Scottish & Southern Electricity Networks

Powering change

PART 2 2020-21

OVERVIEW OF EVIDENCE
Stakeholder Engagement and Consumer Vulnerability Submission

Powering change

Our Part 2 submission

Contents

1st
DNO to commit to a science-based target to reduce emissions

£7.86
average social value created per £ spent over the next 5 years on initiatives measured

£41m
of committed investment to kickstart a green economic recovery

COP26
Principal partner for COP26 flagship climate summit

PRINCIPAL PARTNER SSE
UN CLIMATE CHANGE CONFERENCE UK 2021
IN PARTNERSHIP WITH ITALY

1st
of-its-kind partnership to provide community broadband through distribution network infrastructure

Our stakeholder engagement strategy is in alignment with the AA1000 AccountAbility Stakeholder Engagement Standard (2015) and this year we were awarded an Accomplished rating against the maturity ladder for our first Healthcheck.

"SSEN demonstrates a commitment to integrating stakeholder engagement into its governance and strategy. The purpose of stakeholder engagement is clearly linked to the advancement of SSEN's overall business strategy and is well-communicated among internal stakeholders. The new stakeholder engagement training programme demonstrates a strong commitment to continuous learning and improvement, evidenced by SSEN's first annual participation in AccountAbility's Stakeholder Engagement Healthcheck assessment."

AccountAbility

2.1 Powering change with every connection

Meaningful stakeholder engagement goes far beyond just being the right thing to do – it's crucial to meeting the expectations of our customers and of society.

As you will have read in Part 1, we've made real progress in enhancing our approach to engagement, building on an already solid platform to ensure we turn insights into action and deliver tangible benefits. During 2020-21, we've conducted more engagement than ever before, all while adjusting to a new way of working, but we also recognise that it is the impact of our engagement rather than the scale that really matters.

In this section, we feature the stakeholder-led initiatives that we believe have driven the most impact in 2020-21. This ranges from local and targeted projects that provide a blueprint for wider roll out, such as the provision of high-speed broadband through our subsea cable infrastructure in Shetland, to company-wide initiatives with significant reach and impact, including being the first DNO to commit to a science-based target approach to emissions reduction. This diversity emphasises the point that engagement is 'everyone's job' in SSEN and it's by creating a strong culture of empowerment and accountability that we can deliver the best results for those we serve.

Our activities are centred around strategic themes co-created and prioritised by our stakeholders – **Driving improvement in core services; Enabling a smart and fair transition to net zero; Supporting safe and resilient communities;** and **Delivering in the public interest** and, building on the feedback from the panel last year, we have extended our Social Return on Investment measurement, providing a more sophisticated analysis of the enduring benefits of our actions.

You'll also recognise our focus on addressing the twin challenges of the economic and social recovery from COVID-19 and the impending climate emergency. This is best represented in our Green Recovery investment programme, where stakeholder feedback is driving the acceleration of over £40m in network investment, to help unlock 'shovel ready' net zero projects, including electrified ferries, electrified bus depots and even an electric test flight centre on Orkney. This will not only drive forward the net zero transition but create sustainable employment opportunities in all corners of our region.

I am proud to be part of a stakeholder-led business that listens, responds and acts on feedback, and will continue to power change for our customers and stakeholders in the years ahead.

Graeme Keddie, Director of Corporate Affairs and Stakeholder Engagement

2.2 Our stakeholder-led strategic themes

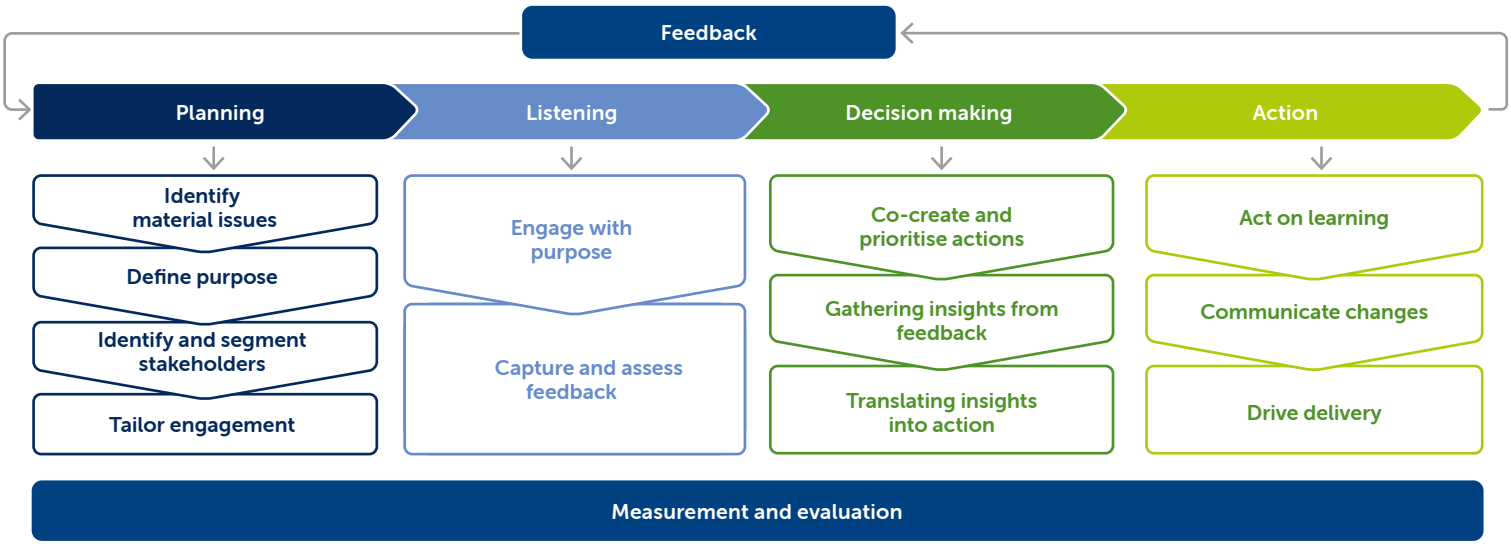
Our stakeholder-led initiatives and activities are centred around clear strategic themes co-created with our stakeholders in 2019 and further refined during 2020-21 (Part 1, page 01). Across these themes, we engaged with over 31,000 stakeholders during more than 870 engagements using a record number of methods (Part 1, page 07). This resulted in over 251 outcomes delivered for our customers.

