillary engagement across our communities allowed us to identify shovel ready projects that would facilitate the energy system transition while meeting our customers' and stakeholders' core needs across all areas of our network. Close collaboration with stakeholders was instrumental in shaping projects from design to delivery and demonstrates how our engagement leads us to deliver the right initiatives, at the right time and in the right place to maximise customer impact and remove the barriers to achieving Net Zero. The Green Recovery Investment (GRI) fund brought these key projects to life.

Stakeholders said:

In addition to our ongoing engagement we carried out specific engagement with strategic stakeholders representing a range of backgrounds such as local authorities, business, charity, NGO, community energy sectors and academia to help us define priority projects and support the right communities with the necessary proposals through the GRI programme. With dedicated Panel sessions in both our Scotland and England/Wales regions, stakeholders overwhelmingly supported our aims to drive local economic growth. However, they were clear we must consider all locations including remote areas to support a fair transition for all, supporting the broadest range of people and hard-to-reach communities.



The actions we've taken:

Following our panel sessions, we worked with stakeholders from a range of groups including local authorities, the emergency services, local governments, government departments, businesses, and housing developers, to gather a representative view. Stakeholders told us they wanted us to focus on two key elements: the decarbonisation of (i) transport, and (ii) heat. This helped us create a priority list of projects that could be delivered at pace to remove community-wide blockers for accessing low carbon technologies (LCTs).

Projects that supported the shift to electric vehicles:

- Motorways – We created new capacity to support EV charging infrastructure at service stations along the M56, M6, M62, M74 and M8 motorways. We also created the capacity for visitors to the Rhug Estate in rural North Wales to power up their EVs, helping to open up green travel and tourism.
- Police Scotland – We upgraded the connection at 16 Police Scotland sites to facilitate their ambition of decarbonising their fleet of 3,500 vehicles.
- Caledonia bus depot – We commissioned a new primary substation at First Glasgow's Caledonia Bus Depot to support the charging infrastructure necessary for the new fleet of electric buses.

Projects that focused on the decarbonisation of heat:

- North-West – A new primary substation to enable the development of low carbon homes in Liverpool, St Helens and Warrington.
- Hard-to-reach rural communities, such as Tanygrisau in Wales: now has a greener heat network in place enabled by upgraded infrastructure developed under the green recovery programme.
- Moodiesburn – Reinforcing the local infrastructure to allow new private and social housing developments to employ heat pumps.

Outcomes:

Our truly stakeholder-led approach to the GRI enabled 40 projects to successfully commence meeting the needs of a diverse set of stakeholders. A few highlights include:

- 270 charging points for Police Scotland, saving 10,000 tonnes of carbon each year.
- Capacity to charge 300 buses in Glasgow, saving over 10,000 tonnes of CO₂ a year.
- Infrastructure in place to support EV charging at some of the UK's busiest motorways.

Overall, the projects we're delivering through GRI will create over 650MW of capacity across our networks. This will deliver the equivalent of 500 EV chargers and 4,000 heat pumps, as well as numerous other significant connections.

For every £1 invested, we estimate green investment will deliver an estimated £2.81 of net benefit over and above the cost, in the first five years.

Each of the GRI initiatives is unique; for this estimate, we use three projects: Police Scotland, Caledonia bus depot, and LV Smart Voltage Control.

Driving the decarbonisation of transport

Developing

We introduced the ConnectMore tool to create a smooth connection process, providing customers with more insight into optimal locations for EV charging connections. Leveraging our network data, and building on the experience highlighted in last year's submission, the tool offers heat maps to visualise requirements and available capacity in an easily understandable format.

Stakeholders said:

Through our regular customer engagement and feedback, customers informed us that while the tool helped a great deal, they still felt the need to engage directly with a SPEN colleague to discuss and proceed with their application. They requested specific features like costings for different locations and various fixes to make the tool more user-friendly, and the overall connections process more transparent.

The actions we've taken:

We took customers' feedback on-board and enhanced the tool's capabilities to offer a fast and effective connection process.

- We introduced a new budget quote function, enabling customers to obtain quotations for EV connections. Sites are presented along with cost estimates based on connection requirements, available capacity, and necessary cable routing. Options are also provided to reduce costs, including savings for flexible connections.
- We updated the tool's interface and how data is displayed, making it more user-friendly and intuitive. We also streamlined the application process onto one tool, provided methods to auto-populate sections, and improved the layout of the tool.

Customers can use the tool to determine the optimal location for new EV connections by clearly viewing charging requirements, available network capacity, and budgetary requirements in an easily understandable format.

The upgraded tool has led to a step change in how we handle a growing volume of connection requests quickly and cost-effectively while uncovering optimal solutions for our customers. We believe that tools like ConnectMore will be critical in the transition to Net Zero. We will gradually direct all of our additional load customers to ConnectMore, where it is expected to serve approx. 8,000 connection quotations per year.

Outcomes:

- The ConnectMore tool was launched in October 2022 and since that time around 40 budget quotes have been issued.
- Over the last year, the tool has been visited almost 4,000 times.
- Feedback from focus groups proved that customers received the tool's updates positively, reporting an improved customer experience.
- Virtual trials, desktop studies and cost-benefit assessments have resulted in recommendations for policies and industry standards relating to deploying smart charging connections.
- We now plan to refresh our web journeys and make the tool more accessible and quicker for customers, given that we expect a five time increase in enquiries by 2028.

For every £1 invested, we estimate that the ConnectMore tool will deliver £0.43 of net benefit over and above the cost, in the next five years.

