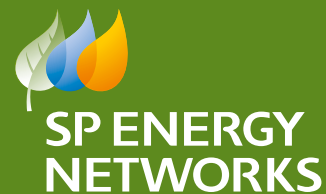


# Making a Difference

## Part Two: Highlights of our activities and outcomes following stakeholder engagement



Ofgem Electricity Transmission Stakeholder  
Engagement Incentive Scheme 2020/21





# This is Part Two of our submission to Ofgem's Stakeholder Engagement Incentive for regulatory year 2020/2021.

Ofgem's annual Stakeholder Engagement Incentive encourages Transmission Network Operators (TOs) 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 two parts:

### Part One – Our strategy

Introduces our Stakeholder Engagement Strategy, with evidence that we meet Ofgem's minimum requirements.

### Part Two – Stakeholder engagement outcomes and impacts

Details key outcomes we delivered through stakeholder engagement during this regulatory year and the impacts for our customers and stakeholders.

## About us

SP Energy Networks is the Transmission Operator that delivers electricity to homes and businesses in Central and Southern Scotland.

We play a critical role in providing security of supply across GB and in facilitating the connection of new renewable energy.





Value of Regulated Assets

(£ Billions)



When comparing all four TOs, SP Transmission is fourth in terms of current worth of our regulated assets, however this does not reflect the size of our ambition.

## Contents

Introduction from our CEO, Frank Mitchell	01
Our core Stakeholder Engagement Strategy	02
Tracking and driving our initiatives	03
Measuring impact	03
 Leading the way to deliver Net Zero	04
 Delivering benefits through innovation and whole system solutions	06
 Maintaining world leading resilience and system operability	08
 Putting our customers, stakeholders and communities at the heart of our plans	10







# Introduction from our CEO, Frank Mitchell

Achieving Net Zero will require big changes to how we operate as a business and how we all live our everyday lives.

Central to everything we do is engagement with our stakeholders. We are leading the way for our customers and stakeholders on the journey to Net Zero, ensuring we continue to engage on the topics that matter most to them and directly embed their feedback within our investment decisions.

This is a critical time for the energy system transition and the country's progression towards a green economic recovery. Taking the right action now can unlock significant economic benefits on the path to Net Zero – incentivising private investment, creating jobs, boosting our domestic supply chain, all whilst ensuring no communities are left behind.

We have a critical role to play in supporting regional and national ambitions driving towards Net Zero. This is why we have been working closely with the Scottish Government and wider industry stakeholders to deliver pioneering projects which play a vital role in the energy system transition. Initiatives such as our Green Economy Fund have made great strides in supporting our local communities to achieve their green ambitions, as well as disseminating knowledge across the industry to encourage others to follow suit.

The eyes of the world will be on Glasgow this year as it hosts COP26 and we are immensely proud to be one of the principal partners – further demonstrating our commitment to decarbonise the UK's energy sector. Being a key partner underlines the UK Governments

confidence in our commitment to tackling climate change and helping Scotland achieve Net Zero by 2045.

This year has brought with it new challenges as we adapted and responded quickly to the coronavirus pandemic, continuing to deliver industry-leading service for our customers – with our agile stakeholder engagement strategy allowing us to do just that. We made sure the effects of the pandemic didn't get in the way of our commitment to continue our dedicated programme of engagement with our stakeholders by implementing new, tailored and effective ways to continue our engagement.

I am extremely proud of my team and their ongoing commitment to stakeholder engagement. We have delivered on our RIIO-T1 commitments, driven innovation throughout our business and, most importantly, kept customers and stakeholders at the heart of our business. We are doing exactly what we said we would do in RIIO-T1, delivering on our promises and will continue to do the same in RIIO-T2. Our role as the provider of critical national infrastructure has never been more important and we have continued to work tirelessly to deliver a business fit for the future, in direct alignment with the priorities of our customers and stakeholders to create a better future for all.



*Frank Mitchell*

**Frank Mitchell**  
Chief Executive Officer,  
SP Energy Networks

## Key engagement highlights

*Global leaders in stakeholder engagement – achieving 81% in the AccountAbility audit – the highest possible categorisation of 'Advanced'*



**25,332** stakeholders engaged in 2020/21



**115** stakeholder events 2020/21



**140** outcomes delivered



**8.6/10** SPT satisfaction score – highest ever. Up from 8.4 in 2019/20



## Continuous consultation on our business priorities

Maintaining a relevant and up to-date understanding of the priorities of our stakeholders and customers is extremely important to us. We are committed to delivering a business in line with these priorities both today and in the future. We engaged with over 6,000 stakeholders, through focus groups, in-depth interviews and surveys, to consult on our strategic goals as a business. This involved engagement with our stakeholder community and our Transmission User group who were instrumental in their creation. The expertise of this group made sure the voices of our stakeholders supported the co-creation of our strategic goals which flow through everything we do – providing key focus and strategic direction to all our activities and decision making.

Through our annual transmission stakeholder survey, we carried out additional research to validate these priority areas. Survey feedback highlighted the key focus areas of maintaining existing levels of system reliability and connecting new renewable generation were in alignment to our strategic goals. Within this submission we have highlighted the key outcomes we have delivered over the last year against these strategic goals, demonstrating our commitment to acting upon the areas our customers and stakeholders have told us to focus on.

### Strategic Goals



**Leading the way to deliver Net Zero**



**Delivering benefits through innovation and whole system solutions**



**Maintaining world leading resilience and system operability**



**Putting our customers, stakeholders and communities at the heart of our plans**

## Key achievements aligned to our stakeholder driven strategy

Stimulated learning discussions with **1,045** organisations through our Green Economy Fund

**Launched new Access Roads Framework** – reducing waste to landfill

**55** full time jobs created through Green Economy Fund



Drone technology deployed – reducing time on site by **60%**

**First TO** to launch customer connections portal – **1,200** users to date



**World first project** demonstrating wind power can restore a black start

Ensured security of supply to vital NHS hospitals throughout COVID-19



**Community Engagement Award winner** at the 2020 Planet Mark Awards

Principal Partner for COP26



# Our core Stakeholder Engagement Strategy

Within Part One of our submission, we provided a detailed account of our Stakeholder Engagement Strategy, which has been embedded in our business since 2013. Since then it has continually improved and evolved to meet the changing needs and requirements of our stakeholders. This has been driven by our own learnings, our stakeholder community, industry experts including Ofgem, SIA Partners, SIRIO Strategies and AccountAbility – the owners of the global standard for stakeholder engagement. We have also benchmarked our engagement strategy and associated approaches outside of our industry to leverage global best practice as well as engaging with industry peers through bi-laterals and best practice sharing sessions with other DNOs, TOs, GDNs and the water sector.

