

Stakeholder Engagement Incentive Submission

Part **2**

2019/20 Delivering stakeholder benefits through holistic engagement



Scottish & Southern
Electricity Networks

TRANSMISSION

Contents

Section A	01
-----------	----

Introduction from Director of Customers and Stakeholders

Section B	02
-----------	----

Table of our initiatives

Section C	03-04
-----------	-------

Our holistic and embedded approach to Stakeholder Engagement

Section D	04-05
-----------	-------

Innovation in direct response to the needs of our Stakeholders

Section E	06-07
-----------	-------

Our dedicated work serving the interests of harder to reach communities and stakeholders

Section F	08
-----------	----

Effective use of project management to improve our engagement

Section G	09-10
-----------	-------

Emerging smart practice with industry

Section H	10
-----------	----

Our Forward Plan 2020/21

Section A Introduction from Director of Customers and Stakeholders

Since taking on the role of Director of Customers and Stakeholders for SSEN Transmission in April 2019 I have been immersed in a transformation of our business culture on engagement. In 2018, when we established Stakeholder-led as one of our strategic themes, many in the business and amongst our external stakeholders, were sceptical that this could be achieved.



Christianna Logan

Now, with my department established and grown; with all employees aware of our new engagement strategy and subject to performance objectives on stakeholder engagement; with engagement leads up-skilled through training and with new processes established to ensure consistent management, measurement, action and feedback on engagement, stakeholders really are at the heart of our business. I'm delighted that this progress has been recognised in our award of "Exceed" in our Stakeholder Engagement Audit and a "Mature" score in our AA1000 Health Check.

We are already seeing the results of this step change deliver measurable benefits for stakeholders. We have made contact with landowners that we previously couldn't reach, reducing refusals of access to less than 1%, letting our operational teams undertake necessary maintenance and repairs to keep the system safe and supplies secure. Our supply chain engagements are delivering multi-million-pound efficiency savings which will be shared with consumers, and are taking greenhouse gas emissions targets to a sector leading new level. Our collaboration on a whole system approach for Shetland has created a ground-breaking new mechanism to deliver benefits for consumers, customers and society by reallocating funding between network companies, a challenge which the sector has been puzzling over for years. The results of our engagement and partnerships on biodiversity net gain, SF₆ alternatives, and particularly the advances this year in application of HVDC, have cemented our position as a sector leader in sustainability.

Based on feedback received on our last Stakeholder Engagement Submission we have structured this submission based on Ofgem scoring criteria to ease identification of relevant initiatives. We have added icons and labels (as shown in the keys below) to ensure that it remains clear how these initiatives are delivering on our stakeholder selected Strategic Themes and the objectives of our Engagement Strategy.

Strategic Themes Key

- 1**  **Stakeholder-Led Strategy**
- 2**  **Safe and Secure Network Operation**
- 3**  **Sector Leading Efficiency**
- 4**  **Leadership in Sustainability**

I'm proud to say this position has been recognised by multiple industry awards.

These successes demonstrate that we are deadly serious about engagement. It is at the heart of our strategy and plans and we want our engagement to be as wide ranging and inclusive as possible. One of my first tasks in the new role was to spearhead the engagement on our business plan consultation, the biggest, most inclusive and most transparent engagement campaign we had ever undertaken. In a move commended by consumer advocacy groups, we went far beyond the requirements of the regulatory process. This prompted the other Transmission Operators (TO's) to publish their draft Business Plans, although we remain the only TO to have openly consulted on our full business plan package, adapting our plan in response to stakeholder views before it was finalised. Reaction to the plan has been very positive with some great media coverage and bilateral comment.






In this first year I've also had the opportunity to advocate on some the topics most commonly and most passionately raised by our stakeholders: the imperative of planning for Net Zero and the need for improved diversity and inclusion in the energy sector. These efforts are already bearing fruit with the Electricity System Operator (ESO) moving to Net Zero scenarios consistent with our own and with our return on Learning & Development investment almost doubling.

I am now excited to be underway with our 2020 plans including the exploration of new approaches to consumer engagement, new partnerships to tackle wildfires and applying the results of our pilot of engagement for consensus decision making on the Skye infrastructure project which is testing this new approach for adoption on future projects.

Strategic Engagement Objectives Key

- 1.** Enable and encourage stakeholder input by providing easy access to ourselves and appropriate information as well as ensuring our communications are inclusive.
- 2.** Build intelligence on stakeholder needs so we can make balanced and fair decisions which anticipate and meets their needs.
- 3.** Work with Stakeholders in our planning and delivery, and strive to achieve mutually acceptable and agreed outcomes.
- 4.** Develop consistent and transparent processes to capture, act on, discuss and feedback on stakeholder input.
- 5.** Develop a culture of engagement by implementing a training programme for our employees and ensuring accountability through clear roles and responsibilities.
- 6.** Develop future optionality with input from a diverse group of stakeholders.
- 7.** Actively participate in industry change as a committed advocate for stakeholders, society and the environment.