Theme		New	Enhanced	DNO first	Innovation	Hard to reach	Collaboration
Driving improvement in core services	Smart network management drives community benefit		●	●	●	●	●
	Using big data to prioritise investment and tailor our service approach		●		●		
	Accelerating transformation during the pandemic	●			●		
Enabling a smart and fair transition to net zero	Supporting a Smart and Fair transition to net zero		●		●	●	●
	Collaborating to help essential services decarbonise	●					●
	Decarbonising our own fleet vehicles		●				
	Driving forward equality in the EV transition	●		●		●	●
	Enhancing our energy scenarios		●	●	●		
Supporting safe and resilient communities	Connecting remote islands with fibre optic lifeline	●		●	●	●	●
	Expanding flexibility to support network resilience		●				●
	Giving reassurance with EV charger location app	●		●	●		
	Co-creating an effective safety campaign with farmers		●			●	●
Delivering in the public interest	Committing to emission goals	●		●			
	Pioneering and delivering a just transition strategy	●		●		●	
	Championing inclusion and diversity in the workplace		●	●		●	
	Accelerating a green recovery	●			●		●

2.3 A mature and embedded strategy

We take pride in our engagement approach, ensuring it is consistent, meaningful and of a high standard across all areas and at all levels. Our accomplished engagement strategy provides a defined, practical step-by-step approach which we apply to all of our engagement activities.

In 2020-21, this was underpinned by the introduction of a clear set of principles – **Inclusive, Iterative, Insightful, Impactful**, which guide how engagement will be undertaken across SSEN, and further embedded through enhanced training and governance. (Part 1, page 05).



2.4 Measuring benefits

Our approach to measuring impact set out in Part 1 detailed how we combine valuation tools to ensure actions taken are the most appropriate and deliver maximum value to our customers and society.

We realise that in some instances, acting on qualitative feedback and customer prioritisation alone may not deliver the maximum holistic value versus cost, and we should change our actions to deliver the best possible outcomes. Below we demonstrate how we used our benefits valuation approach to inform our selection and measurement of a Part 2 initiative.

Case study **Measuring the benefits of the Electric A9**

Qualitative feedback

With EV uptake forecast to increase significantly across our network area by 2030, our stakeholders told us that a coordinated and collaborative approach with Scottish Government, road operators and local councils will be crucial in providing the critical infrastructure required to enable this change in a cost effective and efficient way. In response to this feedback, we assessed different options for how we could go above and beyond to provide extra support on the Electric A9 project.

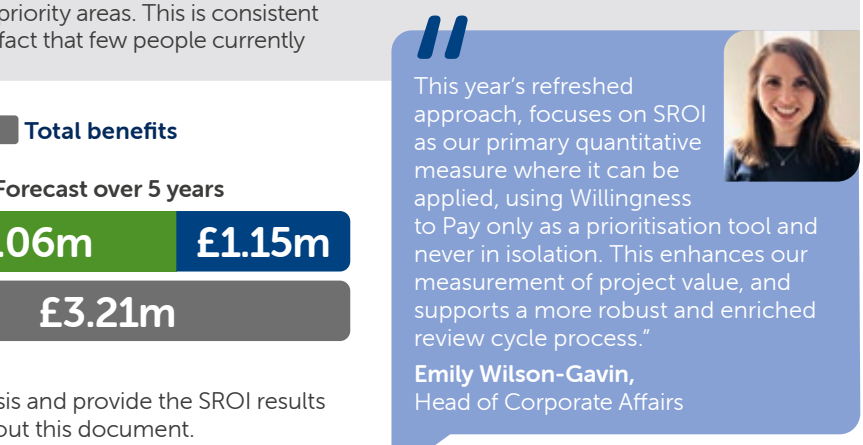
Social Return on Investment

We undertook an SROI assessment to determine the benefit of setting a dedicated central coordination team and seconding one of our engineers to support the local councils with the Electric A9 project. Our analysis found that providing **this resource would deliver strong value to local authorities of £1.66 in excess of every £ we invest per year,** driven by connection cost savings, efficiency benefits and upskilling of the local project team.

Willingness to Pay

Smart networks initiatives tested with customers through WTP research, including actions related to electric vehicles, generally ranked low compared to other priority areas. This is consistent with the fact that few people currently own an electric vehicle or have a strong understanding of the role of networks in supporting this transition, meaning they find it difficult to assign value. Prioritisation using only WTP would have meant we should focus on other actions.

However, bringing all valuation insights together informed us to proceed with providing support on the Electric A9 project while highlighting the importance of going back to customers to report the value of our actions and providing further education of the financial and societal benefits delivered by the adoption of LCTs.



"This year's refreshed approach, focuses on SROI as our primary quantitative measure where it can be applied, using Willingness to Pay only as a prioritisation tool and never in isolation. This enhances our measurement of project value, and supports a more robust and enriched review cycle process."

Emily Wilson-Gavin,
Head of Corporate Affairs

For each of our Part 2 initiatives we applied similar analysis and provide the SROI results alongside the project outcomes for 5 initiatives throughout this document.

2.5 Driving improvements in core services

Driving continual improvements in our core services for customers and network users is a key priority for us. We know it's what they expect and deserve, so we are committed to working with our stakeholders to develop services and execute projects that will deliver lasting benefits.