Over the last two years we have benefited substantially from our Transmission User Group, as their expertise has supported the evolution of our Stakeholder Engagement Strategy. We recognise the benefit of this group and have invited them to continue this advisory role, ensuring our strategy is embedded across our future business plans.

## Key steps of our strategy to deliver meaningful engagement

### Step 1 Define the purpose

With a clearly defined objective, we tailor engagement to deliver the best results. This maximises the value of our efforts, and minimises costs by applying the most effective solution.

### Step 2 Identify and map stakeholders

Depending on the purpose of the engagement, different individuals will be best placed to offer the insight required. We need to understand: **a) who are the relevant stakeholders** and **b) what is their level of knowledge on the specific topic**.

### Step 3 Tailor the engagement

To ensure maximum value is gained from an event, we tailor three aspects of the engagement: content, method of engagement and communications.

### Step 4 Engage

The result of our planning phase is an inclusive, tailored and value for money engagement event, ready to be delivered.

### Step 5 Capture feedback

Feedback to design and deliver the right services for those affected by our business.

We seek feedback on quality of engagement.

### Step 6 Determine wants and needs

Analysing feedback to determine needs and services that could be improved, focusing actions on areas of business change that customers and stakeholders care about.

### Step 7 Develop priorities and actions

We aim to provide value for money. Demonstrating value rests on our ability to measure outputs and prioritise accordingly.

### Step 8 Act

Through developing our priorities based on feedback, we develop the actions to deliver with confidence we are delivering in the best interests of stakeholders.

### Step 9 Close feedback loop

With engagement complete, feedback collected and actions taken, the final step is to close the feedback loop. This step consists of measuring the success of actions taken, identifying how we can improve and providing progress reports to stakeholders.

## Engaging with hard to reach and challenging stakeholders



As detailed in Part One we have implemented a robust framework to standardise our approach to engaging with hard to reach and challenging stakeholders to best serve the interests of these groups. This has been informed by our Strategic Stakeholder Panels, industry peers and hard to reach representative organisations to continually inform and update our approach.

Throughout this document, we have highlighted key activities which deliver benefits for hard to reach stakeholders using our hard to reach icon above, however, we have provided some notable examples of our approaches in action:



### Key Driver – Partnerships

Partnerships from the Green Economy Fund have been further cemented through the pandemic, as the fund has been able to provide resources benefiting local communities. For example, funding facilitated an additional minibus to the FoodTrain fleet, resulting in over 3,000 people benefitting from support services, up from 1,000.



### Key Driver – Lack of awareness

The Connections process is often complex for customers, therefore this year we launched our Transmission Connections Portal, providing clear information on the connection process. This reduces knowledge barriers as the new portal is a self-serve information hub providing connecting customers all the information they require in one place.



### Key Driver – Inclusivity

Conducted a robust mapping exercise with our Land & Planning and Sustainability teams to identify gaps in reach for our Health, Safety, Environmental & Quality Forum – resulting in 36 new stakeholders invited for the first time.

## Global leaders in engagement



We have achieved the highest categorisation phase possible of 'Advanced' in the 2020/21 AccountAbility AA1000 Healthcheck with a score of 81%, an overall increase of 15% since our first healthcheck in 2018. This notable achievement demonstrates our true commitment to continuous learning and improvement in stakeholder engagement.

*"In the past year, SPEN has risen to the challenge of further embedding stakeholder engagement across its business and has deepened engagement work to integrate stakeholder needs and views into business planning. SPEN has received positive feedback on its transition to digital engagements, a reflection of the agility and stakeholder-centric focus of its processes and systems, as well as the outcomes delivered for its customers and impact generated."*

Daniel Metzger, AccountAbility

## Continuous improvement of our strategy

Expert Advice	Feedback	What we did
Ofgem SEI Panel	More detail on how the individual initiatives were linked to the strategic priorities of SPT.	This year, we have re-aligned our initiatives and business activity to our four overarching strategic priorities to clearly define the purpose of our engagement (see page 4 of Part One).
2020 AccountAbility Audit	Prioritise quality engagement over quantity to improve customer trust.	We leveraged online engagement to negate the need for lots of large events – reducing stakeholder fatigue and allowing engagement to happen at a time most suitable for stakeholders. A recent example was our Carbon Reduction Workshop which was attended by both Transmission and Distribution stakeholders – therefore combined into one event.

## Tracking and driving our initiatives

As outlined in Part One, our PDE (Planning, Developing, Embedded) mechanism allows us to track and monitor projects to drive these into becoming fully embedded within our business. Throughout this document, we have used this mechanism to demonstrate the status of each initiative. We have provided a more detailed update on page 9 in Part One of how many of our projects from previous submissions have now evolved into becoming fully embedded within our business.

### 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 adopted as business as usual.

## Measuring impact

As detailed in previous years and in our Part One submission we have made it a priority to have a robust, consistent and accurate way to measure the value of our projects and investments. Our innovative Social Return on Investment (SROI) methodology has been fully embedded within our business since 2018 and since then we have been working hard to continue our commitment to delivering value across everything we do. SROI 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. See Part One for further details on our robust methodology.

### How we use the tool to inform our decision making:

- Before starting a project** we input the details of the project and compare them against alternative solutions to see which option will deliver the greatest social value for our customers and prioritise our options accordingly.
- To complement traditional Cost Benefit Analysis (CBA)**, allowing our teams access to additional data to compare the CBA outputs with the social value delivered to justify and prioritise projects with a greater social return on our investment.
- After we finish a project** to evaluate the success of a project and consider whether an initiative should be amended or discontinued if it was not delivering the desired additional value back to our customers.