Helping customers reduce their bills while delivering zero carbon heating

Developing

DNO COLLABORATION

WIDER CO-OPERATION

The UK Government aims to achieve Net Zero by 2050 and prioritises decarbonising heat in buildings. Through our models, research and engagement we have estimated that by 2030, over 800,000 homes in our distribution network could have installed heat pumps.

The introduction of heat pumps will severely impact the network and cause challenges both in terms of network capacity and the reliability of the electricity system. A major factor that will shape the impact of heat pumps is customer behaviour. Understanding the factors that lead households to install low carbon heating solutions and drive their use will be critical in forecasting the impact of heat pumps and empower our planners to remove barriers to the rapid take up of this technology.

Stakeholders said:

Stakeholders have advised us to collaborate with installers to ensure that larger network capacity, heat stores, and thermal stores are available to support the installation of heat pumps. This will enable the network to meet load requirements as more heat pumps are installed in the coming years.

Shared learnings:

We have shared our latest findings from Re-HEAT at events and stakeholder groups including:

- The annual Energy Innovation Summit.
- As a partner on the National Grid EQUINOX project looking at innovative LCTs.

For every £1 invested, we estimate that the Re-HEAT project will deliver £3.46 of net benefit over and above the cost, in the next five years.

The actions we've taken:

In collaboration with SSEN, E.ON, Daikin, and Sunamp, the Re-HEAT project involved subsidising (up to 85% of) the costs of installing a heat pump along with a home heat battery storage system in the homes of customers with above average existing heating costs.

The initiative aimed to explore two objectives:

- Investigate how electricity networks could facilitate the large-scale electrification of heat by reducing demand through the use of heating systems, without the need for traditional reinforcement.
- Test whether consumers could save on energy bills by charging their heat batteries during times of lower electricity prices, compared to gas or pure electric heating.

With a total budget of £5m, the project is installing 100 Daikin heat pumps in homes across three local authority areas, including 33 in the hard-to-reach rural Highlands. These heat pumps are connected to thermal storage units developed by Sunamp, a thermal storage manufacturer.

Customers that are part of the Re-HEAT scheme also received a range of upgrades to complement the heat pump and storage system. These upgrades included a new hot water tank and radiators, a thermal battery to take advantage of off-peak tariffs, smart heating control and heat pump monitoring, wall and loft insulation, and post-installation support.

Outcomes:

- The Re-HEAT initiative represents a significant milestone towards a sustainable and cost-effective energy system, benefiting both customers and the environment. By developing technical solutions that reduce electricity demand through heating systems, we aim to achieve an affordable and sustainable energy system.
- The average estimated annual savings for heat is currently tracking at £1,800, representing a reduction of 45%.
- 100 homes will benefit from a household heat pump and complementary upgraded equipment. 10 systems already installed, with roll out continuing in 2023.
- Generated lessons on working with public organisations through local authority part funding. The project received funding from the Low Carbon Infrastructure Transition Programme and the Energy Company Obligation, granting DNOs the capacity to work on ECO funded initiatives to improve energy efficiency of homes while managing network capacity.
- If scaled up across our licence area, this initiative could deliver £27m of system benefits by 2050.

Unlocking energy storage to balance the network

Developing

The UK government has committed to harnessing wind energy resources, setting ambitious targets of increasing offshore wind power generation five-fold to 50GW by 2030. They are also committed to reducing heat-based carbon emissions by replacing gas and other fossil fuel boilers with heat pumps.

However, this poses a challenge during colder months when heat pumps will require much more electricity to replace the peak heat currently supplied from gas. This increased demand will strain the grid, especially when the electricity is generated from renewable sources, such as wind power, that are subject to seasonal variations in production and must be transported over longer distances to meet the needs of regions with higher demand.

Stakeholders said:

Key strategic stakeholders involved in our Connections Panels and Strategic Stakeholder Panels, as well those who have provided input to our Distribution Future Energy Scenarios have recommended that we develop an evidence base to support investment in natural renewable energy sources in anticipation of future requirements.

The actions we've taken:

To tackle these challenges, we introduced the Heat Balance project that explores how large-scale thermal energy storage (LTES) could reduce peak demand and support the inter-seasonal alignment of wind generation. The project promises to maximise the amount of heat that customers can access from wind, reducing the requirement for network reinforcement and keeping system costs down for all network users.

We worked closely with leading UK universities and industry partners to tackle challenges, including:

- The development of a coherent framework that would allow for the use of LTES to be repeated at scale across Britain.
- Developed a tool that allows potential users to identify the most appropriate heat generation and storage technologies depending on their location.
- Identified and developed proposals to mitigate the socio-environmental barriers to the implementation of large-scale thermal energy storage.
- Established a road map for the GB-level rollout of LTES and delivered recommendations for the wide scale deployment of the technology.

Outcomes:

- Through the series of work packages, we identified the potential for LTES to reduce heating costs and provide valuable balancing for the energy system.
- From our findings, we developed a coherent framework for LTES across GB.
- The outputs have been disseminated with industry and stakeholders, in the interest of driving the uptake of a viable solution to heat decarbonisation.
- We are now working to develop more detailed tools for the design of further systems, exploring cooperative ownership and/or high levels of community engagement, determining suitable mechanisms for enabling load balancing through scalable demand shifting.

For every £1 invested, we estimate that the Heat Balance project, if fully implemented, would deliver £0.71 of net benefit over and above the cost, in the first five years of operation.



Delivering customer led flexibility

Developing

WIDER CO-OPERATION

The growth in renewable energy generation is critical in helping the UK meet its Net Zero ambitions. However, as generation capacity grows quickly within congested network areas, curtailment costs are also set to increase through curtailment payments and pressure on the grid. One way to help alleviate network stress and lower the overall cost of achieving a Net Zero system is to increase energy use during periods of high generation.