27 outcomes and impacts delivered

£11.82 average social value created per £ spent over the next 5 years on initiatives measured

18% reduction in customers impacted by PSIs following review

SMART NETWORK MANAGEMENT DRIVES COMMUNITY BENEFIT DNO First Enhanced Hard to reach

The electricity network is subject to necessary outages for maintenance and investment. In rural areas where there is limited opportunity for re-routing connections, this can lead to periodic curtailment of generation export to maintain system stability.

We listened:

In dedicated workshops, Distributed Generators (DGs) expressed frustration with the impact of periodic export limits and challenged whether the industry standard "50kW flat rate constraint" policy effectively and fully utilised network capacity. Remote community residents also expressed the desire to maximise the use of local renewable generation, citing socio-economic benefits.

We acted:

- In March 2020 we published a consultation, tabling options to best manage generation during outages. The three options presented – Pro rata percentage (PRP), Last in First Off (LIFO) and Standardised Export Response (SER) were developed with stakeholder and expert input
- 42 generators responded, with 85% opting for the PRP method where available capacity is shared by percentage of total contracted capacity, so that each generator is curtailed proportionately by the same amount
- We updated our Network Access Policy and established a new process of dynamic constraint management in our control room. In July 2020, the PRP methodology has been applied to all outages of a duration of 4 days or more
- Going even further: In response to the benefits of this scheme and further engagement, we have now committed to extending this to all outages of more than 1 day

What we delivered for customers:

- **We're the first DNO to enable generators to maximise their renewable generation export capacity during outages.**
- **This innovative solution supports the local, embedded generation industry and hard to reach communities by;**
  - **Maintaining revenue streams which benefit business and the local community, and;**
  - **Promoting increased renewable generation in line with net zero objectives.**

Combined revenue and carbon benefit*

Additional capacity (MW)	Total export (MWH)	Additional revenue (£72/MWH)	CO_2 emissions avoided (tonnes)
29.03	8160.811	£1,224,121.72	3526.63

* For an explanation of how figures have been calculated, see inside back cover.

3,526 tonnes of carbon emissions saved, enough to boil over 36 million kettles

Case study — Increased small scale generation results in an additional £5,000+ income in one week

The revised PRP approach is having a significant impact on small scale generators serving remote communities as demonstrated by a recent outage impacting community wind turbines.

Before we implemented the new policy the weekly income from the turbine during an outage was £946. With the new PRP approach income rose to £6,248.

- Income for community generator based on their power purchase agreement and FiT rate would be £6,248 an increase of £5,302 over 7 days

	Hours	Output	Export	Income base
Pre policy	180	50kW	3,600KWh	£946
Post Policy	180	330kW	23,760KWh	£6,248
Variance		250kW	20,160KWh	£5,302

£11.82 social value created per £ spent this year driven by avoided CO_2 emissions and additional income for renewable community generators

"Due to the policy change, we were able to operate unconstrained. This is a step forward we greatly appreciate."

Islay Energy Community Benefit Society

"This new Network Access Policy from SSEN will help maximise Scotland's renewable energy generation. At a time when we are facing increasing challenges, the result of this collaborative effort provides good news for the small hydro generation industry."

Richard Haworth, Technical Director, British Hydro

USING BIG DATA TO PRIORITISE INVESTMENT AND TAILOR OUR SERVICE APPROACH Enhanced Innovation

Customers welcome joined-up thinking from utilities. This includes circumstances where some customers may deal with us more frequently than others, such as when investigating transient faults or managing multiple network investments in their area.

We listened:

Stakeholders told us they would welcome greater coordination on network activity in their area, requesting a more targeted service approach that acknowledges their situation and recognises multiple impacts.

We gained knowledge from engagement with industry thought-leaders including the Institute of Customer Service, that bringing together different datasets that were traditionally interrogated separately would allow us to link our service and engagement approach directly to stakeholder and customer feedback.

We acted:

We created a new system known as the Customer Health Index, bringing together tens of thousands of data points from sources such as asset data, fault data, network reference numbers, customer satisfaction insights, complaints and PSR data. This is one of the first applications of Big Data within SSEN.

We use customer health index rating in two ways; (i) to inform how we prioritise delivery of our asset investment programme (ii) to tailor engagement interventions and communications to affected customers.

"This new approach is one of the first applications of Big Data in SSEN to support robust data-driven decision making. Bringing together key datasets from multiple sources now enables us to better serve our communities, minimise disruption and communicate effectively when our customers need us most."

George Ahmed, Head of Customer Contact Centre

What we delivered for customers:

- **We are now able to triage our network circuits based on the assigned score and tailor our services and customer engagement as required.**
- **All jobs with a 1-3 rating automatically trigger an alert flagging the level of bespoke activity and communication that is required.**
- **As the system becomes further embedded, we will be able to identify fault trends and anticipate problems in advance, and proactively communicate with customers to avoid issues and improve customer experience.**
- **Customer feedback from these engagements is also gathered to be triangulated with data sets, to inform the improvement cycle for future decision making.**

Level of engagement activity aligned to health index score

BAU: Tier 0	Enhanced: Tier 1	Enhanced: Tier 2	Enhanced: Tier 3
Standard communications issued to explain our activity in the area and reasons for the activity.	Communications issued to inform customers of action plan to address the issue. The local dedicated Customer Relationship Manager is responsible for providing coordinated updates.	Proactive contact with customers in addition to coordinated action plan communications, supplemented by local authority/parish council engagement to support community resilience planning.	Local engagement to include a Director-led 'Town Hall Event' to facilitate conversation for customers and stakeholders, plus Corporate Affairs bi-lateral meetings with key political stakeholders.

ACCELERATING TRANSFORMATION DURING THE PANDEMIC New Innovation

We listened:

From our consumer insight research, we heard that maintaining a safe, secure and reliable supply of electricity was more important than ever before, particularly due to the rise in homeworking and home-schooling during lockdown and restriction periods. These sentiments were echoed by political stakeholders at our resilience roundtables.