### How we have developed our SROI tool even further this year:

We were the first TO to consistently apply this SROI methodology back in 2018 and since then we have taken great strides to continually improve the robustness of our approach as part of our programme of continuous improvement. We believe this helps to ensure our investments are tailored in a way that best serves our stakeholders, customers and communities. **This year we have:**

- ✓ **Taken a leading role** to embed this methodology across the industry. We set up a working group across all network companies in the UK and key stakeholders, including Ofgem and Citizens Advice, to develop a consistent framework to be adopted industry-wide. This allowed for a more effective comparison of outcomes delivered by all network operators. This group, guided by ourselves and Sia Partners, agreed on a standardised framework and as a result, has now been adopted industry-wide.
- ✓ **Improved the accuracy and robustness of reporting** by taking on board Ofgem panel feedback to only use Willingness to Pay (WtP) values to inform the prioritisation of our activities rather than the social value delivered. As a result, and in line with the new industry-wide methodology, we have removed all WtP values from our SROI models this year, focusing on social proxies gathered from reputable sources, including the government and academia, in addition to the industry-wide central proxy bank.
- ✓ **We took a conservative approach to social valuation.** We only monetised likely outcomes of our initiatives and took conservative assumptions as to the likelihood of their impact.
- ✓ **Further embedded the use of the tool within our business** – we held **nine workshop sessions** in key areas of our business to further embed use of the SROI tool within our teams in relation to projects and initiatives.
- ✓ **Sought external assurance of our 2020/21 SROI calculations** from Sirio Strategies to provide independent assurance and audit of our valuations.
- ✓ **Presented the tool at our Strategic Stakeholder Panels** for feedback on our approach. Panel members viewed the mechanism positively, feeding back that we should share our valuations with project partners.

## Measuring the social impact of Transmission Connections Portal

Our newly launched Transmission Connections Portal is a self-service platform, allowing our customers to have greater visibility of their connections application online – supporting a better service and quicker, more consistent customer journey. (See page 7 for further details of the project and benefits).

### Costs:

Associated project costs of £310,881 – this includes labour, project management and resources.

### Five year reporting figures\*

Total cost	£310,881
Total gross present value	£712,507
Net present value	£401,627
SROI	£1.29

### Societal benefits:

**Reduced time required for customers to interact with TO** – estimated cost of using digital channels for customers to complete the connections process £65,775.

**Improved visibility and access to information** – Customers feeling more in control and informed throughout the connections process £646,733.

By applying this project to our SROI tool we were able to see that for every £1 we invested, £1.29 of value will be delivered back to customers within five years. This demonstrates how the SROI tool ensures our investments deliver value for money; as the wider societal benefits outweigh the costs. As the first TO to launch a Transmission Connections Portal, we are sharing learnings with other TO's which will continue throughout future phases.

\*Costs based on 2021 prices.



# Leading the way to deliver Net Zero



The energy landscape is changing. To help our customers in the transition, we must develop a network that's ready for Net Zero. Over the RIIO-T1 period we have witnessed first-hand the start of an epic transition to a low carbon electricity grid, with this trend only set to intensify. With the Scottish Governments ambitious 2045 Net Zero target and interim 2030 Climate Change Target less than 10 years away, we have a crucial role in preparing the network to be ready for the pace and scale required to make this ambition a reality.

We know how vital our role is to facilitate the changes required, supporting a just transition for the communities we serve - delivering jobs, economic growth and environmental benefits. We are already prioritising actions to tackle the climate emergency and achieve Net Zero, delivering £2.1 billion of investment into our network area in Scotland from 2013 to 2021.

We've been fundamental in establishing Scotland as a globally recognised renewable energy powerhouse, with 30% of the UK's onshore wind generation connected via our transmission network which has been a major contributor to Scotland achieving 97% of its electricity from renewable resources in 2020. We have further cemented our role in leading the way to deliver Net Zero through our core membership of the new Scottish Energy Networks Strategic Leadership Group which was formed to ensure the challenges and opportunities facing the energy industry are at the forefront of all future plans.

Our stakeholders told us that leading the way to deliver Net Zero by investing in our network, enabling communities to achieve their green ambitions and reducing our carbon emissions to deliver a positive impact on the environment should be key priorities for us.

## Key outputs

- ✓ 4,253 stakeholders engaged
- ✓ 61 outcomes
- ✓ £106m\* customer value

**231 tonnes of CO<sub>2</sub> saved through the Green Economy Fund**

**First TO to partner with Supply Chain Sustainability School**

**Funded 35 innovative projects – enabling communities to achieve their green ambitions**

## Setting a blueprint for accelerating Net Zero

### Our Green Economy Fund



**Embedded**

In the two years since its conception, our Green Economy Fund (GEF) has funded 35 innovative projects, enabling communities across Scotland to achieve their Net Zero ambitions. Not only have we provided funding, but we have engaged extensively with our project partners to build strong relationships and leverage the fund to continue to deliver wider benefits to local communities.

#### Stakeholder said:

Feedback from our Green Economy Fund stakeholder workshop emphasised the importance of exploring new ways to bring projects together to share best practice and disseminate key learnings.

#### We did:

- ✓ Initiated knowledge-sharing sessions with project partners, facilitating cross-sector collaboration and the sharing of best practice.
- ✓ Stimulated learning discussions with 1,045 other organisations and produced a GEF annual report to allow for further dissemination of key learnings.
- ✓ Engaged with over 60 stakeholders through our 'Green Power Hour' engagement sessions, with a further three sessions planned for 2021.
- ✓ Welcomed MSP Joan McAlpine to our Dumfries and Galloway 'Green Power Hour' event to showcase how the GEF has accelerated the region towards meeting its Net Zero targets.
- ✓ Introduced projects to the wider business e.g. Warmworks project joined several internal meetings to share learnings on battery storage to benefit future projects.
- ✓ Provided additional support to our partners through the pandemic:
  1. Funding from the GEF enabled FoodTrain to purchase an additional electric minibus, expanding their weekly support services to over 3,000 people (up by >1000).
  2. Forth Valley College used funding to support more than 50 schools with STEM education and online learning while schools were closed during the pandemic.
  3. Vulnerable people across Glasgow were offered free environmentally friendly electric transport to their COVID-19 vaccination appointments, thanks to newly funded electric buses.
- ✓ Engaged with Transport Scotland to share key learnings, helping to shape the 'Scottish Ultra-Low Emission Bus Scheme'.
- ✓ Proactively engaged with First Bus Glasgow to further electrify their fleet after purchasing two electric buses through the fund.
- ✓ Internal knowledge sharing between GEF and SPT delivery team to support future community projects.