The domestic market is a largely untapped resource when it comes to accessing flexibility markets on a large scale, but could provide a cost-effective solution to curtailed generation.

Stakeholders said:

Our customers and stakeholders consistently highlight the desire for customers to participate in the energy system transition, meaning there is an ever-increasing market we can work with to (i) solve network challenges, (ii) keep network costs efficient, and (iii) deliver cost savings directly back to participating customers.

For every £1 invested, the Demand Shift trial delivered £1.97 of net benefit over and above the cost.

The actions we've taken:

Reaching domestic customers to engage in the journey of our energy transition and the benefits it brings is often challenging. This was something we were able to do through our partnership with Octopus Energy to allow residential customers to participate in flexibility markets through the "Flexibility Demand Shift Trial". The trials took place in the Dumfries & Galloway and Ayrshire areas where there is high Distributed Energy Resources (DER) penetration.

Our control room conducted in-depth assessments using their Engineering Net Zero model to trace the network demand. This precise knowledge meant we could reach out to domestic customers enabling demand side flexibility for every constraint. The process involved notifying Octopus Energy when high generation output was forecasted along with the required volume of the demand to be shifted. Octopus Energy then directly informed participating customers the day before the event. From putting a load of washing on at the required time, through to charging an EV, 2,500 customers participated in the six-week trial allowing us to understand customer behaviour and the response to requests for shifting usage.

"This trial was just the first step proving that people are happy to make small adjustments to help the grid and save cash. With a much larger campaign we would be able to really move the needle towards the flexible energy system we need for a greener future."

Rebecca Dibb-Simkin, Chief Marketing and Product Officer at Octopus Energy Group



Outcomes:

- 46% of customers said they would consider managing their energy use five days per week and 22% would do it three days per week. Every customer said they would be prepared to take action to control their energy at least once per week.
- With energy generation managed at a local level in this way, the trial saw 20.2MWh total demand shift with 1.68MW average per demand shift event. The demand shift during these trial windows equates to roughly the output from an average commercial onshore wind farm.
- Households who increased their usage by more than 10% were credited back all the energy they had used during the two-hour timeframe. Those who used more than 100% extra were credited double the amount they had used. Customers were rewarded with an average of £5 of free energy, with some saving up to £73.
- We are now planning to undertake phase 2 of this trial in 2023 to assess and identify appropriate commercial arrangements and the data required to implement at scale.

Creating flexibility opportunities for all

Developing

DNO COLLABORATION

Flexibility markets can effectively manage the growing energy demand from LCT adoption while avoiding the need for costly and time-consuming network reinforcement. However, while commercial participation in these markets has been notable, residential customer involvement has been limited.

We launched the second phase of the FUSION project last year to demonstrate how the innovative market features from the Universal Smart Energy Framework (USEF) could help to unlock the potential of residential flexibility. USEF is a comprehensive set of rules and processes that facilitate the seamless operation of DSO markets, and this project aims to realise its first GB deployment to create a more accessible route to market for flexibility providers – including households – and capitalise upon the large and relatively untapped resource of residential flexibility.

Stakeholders said:

Through extensive consultation, stakeholders supported the need to test USEF as a mechanism to open up flexibility and create an easier path to participation for the hard-to-reach residential sector.

Teeing up FUSION:

In July 2022, we were able to use FUSION at the 150th Open Golf tournament at St. Andrews. Using historical data, we were able to estimate when the highest demand would be during the tournament and offered 500kW of flexibility during the event through daily FlexRequests to our aggregators.

The actions we've taken:

FUSION offers a unique approach to flexibility markets that removes barriers to participation from residential customers. Customers are invited to engage in the market via our participating aggregators, Orange Power and Engie, who in-turn represent them in the market. Participation allows customers to generate revenue from flexibility trading while also benefiting their communities by helping to cost-effectively manage local networks.

In May 2022, FUSION launched phase 2 of the trial which aimed to test the benefits of enhanced USEF functionality and relieve congestion on two primary substations, St Andrews and Leuchars, benefiting approximately 9,000 customers. FUSION provided standby flexibility during a planned outage at the substations. This trial aims to demonstrate how USEF-compliant flexibility markets can contribute to smooth and cost-effective network operation.

A unique element of the FUSION trial is the use of free bids. This function provides aggregators with the discretion to offer flexibility outside of contracted times and capacity limits. This feature removes barriers to residential participation, allowing non-deterministic loads such as EVs to participate in the short term flexibility market without obliging them to commit to their availability days beforehand. With 60% of participants being from the residential sector, results suggest that this mechanism might have been a factor in unlocking residential participation.

Stakeholder feedback from aggregators is being fed into the final report and investigations are underway into the potential for integrating the most successful USEF features into SP Energy Networks BAU flexibility operations.

Outcomes:

Beyond demonstrating the effectiveness of USEF processes and testing features to unlock residential flexibility, FUSION has produced insights that can impact wider flexibility markets and benefit all DNOs and ultimately consumers. These include:

- **Primacy rules implementation** – In collaboration with National Grid ESO we trialled the implementation of primacy rules to manage conflicts that could occur between ESO and DNO-procured flexibility. The results of this trial are not USEF specific, which makes them immediately transferable to other DNOs.
- **Baselining study** – FUSION has also led to other significant developments, including a study into baselining, which seeks to compare different baselining methods and provide industry recommendations.

We estimate that if the Fusion trial were fully rolled out, it would deliver £216m of net system benefits every year under a System Transformation scenario (as detailed in our latest Distribution Future Energy Scenarios).