Using online and face-to-face methods we surveyed 1,600 customers, including 100 by telephone to avoid digital exclusion. Key findings included:

- **30%** indicated that they were either concerned or fairly concerned about the impact of interruptions
- **41%** were spending an additional 5 hours or more at home, with 32% working from home
- **80%** said that 7 days' notice or less would be needed for an interruption > 2 hours

We acted:

Although our notice periods for Planned Supply Interruptions (PSIs) were already meeting customer expectations, we understood we must further adapt our working practices at speed to continue delivering excellent service for our customers.

- We made an overall commitment to minimise the number of customers affected by an individual PSI
- We reviewed all PSIs, undertaking an enhanced impact assessment, reviewing alternative times and potential to postpone
- Improved our communications approach, including increased outbound calling and earlier notifications
- Strengthened our governance, with formal director-level approval for outages impacting over 50 customers.

"Customers are going through difficult periods and have found things even harder due to COVID-19. However, I must say that SSEN has done a really good job over the last ten months and has gone the extra mile to make sure that the response to support these people is coherent."

Dr Alan Whitehead MP, (Lab, Southampton Test)

What we delivered for customers:

- **18% reduction in customers impacted by PSIs following review, which equates to a 27% reduction in time off supply**
- **Enhanced impact assessment led to a 92.5% reduction in one case**
- **We achieved a customer satisfaction score of over 92% throughout the pandemic**
- **We are now exploring enduring benefits post COVID restrictions**

2.6 Enabling a smart and fair transition to net zero

We're firm in our belief that the benefits of a smarter net zero energy system should be available and accessible to all. Only through meaningful engagement with our stakeholders can we deliver innovative projects that support an efficient and cost-effective pathway to a smart, flexible and sustainable energy system that works for everyone.

28 outcomes and impacts delivered

£1.14 average social value created per £ spent over the next 5 years on initiatives measured

+100 additional EVs in our fleet

SUPPORTING A 'SMART AND FAIR?' TRANSITION TO NET ZERO Enhanced

We listened:

Through engagement with customer representatives from Citizens Advice, community energy groups and wider stakeholders, we were clearly told that the transition to net zero should be equitable and accessible to everyone in the communities we serve. Achieving this requires meaningful understanding of the different barriers our customers face.

"The introduction of the smart and fair programme is truly innovative and ground-breaking, addressing head-on key social challenges in reaching net zero."

Mike Petter, Chair of SSEN's Stakeholder Advisory Panel

We acted:

Recognising that an evolving energy system risks creating new barriers and types of unfairness, SSEN commissioned a programme from the Centre for Sustainable Energy to explore this social justice challenge. The initial report investigated what a smart and fair outcome should look like and how that can be achieved without leaving consumers behind.

An analytical framework and methodology – called a Capability Lens – was also developed to measure the impact of changes to the energy system on the diverse group of customers we serve.

What we delivered for customers:

- **21 recommendations to support an equitable transition in addition to a Capability Lens to assess ability to engage in the future energy system and potential barriers**
- **A second phase of the project will improve the analytical tools, pilot interventions to widen participation and analysis of the value of the smart energy market to a range of different stakeholders**
- **The second phase roll-out in Scotland will determine whether the analytical framework can be used 'in reverse' to develop profiles of communities, types of smart energy offerings and to model types of interventions that may be required**

COLLABORATING TO HELP ESSENTIAL SERVICES DECARBONISE

New Collaboration

As a network operator, we can offer invaluable support to local communities and core services as they switch to EVs.

We listened:

Scottish Fire and Rescue Service (SFRS) and Police Scotland approached us to help their plans to switch 1,000 light vehicles to electric across 484 depots and stations.

We acted:

- We undertook feasibility studies to understand how SFRS ambitions could be achieved with site assessments to identify which locations should be prioritised.
- Collaborating with Highland Council, we identified sites in proximity to other scheduled EV charge point installations. This coordination of network reinforcement allowed sharing of resources and savings on excavation costs.

What we delivered for customers:

- **We trained third parties to use our online network load data and mapping tool to identify most suitable locations to target**
- **The approach is now a standard engagement service to support all emergency services and utilities in decarbonising their fleets**
- **We have adopted the same approach with other emergency services and are now testing this method with telecoms companies**

DECARBONISING OUR OWN FLEET VEHICLES

Responding to stakeholder feedback that we should be leading the charge on net zero action, we have continued to build and deliver on our commitment to the EV100 initiative to electrify our car and van fleet by 2030.

Across our fleet of 2,100 vehicles, we now have more than 100 EVs and have launched scaled-up trials in our operational areas to support our field staff who rely heavily on their vehicles for their roles in urban and remote areas, and to learn more about the functionality and performance of electric vans in core operations.

£0.64

social value created per £ spent over the next 5 years due to a reduction in CO_2 emissions and air quality improvements from the uptake of EVs

"I welcome the leadership SSEN is showing in preparing the network and decarbonising its fleet, and hope other companies follow suit."

Bob Seely MP

ENABLING E-TOURISM ON THE ISLE OF WIGHT

Our E-Tourism project is helping us to understand the potential impact that seasonal travel to tourist destinations could have on local networks, and to identify innovative and cost-effective solutions to help manage fluctuations in demand.

While our project analysed tourist destinations in Scotland we knew learnings could help other areas with similar challenges. Upon approaching councils in southern England, the Isle of Wight expressed specific interest and we have now begun an extension of the trial to the island.

DRIVING FORWARD EQUALITY IN THE EV TRANSITION New Hard to reach

We listened:

Our stakeholder and connections panels have stated our strategic focus should be to ensure no-one is left behind as we transition to a decarbonised society. This view was reaffirmed by stakeholders at this year's workshops, where attendees expressed concern that as we transition to low carbon technologies, there will be customers, including PSR customers, who may have new supply resilience requirements.