#### Outcomes

- 8,385 vulnerable customers engaged in local communities to solve energy issues since the launch of the fund.
- 55 direct and 341 indirect jobs created through the fund.
- 231 tonnes of CO<sub>2</sub> saved through GEF projects – equivalent to charging over 1 million smart phones.
- Supported 35 projects who would have struggled to obtain funding via other means.
- 20 new electric buses to be introduced to First Bus Glasgow fleet, providing access to low carbon transport to those without an electric car.
- Vulnerable and elderly customers transported to their vaccine appointments by one of our project partners, enabled through GEF.
- 300+ pupils in Scotland provided with additional STEM education resources during the pandemic as part of our commitment to support learning.
- Plans approved by Ofgem for a similar fund in RIIO-T2 due to the successes of GEF.

**For every £1 cost = £2.33 value**  
expected societal benefits over  
5 years for FoodTrain





## Driving the sustainability step change

### Developing a sustainable business

Our commitment to be a sustainable networks business is engrained in all that we do. Our sustainability strategy covers everything from the goods and services we procure to the design and delivery of our projects and operations. Business sustainability is a key pillar in our role in delivering Net Zero, with stakeholder engagement playing a central role in building and guiding our plans.

#### Stakeholder said:

This year, we engaged with 55 stakeholders across three sustainability workshops, where stakeholders cited the need for early engagement with the supply chain in order to help suppliers achieve enhanced environmental standards. It was also emphasised that every effort should be made to source new alternatives to SF<sub>6</sub> to minimise our impact on the environment.

#### We did:

##### Equipment

- ✓ Trialled SF<sub>6</sub> alternatives and leak reduction strategies. Sharing learnings with TOs, DNOs and the ENA through stakeholder substation visits.
- ✓ Increased our SF<sub>6</sub> awareness training across the business, equipping staff with essential knowledge for safe working practices when handling SF<sub>6</sub>.
- ✓ Established TO carbon management working group to develop common tools and share best practice.

#### Supply Chain

- ✓ The first TO to partner with Supply Chain Sustainability School (SCSS), an online learning tool to increase supply chain sustainability knowledge and adopt best practice.
- ✓ Facilitated growth of the SCSS through engagement with our Sustainability Stakeholder Working Group (SSWG) sharing best practice and learnings.
- ✓ Launched 'Go Supply', our new global platform for suppliers – ensuring minimum sustainability standards are met across full supply chain.
- ✓ Improved supply chain reporting through introduction of 'SmartWaste', reporting carbon footprint and circular economy data – helping us manage data, compliance and performance.

#### Waste management

- ✓ First TO to finalise agreement with SEPA to re-use aggregate from temporary roads, reducing waste to landfill.
- ✓ First utility company to offset its plastic waste through using recycled plastic to construct a new road at one of our largest substations.



**For every £1 cost = £3.90 value**  
expected societal benefits over  
5 years for Access Road Framework



### Developing and Embedded

#### Outcomes

- 33% reduction in our business carbon footprint in 2019/20, excluding network losses.
- Maintained Planet Mark™ certification for our continued performance in reducing our business carbon footprint.
- 638kg of SF<sub>6</sub> will be avoided through new switchgear contract – equivalent to three wind turbines running for one year.
- 76% of Transmission staff trained on handling SF<sub>6</sub> to reduce leakage rates and improve safety.
- 'Go Supply' fully launched, requiring all of our supply chain meet minimum environmental standards.
- Aggregate waste reduced through new Access Roads Framework.
- Two tonnes of plastic waste offset through plastic roads initiative.
- Shortlisted in the 2020 Scottish Green Energy Awards for plastic roads initiative.

*"We would like other companies to follow SPEN's lead and look at the amount of plastic waste generated through projects and consider if this can be recycled into their own roads."*

MacRebur Contract Manager



## Leading the way to drive Net Zero

### Enabling Scotland to achieve Net Zero by 2045



### Developing

As the owner of critical national infrastructure, we have a fundamental role to play in supporting Scotland achieve its Net Zero ambitions by 2045. We are committed to driving this step-change, taking a strategic leadership role to influence and shape key policies to make these ambitions a reality. Our senior leaders lead by example, taking a proactive role in both national and local level engagement through strategic partnerships – supporting and influencing organisations to significantly reduce their greenhouse gas emissions to create a better future for the whole of society.

#### Stakeholder said:

Stakeholders representing 20 organisations from our recent carbon reduction workshop indicated we should show leadership in achieving Net Zero and encourage other organisations to follow suit.

#### We did:

- ✓ Our Director of Network Planning and Regulation now sits on the Energy Networks Strategic Leadership Group (ENSLG), underpinning our active role in supporting a just transition and achieving Scotland's 2045 Net Zero target – five years earlier than the rest of the UK.
- ✓ Signed up to the Edinburgh Climate Compact to support the city's ambition of reaching Net Zero by 2030.
- ✓ Participated in the BEIS and Ofgem Offshore Transmission Network Review, delivering a coordinated approach to offshore infrastructure.
- ✓ Hosted a Director led Transmission Live Event – 'Leading the way to Net Zero' available to every employee to educate our staff on what is required to deliver Net Zero.
- ✓ Joined Board of South of Scotland Energy Transition Group with Scottish Government to create a series of actions crucial to ensuring Scotland benefits economically and socially in the transition to Net Zero.
- ✓ Publicised COP26 events to our stakeholders such as 'Connect with Climate' to share views on a range of climate issues – over 350 stakeholders attended.
- ✓ Our Chief Operating Officer, chaired 'An Inclusive Transition to Net Zero' event, attended by Scottish Government, Community Energy Scotland and CEMVO, ensuring no one is left behind in the energy system transition.