Breaking down barriers to connect renewable generation

D Developing

By 2030, the Scottish and Welsh governments aim to meet 50% and 70% of energy demand with renewable generation respectively. This will require a significant increase of new capacity across our networks. However, some generators have encountered well-documented limitations in installing more renewable capacity and exporting to the transmission network due to the rapid addition of generation assets in recent years. These constrained areas now face disproportionate reinforcement costs.

To address this challenge, we have further developed our centralised Active Network Management (ANM) platform (previously mentioned in SECV), a distributed control system used to monitor and allocate power capacity to customers in areas at risk of exceeding network capacity, called Constraint Management Zones (CMZs).

By ensuring that the network operates within safe limits, the platform benefits customers as they can connect renewable generation and LCTs ahead of conventional reinforcement solutions. If the network is approaching limits, the ANM controller instructs actions to be taken to mitigate any risks.

Stakeholders said:

Our Distributed Energy Resource customers have informed us they want to connect in shorter timescales ahead of traditional reinforcement works.



The actions we've taken:

Following successful trials of the ANM platform, we are now able to offer connections from two of our CMZs in Dunbar and Newton Stewart. Our trial in Dunbar enabled accelerated connections, cost savings, job creation, and wider-community benefits.

The work since our first trial has been on developing and deploying a Centralised ANM platform that is scalable to the rest of our network. For instance, we have now gone live with two customers with a total capacity of 75.5MW connected under the scheme.

As each CMZ goes live, customers seeking to connect in that area will be able to apply for a Curtailed Connection, connecting ahead of traditional reinforcement with the condition that their export or import may be restricted at times of high network loading. Customers will also be provided with a Curtailment Limit, receiving a Curtailment Payment if this limit is exceeded in a 12-month period. This will provide connecting customers with greater certainty over the financing of their project(s).

Outcomes:

- The ANM platform is now live in our SPD licence area. We anticipate that through using the ANM platform, the area will receive a reduction of 522,000 tonnes of CO₂, generating over £40m of customer benefits for the region.
- We are now undertaking in depth analysis of how to replicate the success of CMZs in our Manweb region, which has a more complex, interconnected network structure. We will deploy the first of such areas in Manweb later this year and are aiming to have 28 CMZs across our whole network by 2028.

For every £1 invested, we estimate that the ANM Platform will deliver £2.72 of net benefit over and above the cost, in the next five years.



Accelerating the development of low carbon homes

E Embedded

Housing developers are now required to include renewable energy as part of their building designs. However, developers face challenges as energy produced from these new builds could overwhelm the grid. To overcome this challenge, significant investment in network reinforcement would be required, making developments commercially unviable or causing considerable delays.

Responding to this challenge, load management control systems are being deployed to manage on-site renewable power consumption and generation while reducing peak export to the local network. This solution minimises the pressure on the grid and mitigates the need for reinforcement. Working alongside these control systems, our After Diversity Maximum Demand (ADMD) calculator is deployed. The ADMD calculator is a tool that enables stakeholders to estimate the load capacity required for housing developments, while accounting for the impact of LCTs such as EV chargers and low carbon heating, to provide a more accurate quotation for required works.

Stakeholders said:

Stakeholders participating in our regular Connections Panels and Net Zero Conferences have stressed the need for us to evaluate the impact of integrating renewable technologies – which will be installed as part of new housing developments – on network capacity. These assessments aim to facilitate the development of housing projects without the need for reinforcement works.

The actions we've taken:

In last year's SECV submission, we detailed proof of this concept by showing how the ADMD calculator complemented E.ON Dynamix, an intelligent peak load management control system, enabled the Maidenhill development to proceed without delay. This project proved that our ADMD calculator, combined with a control system, can unlock efficient solutions for renewable micro-generation adoption.

During phase two of the project, we embedded the ADMD calculator into BAU practice and expanded its use in more areas. For example, we scoped the viability of three locations (Wellington, Guardbridge and Winchburgh) for developments by quantifying all non-Net Zero and Net Zero loads on the grid, totalling nearly 6,000 homes, public and commercial buildings and industrial connections.

The tool delivered immediate impact by demonstrating how Cala Homes' Wellington development could not have proceeded as planned if a load control system (such as E.ON Dynamix) was not installed by 2024. The installation of LCTs planned for the development would have led the load requirement to exceed grid capacity, causing a four-year delay to the build. The project would have stalled until a primary substation planned for the area came online in 2027. The ADMD also showed that if a control system were installed and left in place after the introduction of the substation, the need for capacity would have reduced from 5MW to 3.5MW, leaving additional capacity for other projects.

Outcomes:

- Thanks to the ADMD calculator, the Wellington development can proceed with full build-out starting in 2024 without a 4-year delay. This will free up an additional 1.5MW for other projects in the area. If the project had been delayed, Cala would have faced a loss of £100-150 million due to deferred income from approximately 500 homes.
- We are continually engaging with stakeholders at the Winchburgh Developments to monitor grid requirements as the first phases of the build are set to complete. With the development running for the next 10 years, our support and use of the ADMD calculator will be critical in assessing different options as more pressure is placed on the grid.
- We have continued to share learnings from the tool with housing developers and associations across the UK to support with their deployment of renewable energy in new developments. To date, we have shared the tool with over 5,000 stakeholders and showcased it at four Net Zero events.



For every £1 invested, we estimate that the ADMD Calculator will deliver £4.66 of net benefit over and above the cost, in the next five years.