> We are committed to ensuring the disabled community are not left behind and so are delighted to be receiving the support from SSEN to progress this project identifying the needs and designing appropriate solutions that will enable disabled drivers make a smooth transition towards EV ownership."
>
> **Richard Turnbull,** Connected Kerb, Head of Wireless Charging and Innovation Projects

We acted:

- Through our research and engagement on the EV charger location project we found that despite over 2.44 million disabled parking badge holders in the UK, and EV options available through the Motability Scheme, EV ownership remains low
- To understand the unique barriers faced by drivers with disabilities, we are working with Disabled Motoring UK and identified that heavy, charging cables and inaccessible charging point bays can make charging almost impossible for disabled drivers
- Working in partnership, we are investigating wireless charging as an alternative to cable charging to support an accessible EV transition

What we delivered for customers:

- **We are the first DNO to investigate accessibility of EV charging to improve services for current and future disabled EV owners**
- **The project will undertake a feasibility study to understand requirements and barriers for disabled and vulnerable motorists**
- **This study will inform required adaptations to our services to support transient vulnerabilities due to a customer's inability to use transport when needed, perhaps due to supply interruptions**

ELECTRIFYING THE A9, EFFICIENTLY Enhanced Collaboration

Our work with the Strategic EV partnership has continued this year with a dedicated engineering resource providing support on the flagship Electric A9 project, to provide a connected charging network on one of Scotland's key trunk roads. In a unique arrangement, a member of our network planning team was embedded within the project team supporting Highland and Perth and Kinross councils on siting of their proposed charging hub locations.

To date, 8 of the 10 charging hubs have been connected and the A9 is now served with multiple charge hubs and associated amenities supporting long distance journeys across the spine of Scotland. This collaborative approach also helped councils **save over 26% in expected costs in electrifying the A9** leading to consumer savings and further social value (see case study on page 02).

£1.66
social value created per £ spent this year

This has been achieved through more efficient siting of chargepoints, compared to original locations, following intervention and network design by the embedded engineer. This project is being used as a blueprint for future partnerships and will inform a Consumer Value Proposition in our upcoming ED2 business plan.

ENHANCING OUR ENERGY SCENARIOS IN AN INDUSTRY FIRST DNO First Enhanced Innovation

We listened:

In developing our 2020 DFES, we engaged extensively with our stakeholders, including directly with 60 local authorities and at two rounds of workshops with over 400 attendees, to input into the findings and explore their use in the wider development of Local Area Energy Plans. Stakeholders said they found the DFES extremely useful, but welcomed further granularity of data and, in light of changing government policy, a more sophisticated view of factors that may help mitigate increased electricity demand.

> Stakeholders have really driven the development of our energy scenarios during the last year and they are far richer as a result. By introducing greater granularity and a specific layer of energy efficiency data – both industry firsts – we are improving the credibility of our demand forecasting and also helping local policy-makers see the huge opportunity that energy efficiency provides in reaching net zero."
>
> **Steve Atkins,** Delivery Manager, Future Networks

We acted:

In 2020-21, we made **two industry-first** enhancements to our scenarios based on stakeholder feedback. We published forecasts modelled down to 'output area', the lowest level of geographical zoning used by local authorities when using census data. This allows local authorities to understand the demand impact of the transition to net zero at a highly granular level – the minimum size of an output area is 40 households in England, which is ten times smaller than the next level up in zoning (known as lower layer super output areas) which other DNOs publish their DFES data at.

We also became **the first DNO** to add a dedicated layer of energy efficiency analysis in our DFES reporting, overlaying scenarios informed by input from local authorities and partners to show where it can help mitigate demand increase. This revealed that, while many aspects of energy efficiency are driven by national policy and trends, the local demand impact can vary significantly depending on the domestic, commercial and industrial building stock and demand profile in each area.

What we delivered for customers:

- **Updated DFES and energy efficiency analysis was shared with all 60 local authorities in our regions, with follow up workshops and surgeries conducted alongside a digital platform**
- **Energy efficiency layer shows that, by 2035, the impact of energy efficiency on current baseload electricity demand ranges from 7% to 29%, depending on the region and scenario**
- **Report includes specific energy efficiency targets for individual regions e.g. 60% of homes in Portsmouth and Oxford will need to be upgraded to secure an EPC rating of C or above**
- **Data is being used to help better inform and target efficient investment in our network through infrastructure upgrades and delivery of flexible solutions**

2.7 Supporting safe and resilient communities

Our first priority is to provide a safe and resilient supply of electricity to our customers, and this year the essential service we provide has never been more important. Working collaboratively with our stakeholders, we continue to play an active role to enable community resilience and promote public safety in the areas we serve, including some of the most remote communities in the UK.

60 outcomes and impacts delivered

£12.59 average social value created per £ spent over the next 5 years on initiatives measured

468 MW of flexibility contracts now in place, up from 6MW in 2019-20

CONNECTING REMOTE ISLANDS WITH FIBRE OPTIC LIFELINE New Innovation DNO First

We are a unique network operator, responsible for 454km of submarine electricity cables powering fifty-nine Scottish islands and the Isle of Wight. As the cables come to the end of their operational life, they are being replaced with new cable with fibre optic capability, with 83km currently in operation.

We listened:

Informed by stakeholders, our Digital Strategy acknowledges that fast and efficient broadband connections have become an increasingly essential part of modern living. The fibre optic capability within our subsea cables provides an opportunity to unlock additional broadband connectivity for many digitally-poor island communities, if suitable partnerships can be identified.

At our consultation events and follow-up engagement for the Mossbank-Yell and Yell-Unst subsea cable replacements in Shetland, our stakeholders asked us to explore opportunities to use the fibres within the cables to improve broadband to the islands, bringing additional benefits over and above security of electricity supply.