*"We're delighted to join the Edinburgh Climate Compact. Net Zero is the prism through which we take our business decisions, and that has been a profound change. By working together, we can deliver the cleaner, greener and better future we all want, quicker."*

Guy Jefferson, Chief Operating Officer



#### Outcomes

- Co-created eight new principles through the ENSLG, to ensure Scotland's communities are at the heart of achieving Net Zero by 2045.
- Committed to 16 actions through the Edinburgh Climate Compact – reducing emissions through our operations, transport and buildings.
- Enabling Scotland to achieve 11GW offshore wind target by 2030 through the Transmission Network Review.
- Over 320 employees invited to our Net Zero event, equipping our staff with knowledge to support the business and help our stakeholders realise Net Zero ambitions.
- Identified a set of 20 initial actions through the South of Scotland Energy Transition group to unlock opportunities and support a sustainable future for the region.



# Delivering benefits through innovation and whole system solutions



Innovation is at the core of what we do, it's part of our DNA. We have the ambition and capability to lead the industry by innovating in the best interests of our customers and stakeholders. We do this to reduce costs and facilitate a low carbon economy, all whilst continuing to improve customer service, security of supply and network performance. A continual cycle of innovation, embedded across the company from the field to the boardroom, leads us to find new and improved solutions to our customers' evolving needs. Driving innovation empowers our teams to achieve more with less, specifically by embedding new technologies, processes, and ways to acquire, analyse and share data.

This allows us to deliver against the priorities of our customers and stakeholders, including uninterrupted supply and faster connections. At the same time, innovation moves us closer to unlocking the benefits of whole system solutions, such as identifying and facilitating the course of action that best meets the diverse requirements of the local communities we serve, reducing the time to connect new generation. These solutions will play a vital role in delivering Net Zero at the least cost and disruption for our customers.

## Key outputs

- ✓ 552 stakeholders engaged
- ✓ 23 outcomes
- ✓ £36.3m\* customer value

**Joined Whole Systems Charter** – working in collaboration to achieve Net Zero targets

**First TO** to launch a Transmission Connections Portal

**60% reduction in time on site** – utilising drone technology to carry out site assessments

## Embedding innovation within our workforce

### Driving a culture of innovation

We continue to drive a culture of innovation within our organisation through our innovation platform, iHub. This innovative platform encourages our employees to take an active role by participating in shaping the future of our business. Our employees submit ideas and solutions to overcome real business challenges, in turn, delivering positive benefits to our customers, stakeholders and the environment through innovative solutions.

#### Stakeholder said:

Stakeholders told us through workshops and in-depth interviews that investment in innovation projects is a top priority and its vital for technology to progress and align with the changing needs of both the electricity system and wider operating environment.

We also conducted external surveys with selected vendors to outline what we should do to be more innovative. Feedback told us to focus on closer collaboration and empower and enable employees to get involved in innovation.

#### We did:

- ✓ 10 ideas were progressed from the iHUB SPT efficiency campaign including:
  1. Introduced drone technology to inspect our transmission network, where we previously relied solely on helicopters, delivering environmental benefits and reducing costs. We are using drones to carry out condition-based assessments of our transmission towers, while also expanding our own fleet of drones to assist with network risk assessment and planning. Recorded drone footage provides a visual record of asset condition pre-access and is used to compare conditions after completion of work.

*"Thanks to the flexibility of drones, it's encouraged better stakeholder engagement for site assessments and ongoing relationships with landowners."*

Steven McChristie,  
Transmission Land Officer



*"Drone technology is hugely beneficial for the environment. The imagery we obtain is of a high standard due to the flexibility of the drones in assessing tower conditions, meaning we can make even more informed decisions."*

Pearse Murray, Transmission Director



2. Established a new methodology to collaborate more efficiently across Transmission and Distribution projects, allowing earlier communication and alignment of programmes across both licence areas – improving efficiencies in time and customer service through whole system working.
  3. Developing a new initiative to mitigate the risk of landslides around our assets by adopting natural prevention measures such as tree planting.
  4. New interactive touch screen technology introduced to field engineers to digitalise tasks, improving project efficiencies, replacing traditional paper methods.
- ✓ Completed a 12-week trial on virtual 'food for thought sessions', by bringing together employees from across the business, enabling rich discussion to solve business challenges, ensuring innovation is engrained within the business and networking throughout COVID-19 continued.



**iHUB**



### Developing and Embedded

#### Outcomes

- Estimated 86% CO<sub>2</sub> reduction per average site visit through adopting drone technology.
- Conducting site assessments in two days instead of five using drone technology, reducing the need for face-to-face interaction during the pandemic and minimising inconvenience for landowners.
- Reduction in carbon footprint and increased cost efficiencies for customers through introducing new touch screen technology.
- £500,000 of future savings projected through newly embedded collaborative working methodology.
- Network more resilient to landslides and improvement in visual amenities for our local communities.

**For every £1 cost = £2.89 value**  
expected societal benefits over  
5 years for **drone technology**



**DRIVE**

## Aligning strategies and ambitions to deliver government policy objectives

### Building a sustainable energy system for customers through whole system collaboration



Developing

From the earliest days of energy network development, gas and electricity networks have been owned and operated separately. Since then, there has been a paradigm shift, as new sources of energy are changing the way networks operate. As we continue on our journey to Net Zero, both energy supply and demand will be more distributed and intermittent requiring a move towards a whole systems approach. We recognise the challenge and complexity involved in delivering Net Zero, requiring transformation across the whole energy system.

#### Stakeholder said:

Feedback through strategic stakeholder workshops identified a collaborative approach across network operators should be developed. Additionally, engagement with 39 stakeholders across two strategic stakeholder panels highlighted the need to adopt a whole systems approach with other networks to ultimately benefit customers, stakeholders and communities.