Trusted partners of our customers, communities and stakeholders



Partnering to deliver the UK's first low carbon industrial cluster

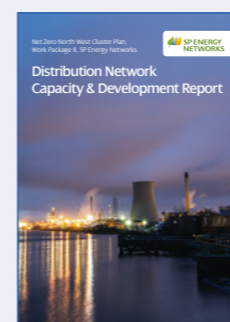
D Developing

WIDER CO-OPERATION

The North West of England has the largest concentration of manufacturing and chemical production in the UK, emitting 40 million tonnes of CO₂ each year. The continued economic growth of this area must now coexist with legally-binding Net Zero targets. Seeking a solution to this critical challenge for our local stakeholders led to the establishment of the Net Zero North West (NZNW) partnership. This group comprises a consortium of companies, regional leaders, and academic experts located across the region. The group's primary objective is to establish the UK's inaugural low carbon industrial cluster by 2030.

Stakeholders said:

We have now been engaging with customers for over eight years on this initiative, evolving and adapting to their feedback over time. Our industrial and commercial customers want SPEN to be part of the NZNW partnership to help facilitate their low carbon ambitions in timely and cost-effective ways.



See: www.netzeronw.co.uk/wp-content/uploads/2023/01/39883_SPEN_Net-Zero-NW-Report_Final_Digital.pdf

The actions we've taken:

As a partner of the NZNW Cluster Plan, SPEN is leading the planning and assessment of network needs and consulting on projects' feasibility based on available network capacity. We are also leading one of the key workstreams detailing the state of the network in the North West and the range of opportunities available for partners to take forward their projects cost effectively while minimising delays.

As part of our work we:

- Scoped the development of CMZs, detailing how we can utilise existing capacity before reinforcement is required.
- Scoped the opportunity for partners to access flexibility services via the network to lower overall system costs and emissions.
- Presented our 10-year plan aimed at increasing network capacity in the North West to unlock stakeholders' electrification plans.
- Provided data on network capacity headroom up to 2050 to further facilitate planning and co-ordination efforts.
- Explained how stakeholders can work with us to develop future low carbon plans through events, such as our Connections Surgeries and Preparing for Net Zero Conferences.

We are now working on a Register of Strategic Investment Projects for the NZNW area – this will help facilitate the significant interactions between our distribution and transmission networks in the area as the importance of Whole System planning increases.

Outcomes:

The output of the SPEN-led workstream for NZNW will directly inform the connection work required for 35MW of hydrogen production by 2025, expanding to 90MW by 2030. In addition, our workstream will inform the network reinforcement measures planned to support the transition.

Without a network that is fit for future purpose, NZNW cannot complete its Net Zero plans and meet the following goals:

- Deliver the world's first Net Zero region by 2040.
- Create 34,500 green jobs in the near term, with 660,000 green jobs overall.
- Save 46mt of CO₂.

For every £1 invested, we estimate that our involvement in the NZNW Cluster Plan will deliver £2.20 of net benefit over and above the cost, in the next five years.



Collaborating to improve our responses to extreme weather

E Embedded

DNO COLLABORATION

WIDER CO-OPERATION

Storm Arwen was one of the worst storms in decades. While most of our customers were not affected, around 189,000 properties experienced power cuts. In response, we engaged former UK Energy Minister Rt Hon Charles Hendry CBE to lead a review of our operational response to Arwen, focusing on the rural communities worst affected.

In developing his May 2022 report, Mr Hendry invited over 150 stakeholders to share their concerns and ideas for improvement, including local authorities, MPs, MSPs, members of Local Resilience Forums (England & Wales – LRFs), and Local Resilience Partnerships (Scotland – LRP). He also reviewed complaints made by customers and local media coverage.

The report resulted in 27 recommendations that transparently and unbiasedly reflected our stakeholders and pointed us towards steps we can take to minimise the impact of storms on our communities, especially those hard-to-reach.

We have established new feedback loops and named contacts with all LRFs and LRPs to ensure continuous improvement.

Outcomes:

Our strategic approach, based on the input of 150 stakeholders, complements the agile and tactical actions undertaken in the immediate aftermath of the storm.

Stakeholder-driven area of improvement	Examples of our progress over the last-year
Working cross-industry to review fault identification procedures and how the use of technology can be used effectively.	Creation of a Damage Assessment App to allow our field force to report data, including photos, GPS location and technical information to prioritise repairs and restoration of supply after a storm. We have now trained 180 of our staff to use this app.
Reviewing communication methods to ensure we better prepare customers ahead of winter.	Media campaigns to support winter preparation for customers, including local, regional and national media channels. Winter readiness briefings to almost 800 external stakeholders across our SPD and SPM network areas, including government and local resilience groups.
Reviewing mutual aid agreements across Network Operators in the UK to expand the types of staff that can be shared in large events and storms.	A Memorandum of Understanding (MoU) has now been signed by the Department of Levelling Up, Housing & Communities (DLUHC) giving guidance on engagement between Network Operators and Integrated Multi-Agency Partners in England, Wales and Scotland. Supported ENA in collaborating with Energy UK during our winter storm exercises, enabling them to stay up-to-date on critical issues. We have worked with other DNOs to review weather forecasting, scenario planning, generator deployment, fault identification procedures and future infrastructure standards.
Planning worst-case scenarios to update assumptions, ensuring sufficient capacity across IT platforms supporting call centres and websites.	Used scenario mapping to ensure the right governance structures are in place to protect customers during and after future emergency events, including storms and blackouts. Carried out stress-testing on our: (i) website (ii) ENA website and (iii) Telephony platform.

Guiding local authorities to reach their low carbon ambitions

Developing **DNO COLLABORATION**
WIDER CO-OPERATION

In Scotland and Wales, obligations are in place for local authorities to develop detailed plans about how they will decarbonise their areas to contribute to national Net Zero targets with strategies appropriate for the local context. In Scotland, local authorities are required to have Local Heat and Energy Efficiency Strategies (LHEES) in place by the end of 2023 and in Wales, Local Area Energy Plans (LAEPs) must be created by March 2024. Local authorities in England are also required to have LAEPs, however there are no definitive timelines for these to be in place.