We acted:

Improving connectivity has been a priority of Shetland Islands Council (SIC). Following an approach by SIC's Shetland Telecom Project, we worked collaboratively over 12 months to enable access to our subsea fibre optics, with mutual benefits including:

- Improved broadband speeds to the islands, with the three subsea cables providing a backup route to the existing network
- The potential to connect nine SSEN substations via Shetland Telecom infrastructure, enhancing our asset management capabilities

£12.07
social value created over the next 5 years per £ invested due to a financial savings to Shetland council and community benefits of high speed internet

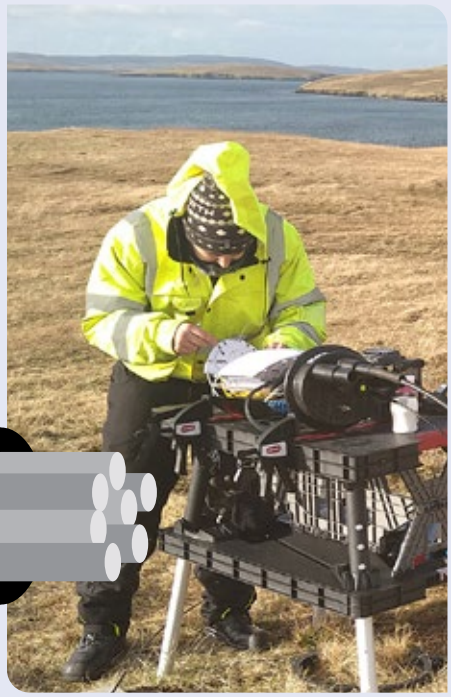
What we delivered for customers:

Outcomes from our partnership with Shetland Telecom include:

- **The first ever fibre optic connection to Yell and Unst, increasing internet bandwidths from 8-10 megabytes to gigabyte capability**
- **The roll out of faster broadband to 21 public sector sites including schools, medical centres, care homes and council buildings, reducing the inequality of online service provision across the islands**
- **NHS Shetland Telemedicine initiatives, which were previously hampered by poor broadband connections, can now be deployed more widely**
- **£2 million cost saving to SIC, alongside improved access to online training and workforce development to boost the local economy**
- **In the long-term, fibre connectivity to SSEN's infrastructure will help detect and prevent faults before they occur, reduce our carbon footprint from in-person inspections and enable the faster restoration of supplies during power cuts**
- **Remote visibility of our substations will minimise disruption to local homes and businesses and improve the service we provide to our customers**

We are actively seeking further partnership opportunities and are currently working in collaboration to help enable the rollout of superfast broadband on the Isle of Wight and Arran.

> "In a rural community like Shetland it is vital that all stakeholders work together. This partnership with SSEN has provided fibre infrastructure on a route which we simply could not have achieved ourselves and will ensure high capacity resilient connectivity for Yell and Unst."
>
> **Councillor Alastair Cooper,** Chair of the Shetland Islands Council's Development Committee



1st
of-its-kind partnership to provide community broadband through network infrastructure

EXPANDING FLEXIBILITY TO SUPPORT NETWORK RESILIENCE

Enhanced Collaboration

We listened:

In 2019-20, we introduced our first zero carbon constraint managed zone (CMZ) contract, securing a total of 6MW of flexibility services on the islands of Islay and Jura which reduced carbon emissions equivalent to the removal of 971 cars from the road for a year. Following this success, stakeholders asked us to do more to promote and make these opportunities accessible.

We acted:

- During 2020-21, to meet wider feedback on aligning flexibility services across the industry, we joined forces with four other DNOs to offer a single point of information relating to flexibility service requirements through adoption of the Flexible Power system. This collaboration provides a one-stop-shop for interested parties to view flexibility locations, requirement data, procurement notices and documentation via the dedicated Flexible Power website
- We introduced an interactive mapping capability on our website, increasing the information available online
- We implemented a tailored engagement programme of three live webinars detailing specific zones due for release, which were attended by over 60 stakeholders and delivered 22 tailored 1:1 sessions on specific CMZ or flexible connections

Flexible Power

What we delivered for customers:

- **We've now released 12 CMZ zones north and south, placing contracts in every zone tendered, often with multiple providers (20+ contracts with individual providers)**
- **Interest and uptake have significantly increased. Following 6MW of services awarded in 2019, this year contracts worth 468MW of live services have been placed, a significant increase on last year**

£13.11

social value created per £ spent over the next 5 years driven by a reduction in CO_2 emissions and generation benefits to DG customers

CO-CREATING AN EFFECTIVE SAFETY CAMPAIGN WITH FARMERS

Enhanced Hard to reach Collaboration

We have a responsibility to keep people safe around our equipment so every year we launch a campaign to alert people, in particular working farmers, of the dangers of striking overhead lines.

We listened:

A survey revealed that just over half of farmers and stakeholders were aware of our farm safety campaign. In response we set out to find new fresh ways of communicating to raise awareness levels to our target audience.

We acted:

Working directly with agricultural stakeholders, we adopted an ethnographical approach to explore safety behaviours and media habits, understanding of our campaign and the dangers associated with overhead lines. 15 hours-worth of one-to-one interviews with farmers aged between 17-62 yrs produced several key recommendations;

- Clear and simple instructions are vital
- Daily memorable reminders cut through farmers 'autopilot' mode
- Timing of the campaign is crucial, just before the busy seasons starts
- Advice would more likely be heeded from peers rather than a company

Building on this, we ran a social media safety campaign in September 2020 partnering with 'influencer' Farmer Jim.

What we delivered for customers:

Our social media campaign increased awareness of farm safety around our assets with:

- **90,000 targeted views, over 15,000 likes, shares and clicks and an 82.5% recommendation rate**
- **Our co-created new campaign is directly informed by the real-life insights and experiences of the farming community. Responding to feedback, this includes;**
  - **a simple graphic with three clear instructions to follow in an emergency, and a memorable phrase 'Farmers! A quick heads up'. This is shared via social media campaigns, posters, and with stakeholder partners the National Farmer Union (NFU), Young Farmers Association and agricultural colleges**
  - **A new campaign in the 'voice' of the farmer, using a real-life farmer, and a new radio advert with direct 'farmer-to-farmer' advice. This will run to coincide with peak farming activity during autumn and spring**

Our partnership with Young Farmers clubs in our regions will help us deliver messages through trusted channels and to new young farmers each year.