#### We did:

- ✓ Driving force in the development of the 2021 joint Whole System Charter between SP Energy Networks, SGN, National Grid ESO, SSEN and National Grid Transmission, working closer to achieve Net Zero targets.
- ✓ Committed to the Whole Systems Charter principles, supporting the alignment of our collective resources, strategies and ambitions, to build and maintain a future energy system that delivers clean, sustainable energy for customers through efficient and collaborative transformation.

#### Case Study – Network Rail

- ✓ Collaborated with Network Rail to develop and accelerate a portfolio of projects to electrify the rail network.
- ✓ Increased electrification of the rail network through whole system interaction with transport networks.
- ✓ Collaborated with Network Rail when planning outage time to ensure minimal disruption, identifying and co-ordinating efficient solutions.
- ✓ Proactively identified new techniques to refurbish assets, reducing project time and fulfilling stakeholder objectives, whilst utilising robust project management throughout the project to mitigate risks.
- ✓ Supported Network Rail in their journey to electrify the rail network. Identified new monitoring solutions at Marshall Meadows site to mitigate voltage imbalance, allowing greater demand to be connected.

#### Outcomes

- Jointly committed to four whole system principles – underpinning network collaboration in delivering Net Zero.
- Providing optimal solutions for customers though a new commitment to develop joint tools and processes to support the delivery of Government objectives.

#### Case Study – Network Rail

- Delivered project two years ahead of schedule, helping the UK decarbonise its railway.
- Key enabler in Network Rails' 2024 target of 25% improvement in carbon emissions.
- Implemented new ways of working due to improved efficiencies, which has been shared across the business to influence future projects.



## Empowering customers through data sharing

### Evolving our connections portal in line with customer feedback



Developing

In 2019, we used Agile Project Management methodology to keep our customers, the Electricity System Operator (ESO) and colleagues at the centre of the creation of our new Transmission Connections Portal. Part of this new project management approach was hosting small focus group sessions, known as sprint sessions. These were used to co-create our new portal based entirely on the needs and requirements of our stakeholders. In 2020, we continued this effective engagement method to continuously evolve our system and implement key feedback during the trial phase, ahead of its full launch.

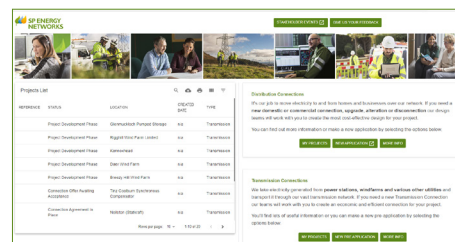
#### Stakeholder said:

Survey feedback from 40 connecting and connected stakeholders highlighted knowledge gaps and key areas of improvement which could enhance the connections process. Stakeholder feedback also identified the desire for a self-service platform to have greater visibility of their connections application.

#### We did:

- ✓ First to launch a Transmission Connections portal.
- ✓ Disseminated knowledge through sessions with NGET, NGENSO and SHET to share best practice and inform future portal development, aiming to providing customers a consistent experience when dealing with multiple TOs.
- ✓ Continued use of agile methodology to ensure consistency in project management processes.
- ✓ Held internal engagement sessions for all project managers, providing them with the knowledge to promote the portal to a wider range of customers.

- ✓ Whole system approach with our distribution business – aligning system design, ensuring a consistent experience for our connections customers.
- ✓ Continued collaboration with stakeholder pilot group, gathering in-depth feedback to continue to improve portal design. This will continue throughout phase two, ensuring the portal continuously evolves in line with feedback.
- ✓ Published new connections booklet, providing a simple overview of the transmission connections process to further reduce knowledge gaps.



#### Outcomes

- Increased transparency – customers now have more control and can track their connections application 24 hours a day.
- Customers can now submit real time feedback through the portal, providing a continuous feedback loop for us to act upon.
- Over 1,200 users of the portal to date, with 80% of customers satisfied with functionality and design of the portal.
- Portal has reduced knowledge barriers by providing customers information on their connections application in one place.
- Portal is embedded within future annual satisfaction surveys, ensuring we continue to gather key feedback to meet the needs and preferences of our customers.

**For every £1 cost = £1.29 value expected societal benefits over 5 years for Connections portal**



*"Very easy to navigate and feels very intuitive. On first review the site appears to include all functions required for day-to-day elements."*

Connecting Stakeholders, 2021





# Maintaining world leading resilience and system operability



This is a critical time for networks – demand is changing, generation is evolving and new threats are emerging. We are adapting our world-class network to meet these challenges, whilst delivering high performance for consumers, network users and wider stakeholders.

Our customers' and stakeholders' foremost priority is the reliability and resilience of our transmission network. While our network is among the world's most reliable, the rapid increase in renewable generation (30% of all GB's renewables are connected to our network), broader supply and demand shifts,

the digitalisation of the energy system and more frequent extreme weather events bring new and significant challenges. To continue to deliver world-class resilience and reliability and meet our customers' and stakeholders' primary need, we must take bold steps to manage these rising challenges. We are already making great strides in maximising security of supply through innovative approaches to black start, demonstrating the role renewables can play if a black out were to occur.

## Key outputs

- ✓ 304 stakeholders engaged
- ✓ 15 outcomes
- ✓ £8.6m\* customer value

**World first demonstration trial – increasing system operability in the event of a black start**

**Supported the vital role of the NHS, by ensuring security of supply**

**99.99% system reliability – phenomenal level of performance**

## Ensuring optimum network security through the pandemic

### Maintaining network and workforce resilience

 **Embedded**

COVID-19 has transformed many aspects of our lives, from where we work to how we live our everyday lives. Last year, we witnessed unprecedented challenges to continue to keep the power flowing to our 2 million customers; in turn keeping customers connected to family, friends and work. Our entire workforce rose to the challenge, doing everything they could – going above and beyond to achieve that.

#### Stakeholders said:

Engagement with Governments recognised us as critical workers and agreed to work with us proactively to develop solutions to ensure continued network security.