Stakeholders said:

From our ongoing engagement with local authorities, the Scottish and Welsh Governments and the Liverpool City Combined Authority, it has become clear that SPEN can play a critical role in providing technical support and expertise to help develop LHEES and LAEP plans, supporting the authorities' ambitions and facilitating an efficient and cost-effective transition to Net Zero.

Effective planning of the energy system and how the electricity network interacts with demand, storage, the built environment, heat and transport will be vital in achieving Net Zero, particularly in hard-to-reach areas.

Scottish and Welsh Governments have specifically called on SPEN's support to trial the process around creating these plans and developing blueprints to be used across the nations.

The local authorities in England are not expected to have their LAEPs in place by a particular date, therefore each authority in our license area is at a different stage of their development. We have been engaging with all of them for a number of years and continue to do so, providing the necessary support, guidance and expertise required to fit their needs.

"SPEN already plays a key role in many aspects across the region. The Strategic Optimiser proposal that forms part of the Strategic DNO role will be very helpful in providing insight and support to the region in developing their energy plans."
Welsh Government

The actions we've taken:

We trialled LHEES and LAEPs in Scotland and Wales with Fife and Conwy local authorities, respectively. We shared open data, shape files, and heat maps, and used our Distribution Future Energy Scenarios to predict customer demand and generation metrics. We also provided advice and optioneering based on the scenarios generated. To meet local area and national government requirements, we tailored our approach:

Scotland: We are collaborating with Fife Council to identify an optimal building and homes decarbonisation plan, conducting a pilot project to identify the top three locations for Fife and SPEN to start their LHEES projects. We supported Fife Council in developing an optimal building and homes decarbonisation plan in line with their LHEES obligation, starting with a pilot project that identified the top three locations in which such plans would be most beneficial to the Net Zero transition. Critically, in collaboration with Fife we created a standardised seven-step process that can now be used by local authorities throughout Scotland to develop LHEES. As part of this we have worked closely with ES Catapult, SSEN and the Scottish Government to ensure that the processes and data are consistent across Scotland, especially in cases where both SPEN and SSEN serve the same local authority.

Wales: SPEN developed and trialled the first LAEP in Conwy, North Wales mapping the optimal mix of solutions and technologies to meet the local Net Zero ambition. To support Conwy in creating a cost-effective and efficient LAEP, we partnered with WWU to ensure whole-system solutions were adopted, considering gas, electricity and other alternatives. SPEN has a unique advantage in supporting LAEP development thanks to our technical knowledge of the infrastructure in North Wales and our involvement in government and stakeholder groups focused on renewable energy, future heat strategies, and the move to hydrogen at a national level. The findings from the trial were used to build the framework for the complete roll-out of LAEP guidance across Wales. Following the completion of the Conwy trial, the Welsh Government asked SPEN to develop further LAEPs, starting with Powys and Ceredigion in January 2023.

Strategic Optimisers: To meet the rising demand for support from local authorities, we're creating a team of 13 'Strategic Optimisers'. These experts will use their extensive network knowledge to support stakeholders in developing bespoke and deliverable LAEPs, LHEES, and low carbon plans in our network areas by leveraging the models developed over the past year in Scotland and Wales.

Outcomes:

- Following our work with Fife Council, we now have a robust process in place that can be rolled out across our Scottish network areas improving the speed and accuracy of LHEES optioneering and decision-making. We expect resource and delivery time to be reduced significantly for both local authorities and SPEN, potentially saving thousands of work hours.
- As part of the Energy Networks in Wales group, SPEN has collaborated with networks, Welsh Government and Ofgem to facilitate the Future Grid Study. This study has gathered insight, data and expertise over the last year to model the current and future Welsh energy landscape to meet its Net Zero ambitions.
- The newly created Strategic Optimiser teams will go one step further in acting as the conduit between local authorities and the technical optioneering for LCTs. This approach will offer significant time and cost efficiencies, through local authorities having access to expert electricity network knowledge. It will also allow us to more accurately model our scenarios and, therefore, our investment decisions for the future.

"For every £1 invested, we estimate that the support provided to local authorities in preparing LAEPs and LHEES will deliver £0.43 of net benefit over and above the cost, in the next five years."
This does not include our involvement in unlocking wider system benefits and least-cost options to reach Net Zero by collaborating with local authorities.

Creating the tools to help deliver an exceptional customer experience

Planned

Enhancing customer service is a top priority for us. Our customers have told us what is important to them is clear, accurate information in a format that suits them. Building on our brilliant customer service we know we need to stay ahead of customer needs and technology change is accelerating at an unprecedented rate. That's why we need to seize the digital transformation opportunity to take us into the future and stay ahead of those customer needs, not just digitise our existing business.

With that in mind, in 2022 we embarked on a programme to implement cutting edge technology across all of our customer service processes, delivering a programme called Total Customer which implements leading Salesforce CRM technology with an integrated Amazon telephony

platform. Using customer feedback, we have built a programme that meets the needs of our customers for the future while implementing technology that will be constantly evolving ahead of customer needs.

We have now implemented Phase 1 of our new platform across our Faults and Emergency processes, implementing:

- A world-leading Salesforce CRM platform and Integrated Amazon telephony, integrated with our real-time systems and giving us a single view of the customer.
- Automatic creation of on line faults from our website.
- Automatic messaging for customers with up-to-the-minute information.