GIVING REASSURANCE TO OUR CUSTOMERS WITH EV CHARGER LOCATION APP

DNO First New Innovation

We know that networks for the future will bring new service requirements, so following our digital customer experience strategy we sought to understand what these new customers' needs are, and how we can meet them.

We listened:

Transport policy, including the banning of new petrol and diesel sales by 2030 means that there are projected to be 1 million EVs across our network by 2028 and 5 million by 2050 (2020 DFES). Our Connections Customer Steering Groups told us that greater certainty is needed about where and when drivers can charge their vehicles, particularly in a power cut.

They requested the ability to pinpoint and navigate to EV charge points to help overcome customer anxiety about charging. This sentiment was echoed by Citizens Advice who told us that EV ownership and charging is their fastest growing enquiry subject.

We acted:

- We are now the first DNO to provide a location finder to the nearest working public charging point at any time
- Using the National Charge Point Register (NCR), we geo-tagged all public EV charging points within our licence areas on our Power Track App. In the event of a power outage, affected charge points will be shown as offline and customers will be redirected to the nearest working charger
- Over 13,000 charge points have been added and a live feed function will update new charge point automatically

What we delivered for customers:

- **Over 100,000 existing Power Track app users have received this new function automatically**
- **The new service supports customer confidence and preparedness, for both existing and future EV owners**

2.8 Delivering in the public interest

Delivering beyond our primary obligations as a network operator is becoming an increasing priority each year. Stakeholders have told us that they not only want us to be responsible and accountable for the impacts we have on the communities we serve, they also want us to support the creation of wider environmental value and social justice.

26 outcomes and impacts delivered

£41m of accelerated network investment to aid the green recovery

1st DNO to commit to science-based targets for emissions reduction

COLLABORATING TO ACCELERATE A GREEN RECOVERY New Collaboration

In 2020, the UK Government signalled its intention to "build back better, build back greener and build back faster from the economic impact of coronavirus." As part of an industry that serves all corners of the country, electricity distribution networks are ideally placed to support this aim, providing a route to market for zero carbon projects that deliver skilled employment and local economic growth.

We listened:

At our annual workshops and stakeholder meetings, we heard concerns that the development of low carbon projects, especially those most innovative, would be stifled by the current economic environment and that support was required to reduce barriers.

We acted:

We proactively engaged with political, industry and community representatives and in February 2021 joined forces with the ENA and Ofgem to launch a collaborative industry-wide effort to promote green investment. We issued a Call for Evidence inviting applications from local authorities, developers, and others to identify 'shovel-ready' green projects that would benefit from extra network capacity and expedite the uptake of low carbon technologies.

We established a dedicated green recovery team and held two 'broadcast' events with over 100 stakeholders to launch the scheme, and over 50 bilateral meetings with interested parties.

"The green recovery programme is a great example of where industry collaboration, regulatory flexibility and meaningful stakeholder engagement can drive real results for customers and society."

Andrew Scott, Head of Commercial

What we delivered for customers:

- **150 expressions of interest were scored based on robust criteria, including customer value and benefits of employment and economic growth**
- **We've committed to deliver £41m of additional green recovery investment over the next two years, freeing up to 130MW of network capacity for low carbon growth**
- **Projects enabled include innovative projects including electric ferry and bus services, Rapid EV charging at motorway services and a test centre for electric aviation**
- **These projects will have a multiplier effect with SROI analysis supplied in our 2021-22 SECV submission. Unsuccessful projects are tracked, with ongoing support provided**

DRIVING POLICY TRACTION

Our stakeholders and consumers urged us to take a leading role in progressing an inclusive net zero transition, with local authorities telling us that we should be at the "leading edge" of a locally-led green recovery.

In response, we took a proactive and public leadership role publishing key documents to promote the policy interventions required to advance the green recovery agenda; our SSE 'Greenprint', distribution network specific 'Accelerating a Green Recovery' transport policy recommendations and our first Heat Strategy. This was supported by a proactive public affairs and engagement programme involving more than 100 meetings and events.

Several UK and Scottish Government publications have included our policy recommendations and in November 2020, SSE announced its principal partner sponsorship of COP26 which will see us partner with Italian utility ENEL in demonstrating the local net zero transition.

SSEN's Eliane Algaard with Secretary of State for BEIS, Kwasi Kwarteng MP

PIONEERING AND DELIVERING A JUST TRANSITION STRATEGY New DNO First

We listened:

Our involvement in the Just Transmission Commission and feedback from our investors prompted us to review how we could drive advocacy in this area.

We acted:

In November 2020 we became the first company to publish a Just Transition Strategy, framing the challenge around transitioning out of a high-carbon world and into a net zero world. The Strategy sets out 20 principles that will support: good green jobs; consumer fairness; building and operating new assets; looking after people in high-carbon jobs; and supporting communities.

"We are at the forefront of the low-carbon transition, but we only gain consent and legitimacy if it is done in a fair way. This strategy is just the beginning of the dialogue and we hope it will help deliver fairness in the shared endeavour of achieving a net zero carbon world."

Rachel McEwen,
Chief Sustainability Officer

What we delivered for customers:

We are calling on other companies to join us in publishing a Just Transition Strategy and set out how they will support a fair shift out of a high-carbon world and into net zero.

We are taking a leading role in this area and have shared the findings with the Just Transition Commission and other industry and public policy groups.

CHAMPIONING INCLUSION AND DIVERSITY IN THE WORKPLACE Enhanced

Our aim is to create an inclusive workplace which represents the diverse customers we serve, provides an environment where everyone can be themselves and, in doing so, enable better business delivery for all.

We listened:

Our focus was to drive positive action in key workstreams of disability, inclusion and gender so we undertook a strategic review of inclusion and diversity across our business. Our stakeholders told us:

- More needs to be done to make jobs in energy accessible for those with disabilities
- Women in the business do not feel there is full parity in pay or opportunities
- Traditional entry requirements recruitment model can be restrictive.