Feedback from stakeholder workshops told us that stakeholders believe energy security and maintaining reliability of supply is of number one importance – particularly essential services that rely on electricity such as hospitals and schools.

#### We did:

- ✓ Developed contingency plans with other network operators, Scottish Government, Ofgem, BEIS and Local Resilience Groups to ensure we maintained optimum security of supply.
- ✓ Shared best practice with other electricity networks and the ENA to strengthen our collective response – ensuring consistency of messaging. This was further shared internationally, extending best practice on a global scale.
- ✓ Proactively engaged with our entire Supply Chain and contractors at the beginning of the pandemic. Digital surveys issued to our contractors to understand impacts and mitigate risks, ensuring essential projects continued.
- ✓ Conducted comprehensive review and monitoring of our infrastructure around hospitals, nursing homes, water treatment works and food supply businesses across Central and Southern Scotland to ensure continued security of supply to these critical sites.
- ✓ Outages rescheduled and re-prioritised works to provide additional capacity and more electricity where it was needed, supporting the NHS.
- ✓ Engaged stakeholders throughout outage re-planning, ensuring they were supported and satisfied with plans.
- ✓ Worked with Scottish Government to make sure new field hospitals had the connections, capacity and resilience required to adequately fight the spread of the virus.
- ✓ Proactively advanced our shunt reactor programme to balance over-generation and low demand to manage network fluctuations in preparation for the UK population working from home.
- ✓ Managed demand risk through weekly operability meetings with all TOs, DNOs and NGESO to remove the risk of an over supply on the network.
- ✓ Dedicated COVID-19 response team established to identify key workers and implement safe working practices enabling critical work to continue in our communities.
- ✓ Established sub-group of union representatives to outline appropriate standards and practices across the business to maintain security of supply.
- ✓ Embedded innovative solutions throughout COVID-19 such as our iHUB drone project to inspect overhead lines.
- ✓ Continuous engagement with the National Health and Safety committee (HESAC) sharing key learnings on new working practices adopted to keep our staff, contractors and customers safe.
- ✓ Provided feedback to over 110 Trade Union questions in advance of HESAC calls, outlining working procedures and risk assessments ensuring the health and safety of our colleagues and customers.
- ✓ Signed the C-19 Business Pledge, demonstrating our commitment to help society at large through the COVID-19 crisis.

#### Outcomes

- Maintained 99.99% reliability throughout the pandemic, protecting the most vulnerable and ensuring supply to critical sites such as hospitals, nursing homes, water treatment works and food supply businesses.
- Customers were not impacted by fluctuations in demand as a direct result of proactively advancing our shunt reactor programme.
- Over 185 contractors completed our COVID response survey to proactively mitigate risks, ensuring essential works continued.
- Inspections proactively completed at over 120 substations around critical sites to maintain resilience – ensuring life-saving support continued to be provided 24/7.
- Reduced on site contact with landowners during the pandemic through adopting drone technology for site inspections.
- Improved health, safety and employee wellbeing as a result of enhanced level of engagement across network operators and Trade Unions which will be an enduring legacy.
- Due to our proactive approach during the pandemic we were able to deliver our Wishaw modernisation project on schedule to the benefit of connected stakeholders.

**For every £1 cost = £1.14 value**  
expected societal benefits over 5 years  
for Wishaw modernisation project



*"Weekly calls provided clear and concise channels for communication between staff, Trade Unions and senior management. These calls enabled us to successfully work together to shape the companies response to the pandemic, all whilst keeping members of staff safe."*

Senior Trade Union Representative



## Leading the way in developing innovative technologies

### A global first – transforming the role renewables play in network restoration



Developing

As the UK moves towards cleaner, greener energy solutions, it's vital new innovative ideas are explored to ensure the network is resilient enough to support this transition. This has been further driven by the Government who have recently announced new restoration standards if a black out was to occur, with 60% of all power being restored within 24 hours and 100% within five days. Our aim is to provide an energy network that can support the increased use of green technology and enable renewable generators to play a key role, ensuring power can be rapidly restored in the unlikely event of a total or partial shutdown of the National Electricity Transmission System. Through innovation projects, we're helping to develop pioneering green alternatives that have the potential to transform how power is restored to the network.

#### Stakeholders said:

Feedback from Government, BEIS and wider stakeholders highlighted we should look for new techniques to enable system restoration within this new energy environment.

#### We did:

- ✓ Collaborated with a renewable developer and Siemens to trial new, innovative technology at the Dersaloch wind farm to demonstrate if this could be used to restore the system in the event of a black start.
- ✓ Carried out a 'black start' and were able to successfully re-energise part of the transmission network, providing a clear proof of concept for wind-farm led restoration of the electricity network.
- ✓ Facilitated getting the grid ready to run the industry-leading trial whilst not impacting on the rest of the network.
- ✓ Engaged with Scottish Government, a renewable developer and Siemens Gamesa to outline project requirements, risks and ensure support. Scottish Government Minister for Energy and Economy played a key role in supporting this trial.
- ✓ Innovative technology was used to resynchronise supply to the grid and fully restore the system to normal operation.
- ✓ Took a leading role in lobbying BEIS and Ofgem towards a better understanding of the implications of a black start. As a result, BEIS produced a recommendations report on the required restoration standard if a black start were to occur which has been submitted for ministerial approval.
- ✓ Shared project findings with the Scottish Government, feeding in to their Net Zero agenda.
- ✓ Collaboration with National Grid Electricity System Operator (NGESO) in exploring how distributed energy resources can be used to implement a 'bottom-up' restoration strategy, with live trials currently being progressed.
- ✓ Leading the way to encourage key stakeholders to follow suit by publishing an article on how game changing green alternatives can restore the network in the event of a black start.
- ✓ Hosted virtual panels with wind suppliers, academics and network companies to share key learnings from the trial to influence future roll-out.

#### Outcomes

##### For communities;

- Greater security of supply for customers by facilitating the development of this industry-leading innovation.
- Embedding cleaner energy solutions and no longer being reliant on traditional energy generation to enable a black start – demonstrating our commitment to delivering a greener, more reliable energy system for our customers.