- Seamless proactive contact for customers.
 - Speech recognition to aid customers through IVR (Interactive Voice Response).
- Our future phase to be fully delivered in 2023 will include all other customer processes including Connections, Vulnerability, Enquiries, Complaints, Automated Quality and Customer Satisfaction as well as other back office process including Land and Planning.



Readying our business for a digital and sustainable future



Improving our ability to identify and respond to faults on the network

Developing

The low voltage (LV) network is the 'last mile' of network that runs from local secondary substations into customers' properties. Typically, there is limited to no visibility of the performance of LV networks as traditionally these have been stable and predictable. However, with households decarbonising their transport and heat, consumption profiles are more dynamic and less predictable.

To address this, effective fault detection mechanisms are needed to identify and isolate issues before they escalate into supply interruptions for customers, further enhancing network reliability and minimising impact.

Stakeholders said:

We know from daily engagement with our key stakeholders we should prioritise and invest in grid monitoring to increase visibility, understand the causes of interruptions and reduce network fault rates, particularly on the LV network.

Further improvements to LV monitoring:

We are conducting a trial of 500 network monitors in our SPM region, focusing on areas expected to lead in the transition to Net Zero. These monitors will provide additional data to help the LV Support Room identify weaknesses, improve outage response times, and plan for future reinforcement. We aim to install over 14,000 LV network monitors across our regions during the ED2 period, providing coverage for 76% of our customer base.

The actions we've taken:

SPEN has revolutionised its LV network monitoring by introducing the LV Support Room. Utilising the bespoke LView/Navi platforms (innovation projects mentioned in the previous SECV submission and now embedded in BAU), this system provides real-time data produced by smart meters and substations to pinpoint where faults are occurring, allowing response before they disrupt customer supply.

The LV Support Room was established as a permanent part of SPEN's operations following a successful trial, which identified 30 'pre-faulting' circuits. By dispatching technicians to these circuits before a fault occurred, an estimated £60,000 in equipment damage was saved, unnecessary power cuts were prevented, and the amount of time customers were without electricity during repairs was reduced.

Originally, smart meter data only indicated whether electricity was on or off, but the team added voltage alert thresholds. This enhancement provides engineers with real-time dashboard visibility, which enables them to be dispatched to sites where faults are predicted or occurring, improving reliability and reducing disruption.

We have successfully implemented a real time-Smart grid monitoring system for 40% of smart meter customers, and plan to expand coverage to almost 100% as we transition into ED2 and prepare to achieve our ambitious reliability and customer satisfaction targets.

Outcomes:

- We have detected numerous faults before impacting customers, saving thousands in maintenance costs, and preventing customers from losing their energy supply. Some specific examples of cost savings include £105,000 from the First Fuse process over a six-month period, £27,000 from equipment monitoring, and £1,000,000 in avoided costs from smart meter analytics detecting neutral faults.
- By continuing to invest in pre-fault measures and bringing data and fault analytics services in-house, we will save an estimated £600,000 in framework contract requirements.

"For every £1 invested, we estimate that the LV Support Room will deliver £0.56 of net benefit over and above the cost, in the next five years."

"We're continuously innovating to provide our customers with the best service possible while leading the way towards a greener, electric future. Faults are an unavoidable part of any energy network and our LV Support Room is helping to revolutionise the way we spot and handle problems when they happen."
Craig Arthur, SP Distribution Director

Sharing our data to meet stakeholder needs

Developing

DNO COLLABORATION

We recognise that access to data, and information will be a key enabler in our ability to achieve Net Zero, and that we have an important role in facilitating efficient whole system planning and operation, and supporting the development of new markets and opportunities. Through our ongoing engagement, we are aware that stakeholders require access to data and information about our network in order to develop accurate plans, enhance project proposals, and to understand their impact. However, without appropriate tools and processes, providing the necessary data can be a timely and labour-intensive task both for our stakeholders and our colleagues. Our newly created Open Data Team, and our recently launched Open Data Portal, will aim to streamline the process to share data openly with our stakeholders.

Stakeholders said:

Stakeholders contact us with a range of requests for access to our data in a downloadable format to facilitate research, business analysis and planning activities. They want a simplistic and efficient route to obtaining the required data without encountering barriers. They have also asked that we continue to improve the time to serve, and the format of the data we share with them.



The actions we've taken:

By establishing more efficient processes, and using standardised data formats, we have significantly improved the time taken to facilitate each open data request, and have received positive feedback from stakeholders in the use of our new processes.

We have recently implemented an Open Data Portal, freely accessible to all customers and stakeholders from our website. The Portal is our centralised repository for data that we will be sharing openly, allowing users to easily search our open data catalogue, along with providing detailed metadata and the ability to consume our data via an API.

We look forward to working with our customers and stakeholders throughout the R110-2 Price Control period and beyond to identify enhanced data sharing opportunities. As an example, we have analysed our historical open data requests showing that approximately 50% were related to provision of a downloadable version of our network assets. These requests have previously been fulfilled by sharing files to the requestors bilaterally. Going forward, these files are now held on our Open Data Portal, available under a "shared" data sharing classification, to be updated on a quarterly basis. We will be proactively contacting our stakeholders to advise them of this and to seek feedback on our approach. Stakeholders can also provide feedback on the datasets published on our Open Data Portal, or request for new data to be shared, via the "feedback form".

Outcomes:

- Our Open Data Portal has now been launched, and contains key data sets which are representative of the trends requested during the last two years, as well as datasets published to meet our operational data sharing commitments made under the ENA's Open Networks Project.
- We will continue to build on our Open Data Portal, publishing additional datasets to align with our Stakeholder priorities, and working with other licensees through various working groups to aid standardisation across the industry.