We acted:

We have set up a dedicated working group alongside existing Inclusive Service Panels to drive impactful long-term action in the focus areas of disability, inclusion and gender.

- We signed up to **The Valuable 500** which champions workplace disability inclusion and compels private sector organisations to take affirmative action on disability issues.
- We pledged our commitment to the **Equal by 30** campaign which galvanises action on equal pay, leadership and opportunities for women in the sector.
- We have evaluated the advertising and recruitment process of our apprentice and graduate programmes, working with talent specialists to identify barriers to uptake by minority groups.

What we delivered for customers:

- **Our recruitment and selection policies, updated in the context of disability inclusion, identify 10 core roles to build an inclusive pathway and accessible work environment for prospective candidates with visible and invisible disabilities**
- **Our Distribution Executive Committee is now 33% female exceeding the targets set by the Hampton Alexander Review and Equal by 30.**
- **We have changed our entry requirements from being qualification based to skills based and have attracted and recruited a more diverse workforce pipeline, taking on 34 new apprentices and trainee engineers along with 11 adult trainees.**
- **During 2020-21, and for the first time, our graduate intake is a 50/50 male:female split**

"We are proud of what we have achieved this year through our Inclusion and Diversity Plan however it's worth noting that this is not just about delivering meaningful progress now, it is also designed to ensure we continue to listen and learn so that we drive improvements and measure benefits for years and generations to come."

Jenni Stephen, Head of HR, SSEN

Setting standards with living hours accreditation

Our stakeholders told us we should avoid zero hours contracts and provide certainty to our workforce. While the Living Wage supports a fair wage, employees told us they need the security of guaranteed working hours.

In response we've acted and become the **first DNO** to secure Living Hours accreditation, the new standard that provides security of hours alongside a real living wage.

COMMITTING TO SCIENCE BASED TARGETS FOR EMISSION GOALS DNO First New

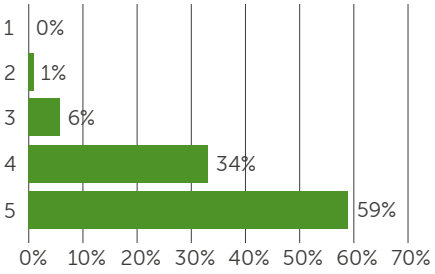
We understand it's crucial we commit to ambitious targets not just with words, but with the right tools and frameworks to ensure we deliver on our promises with meaningful action.

We listened:

At our annual stakeholder workshop, attendees said they expect us to have an ambitious sustainability strategy with stretching net zero targets. 93% voted for 'accelerating net zero' or 'achieving net zero' as a priority, and said we should prioritise activity to reduce environmental impact and move towards an affordable, flexible, low carbon network.

On a scale of 1-5, how ambitious should SSEN be in its sustainability strategy and Net Zero targets?

1 = remain as we are (in ED1)
3 = Pace with the Paris Agreement
5 = Accelerating Net Zero



Protecting the environment from our business activities was the top 'Net Zero' priority for 81% of stakeholders, who verified our approach to limit global warming to well below 2°C and pursue efforts to 1.5°C.

We acted:

Responding to this feedback, this year we;

- Became the first UK DNO to commit to the Science Based Target initiative (SBTi), in a letter of intent. This commitment to reduce emissions from our own operations aligns with our business strategy and sustainability values.
- Continued to build on the Sustainable Development Goals (SDGs) set last year through our new Sustainability Strategy. Working with stakeholders we have identified 5 themes and 8 key SDGs to deliver sustainable business improvements.

Sustainability Theme	Sustainable Development goals
The Net Zero Transition	7, 13
Enhancing Local Environments	7, 9, 13
Inclusive Service Provision	7
Investing in People	7, 9
Serving The Public Interest	8

What we delivered for customers:

The SBTi is consciously being adopted before the ED2 price control to reduce scope 1 and 2 emissions in line with net zero ambitions as soon as possible.

- **Work is already underway to switch diesel generators to hybrids (mix of battery and diesel). All of our 30kVa mobile diesel generators will be replaced with 23kVa hybrid models (50 across both network areas)**
- **Our new Loss Reduction Strategy will deliver a programme of initiatives to reduce losses and carbon emissions from all areas of our operations**
- **These strategies and commitments provide a solid basis for us to work with local authorities to develop tailored action plans to support their net zero ambitions**
- **Our EV100 Commitment will see 100% of our car and van fleet electrified by 2030**

Calculation of figures

CO_2 emissions saved have been calculated using the carbon conversion factors from the ED1 Ofgem CBA (based on 2012/13 figures). These are the factors we use for reporting the E6 submission each year. Form the projection table below the conversion factor in 2020 is 0.445 therefore 50.4x0.445 which is 22.43 tonnes of CO_2 emissions were avoided.

The feed-in tariffs (FiT) scheme is a government programme that pays renewable generators for energy they generate and export to the National Grid, the generator will have gained additional income through the FiTs scheme for the additional export during this period however we do not know the specifics of each FiT tariff or power purchase agreements so we have based the calculations on a nominal figure of £150/MHW.

The Overall outputs calculations are based on the sites running at full capacity or having the ability to when constrained. We do not have the weather data or monitoring to make assumptions on what their export could have been or was during the outage period.

The table 2 on page 3 sets out the details of revenue and carbon savings for individual site constraints.

Scottish and Southern Electricity Networks is a trading name of: Scottish and Southern Energy Power Distribution Limited Registered in Scotland No. SC213459; Scottish Hydro Electric Transmission plc Registered in Scotland No. SC213461; Scottish Hydro Electric Power Distribution plc Registered in Scotland No. SC213460; (all having their Registered Offices at Inveralmond House 200 Dunkeld Road Perth PH1 3AQ); and Southern Electric Power Distribution plc Registered in England & Wales No. 04094290 having their Registered Office at No.1 Forbury Place, 43 Forbury Road, Reading, RG1 3JH which are members of the SSE Group

www.ssen.co.uk