##### For renewable developers;

- Trial successfully demonstrated using 'grid-forming' technology compared to 'grid-following' technology can be used regulate power – allowing renewables to play a critical role in the event of a black start.
- Increased confidence for wind farm developers that their equipment can play a larger role in the country's journey to decarbonisation.

##### For wider industry stakeholders;

- Major achievement for the business and the wider industry – evidenced technology can be used to restore the transmission network in the event of a black out.
- Due to its success, Dersaloch will become the world's first 'black start' wind farm by 2022, with work to install new permanent infrastructure at the site by the end of 2021.
- Contributing to the wider grid system restoration resulting in a quicker restoration – without stakeholder engagement this would not have been achieved.
- Setting a standard on how we re-energise the electricity transmission system in the event of a total or partial shutdown, future proofing the supply to our 2 million customers as we transition to clean energy.
- Key learnings from these trials contributing to the Distributed ReStart project, a NIC funded project to share key learnings for a national roll-out.

*"Thanks to a series of important innovation projects, we're helping to develop pioneering green alternatives that have the potential to transform how power is restored to the network."*

Scott Mathieson  
Network Planning and Regulation Director



# Putting our customers, stakeholders and communities at the heart of our plans



Being the trusted partner for our customers, stakeholders and communities is extremely important to us. They are at the heart of everything we do, as the changes we make are designed to give them a network which suits their needs. The needs and preferences of our stakeholders are understood through

extensive engagement, are at the core of every initiative and our very priorities as a business. Beyond this, we believe we play an important societal role along with our Distribution business as essential service providers. Recognising this role, we have continued to invest in the wellbeing of our local communities.

## Key outputs

- ✓ 20,223 stakeholders engaged
- ✓ 41 outcomes
- ✓ £24.7m\* customer value

**Winner** of the Community Engagement Award at the 2020 Planet Mark Awards

**Over £2.1 million** invested in community regeneration projects – enhancing the environment in local communities

## Enhancing the natural environment for our local communities

### Giving back to the communities we serve



**Embedded**

We recognise our transmission projects can be disruptive, so we make it a priority to work with our communities to give something back, going over and above our baseline requirements to best suit the needs of our local areas. We do this by providing mitigation measures to minimise the impact projects have on local communities, residents and the environment around our major transmission projects.

#### Stakeholder said:

Engagement with local communities through consultations, workshops and surveys highlighted the need for the mitigation projects to give back to the communities we serve through community regeneration projects.

#### We did:

##### Beauldy-Denny regeneration project – Phase three

- ✓ Developed a large scale community regeneration programme around our Beauldy-Denny major project.
- ✓ Engaged with the Beauldy Denny Legacy Steering Group (BDLSG) along with representatives from Scottish Government, Stirling Council, Central Scotland Green Networks and public representatives to provide communities direct access to key project information and make sure local voices were heard in influencing our plans.

- ✓ Held engagement sessions with Cowie, Fallin and Throsk Community Councils – to keep communities engaged throughout the entire project.
- ✓ Enhanced environment, landscape and travel corridors in vicinity of new overhead lines.
- ✓ Implemented bespoke project management throughout the major infrastructure project to ensure successful delivery, minimising disruption to local communities and maximising environmental benefits.

##### Peat bog restoration

- ✓ Engaged with Scottish Forestry Commission, Nature Scotland, the Callander Estate and our charity partner Buglife, an invertebrate conservation trust, to inform our peat bog restoration project in Falkirk.
- ✓ Invested £850,000 in peat bog restoration to minimise CO<sub>2</sub> impact and improve bog habitats.

#### Outcomes

- 5.5km of new cycleways constructed providing safer cycle routes and connecting rural locations.
- Created 1.5km of new public footpaths.
- Enhanced bio-diversity of local area through tree planting.
- Key learnings from projects helped inform our Community Energy Strategy – as project team shared areas of best practice from proactive community engagement.
- Key learnings from Beauldy-Denny project have been shared internally to benefit future projects – ensuring local communities continue to benefit through regeneration initiatives.
- Over 260 hectares of peat bog land restored – crucial in reducing CO<sub>2</sub> impact and improving bog habitats.
- Supporting the aims of Central Scotland Green Network and a number of UN Sustainable Development Goals.

*For every £1 cost = £3.23 value expected societal benefits over 5 years for Beauldy-Denny regeneration project*



### Leading the way to improve the natural environment in our local communities



**Developing**

We understand that our major transmission infrastructure projects have an impact on the natural environment, so we have made it a priority to identify areas where we can enhance natural capital within our local communities.

#### Stakeholder said:

Engagement with stakeholders from our quarterly Sustainability Stakeholder Working Group, told us we should explore new tools and approaches to natural capital and have further engagement with public bodies, other TOs and expert stakeholders to develop new partnerships.

#### We did:

- ✓ Proactively engaged with Innovate UK to develop a standardised natural capital tool to measure the value nature has for our customers, stakeholders and communities.
- ✓ Engaged with other TOs to identify mapping and baseline methodology, produce pilot case studies and further develop the scope of the tool to meet the needs of all network operators.

- ✓ Bilateral engagement and workshops with Scottish Wildlife Trust and Nature Scot to guide our approach to biodiversity and natural capital enhancement, inform planning and ensure representation from partners with key links to local communities.
- ✓ Played a central role in shaping and piloting the natural capital tool by presenting and providing information to stakeholders to encourage its adoption on a wider scale.
- ✓ Completed phase one of non-operational land analysis and identified feasible community led biodiversity enhancement projects.

#### Outcomes

- Key partner in developing new standardised natural capital tool, NATURE, to objectively assess, manage and implement net benefits for the environment.
- Tool informs where we should protect and enhance natural capital when planning, designing and delivering projects, ensuring we have a positive impact on the environment.
- Tool is a key enabler in delivering our sustainability goals through biodiversity and natural capital enhancements.

**NATURE**  
Nature Assessment Tool  
for Urban and Rural Environments







SP Energy Networks  
SP House  
320 St Vincent Street  
Glasgow  
G2 5AD

[spenergynetworks.co.uk](http://spenergynetworks.co.uk)