Leading the way in the just transition

Developing

DNO FIRST

SPEN are taking significant steps to implement business practices and procedures to help the UK reach its Net Zero targets. During the UK's transition to Net Zero, there is the risk that some people will get left behind or suffer detriment as a result of the transition to a low carbon future.

Stakeholders said:

During our annual programme of engagement, a key emerging priority we identified from key stakeholder groups (e.g. Community Energy Groups, Government stakeholders) was to formalise our approach to delivering and supporting a just energy transition. The current cost-of-living and energy security crises have exacerbated the challenging risks faced by customers and have shaped the development of our first ever Just Transition Strategy.

"Achieving Net Zero is not a distant goal. It is here, now. I am confident that by working together to deliver our strategy, we can help to create a better future, quicker, for all."

Vicky Kelsall, CEO,
SP Energy Networks



The actions we've taken:

We have recently published our Just Transition Strategy, a document setting out the plans and principles we have in place to deliver a fair and equitable transition to Net Zero. This strategy – the first of its kind for a UK DNO – responds to stakeholder expectations that we establish a clear plan to deliver our bold ambitions.

We consulted with around 220 stakeholders on our proposed approach in Autumn and Winter 2022 through several channels, including (i) presentations to city and district business groups, (ii) engagement with our Strategic Stakeholder Panels in our network regions, and (iii) open consultation through our website available to all stakeholders. This collaborative approach with stakeholders led us to challenge our own internal thinking and develop more ambitious goals in facilitating a just transition.

Our strategy sets out our ambition to improve energy and social justice for all customers and stakeholders across our network, and to embed the principles of a fair, inclusive transition at the heart of our business. Our plan is centred around four key principles:

- Being a purposeful business.
- Leaving no one behind in the energy transition.
- Working together with our communities.
- Sharing knowledge and opportunity.

Independent, expert stakeholders will review progress towards our just transition vision annually.

Outcomes:

- A clear strategy that is informed and developed with stakeholders offers a clear, concise picture of how SPEN will support and deliver a just transition.
- A governance process that will ensure our Just Transition Principles are embedded within our business planning and BAU processes.
- Fair and equitable outcomes delivered for our customers and stakeholders in the transition to Net Zero.



See: www.spenergynetworks.co.uk/jts

Driving sustainability throughout our supply chain

Embedded

WIDER CO-OPERATION

Our Sustainable Business Strategy outlines our stakeholder-led vision for sustainability improvements across the network. Stakeholders strongly support our vision to become a carbon neutral company throughout our value and supply chains.

Our supply chain plays a significant role in achieving this target through the wide range of services they provide throughout the life cycle of our assets. However, not all contractors have access to tools that can help them track performance, and therefore allow us to monitor progress towards our targets.

Stakeholders said:

Reflecting the key role played by our supply chain, our stakeholders (e.g. the long-established Sustainability Stakeholder Working Group) have asked us to spearhead efforts that could support supply chain partners in taking control of their impact on the environment.



The actions we've taken:

We have driven collaboration by taking a lead role on behalf of ScottishPower for the Scottish Business Climate Collaboration (SBCC) project, a group of Scotland's leading businesses aiming to improve climate literacy, create green skills/opportunities, and green the supply chain. Spearheaded by SPEN, in March 2023 the SBCC launched the Climate Action Hub (CAH), a web tool providing free, bespoke climate action resources for SMEs.

To assist our supply chain partners in monitoring and reporting their waste management and sustainability data, we also introduced the SmartWaste reporting tool. SmartWaste allows us to collect, store, and report data in areas such as waste generation and carbon impacts.

By utilising SmartWaste to record this data, contractors can provide SPEN with data more efficiently and can perform their own data analysis and obtain reports on various sustainability metrics, providing valuable insights into e.g. their overall waste footprint, energy consumption and fuel use, or a summary of their carbon footprint and emissions. This enables our supply chain members to develop plans targeting waste and emissions in line with our ambitions to become a Net Zero organisation. Over the last year, we have conducted several events to showcase how to use SmartWaste to its full potential. During onboarding, we also offer comprehensive training.

Our supply chain played an important role in the development of the tool. With their feedback, we have been in ongoing dialogue with SmartWaste to influence the tool's development of new features and improvements. We have also engaged with Ofgem, DNOs and TOs to understand the most effective ways of reporting waste which has also fed into changes to the tool.

While the use of the SmartWaste and CAH undoubtedly contribute towards SPEN's environmental and sustainability ambitions, there are other far-reaching benefits. If all our contractors improve their practices to reduce waste and carbon using the insight from these tools, this will have material impacts far beyond the immediate work that SPEN contracts them for. We will continue to engage with our supply chain feedback and changing needs to support the continuous improvement and development of these and other sustainability tools.

Outcomes:

- CAH is freely available on the internet, so the 12 modules and tools can be used by any business.
- SPEN are actively pointing our SME suppliers to the CAH tool to support them in setting carbon reduction targets, which are now being embedded as requirements in our contracts. SmartWaste has already been added as a requirement.
- With a plan in place to engage and train all 53 of our contractors, we could see a potential increase of 139% in the number of contractors reporting through SmartWaste.
- Enhance circularity in business operations by obtaining more information on top waste streams. This will be achieved by examining the disparity between predicted and actual waste in projects that reduce carbon and material footprints.
- By supporting all companies within our supply chain, we can work together to meet our stakeholder-led ambitions of becoming a carbon neutral business.

For every £1 invested, we estimate that the SmartWaste tool will deliver £7.96 of net benefit over and above the cost, in the next five years.





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www.carbonbalancedpaper.com
CBP003019