Section B Table of our key initiatives

Stakeholder Engagement Initiatives 2019/20		Strategic theme	Embedded	New	CBA	Sector Leading
 1 Our holistic and embedded approach to Stakeholder Engagement						
1.1 Exceeding regulatory requirements for a holistic approach to T2 planning Deliver next level T2 stakeholder engagement to increase access and inclusiveness	Stakeholder-led	✓				✓
1.2 Embedding stakeholder engagement expertise Provide consistent stakeholder engagement across all areas of business	Stakeholder-led	✓				
1.3 Involving internal stakeholders in strategic decisions Utilise our Shadow Board to challenge and provide diverse input to our strategic business decisions	Stakeholder-led	✓				✓
1.4 Holistic approach across digital channels Adopt a holistic approach to engagement across digital channels	Stakeholder-led	✓				
 2 Innovation in direct response to the needs of Stakeholders						
2.1 Delivering savings through HVDC multi contract innovation Our stakeholders have asked us to make savings and keep energy affordable for all	Sector Leading Efficiency		✓			
2.2 Whole system approach to meeting customer needs Maintain security of supply and contribute to Net Zero	Sector Leading Efficiency	✓		✓		✓
2.3 Supply chain greenhouse gas (GHG) targets Influence the supply chain to reduce waste and GHG emissions	Leadership in sustainability	✓		✓		✓
2.4 Collaboration on HVDC Black Start savings Explore the potential of HVDC to support Black Start energisation	Safe and Secure Network Operation					✓
2.5 A new solution for visual amenity Minimise visual impact of overhead lines in areas of natural beauty	Sector Leading Efficiency	✓				✓
 3 Our dedicated work serving the interests of harder to reach communities and stakeholders						
3.1 Engaging with vulnerable and hard to reach end consumers Increased engagement with hard to reach and vulnerable consumers	Stakeholder-led		✓			
3.2 Reaching out to young people and communities Extend our reach with future consumers through practical engagement	Stakeholder-led	✓				
3.3 Improved landowner access for operations Improve our communications and engagement with landowners	Stakeholder-led	✓				
3.4 Improving engagement with under-represented diversity groups Address the diversity challenge and become more inclusive	Safe and Secure Network Operation		✓			
 4 Effective use of project management to improve our engagement						
4.1 Ensuring robust project management of environmental engagement Gain stakeholder confidence through ISO14001 accreditation	Leadership in Sustainability	✓				
4.2 Accountability on engagement management Adopt clear governance and robust project management	Sector Leading Efficiency	✓				
4.3 Expanded engagement teams delivering early engagement Early engagement to allow meaningful influence and impact	Stakeholder-led	✓				
 5 Emerging smart practice shared with industry						
5.1 Leading industry adoption of SF ₆ alternatives Lead the sector in achieving green house gases reduction through best practice	Leadership in Sustainability	✓		✓		✓
5.2 International best practice on biodiversity net gain Strive for Net Gain by avoiding or minimising biodiversity impacts	Leadership in Sustainability	✓		✓		✓
5.3 Driving and informing adoption of Net Zero Scenario modelling Inclusion of Net Zero scenarios in GB electricity system modelling	Leadership in Sustainability		✓			✓
5.4 Embodied carbon of our Infrastructure Calculate the embodied carbon of our cables, overhead lines and towers	Leadership in Sustainability	✓		✓		✓

Section C Our holistic and embedded approach to Stakeholder Engagement

1.1 Exceeding regulatory requirements for T2 planning

Objectives 1 & 2 Embedded ✓ Sector Leading ✓

The stakeholder ask

Opportunity to review and challenge our draft RIIO-T2 Business Plan as a whole, following engagement on individual elements; presented in an accessible format to be inclusive to all stakeholders; promoted via existing networks; and that our consultation events must be held across our area and accessible for GB stakeholders. All these asks were over and above the requirements of the regulatory process.

What we did

To provide the requested opportunity for review of the complete business plan package and to increase transparency and challenge, when we submitted our draft Business Plan (required) we also published our unredacted draft business plan as a consultation (exceeding requirements) alongside accessible materials (Business Plan summary and video, and a poster featuring annual cost to GB Bill Payers average consumption). The consultation required a holistic approach as it involved all areas of our business and our stakeholder groups. Communication channels:

1. Traditional channels - online, email and print;
2. Email to networks of trade bodies for reach;
3. Social media and online in-read advertising to target consumers and policy makers;
4. Consultation events across our network area and online to be accessible to customers, landowners, local authorities and consumers; and
5. Bilateral meetings with experts including consumer groups.

The cost of the 34,360 engagements was £45K, reaching 164,747 stakeholders. Delivery required 2FTE Project Management and delivery resource; 50+ colleagues supporting (including Directors and the board). We tested acceptability of the plan, including: investment, our goals and cost to the GB consumer. Stakeholders also assessed the trade-offs we made for differing interests. While over 80% of stakeholders were satisfied with the plan, including affordability; they challenged that the 100% efficiency goal risked over-investment; sought reassurance that engagement would continue in RIIO-T2; and asked us to include Scottish Islands connections in our baseline allowance.

We reviewed the certainty of island connections and results showed uncertainty was still too high to justify a baseline allowance so the stakeholder asked us to trade off against reduced risk to consumers. The findings of the consultation and our actions in response were published on our website and summarised in our business plan with links to these documents emailed to consulted stakeholders.

Outcomes

First TO to publish our Business Plan early. Only TO to consult on our plan. Affording stakeholders opportunity for input and influence. Changed **100% reliability** to an aspirational goal adding "while economic to do so". Committed to establish a RIIO-T2 stakeholder group to hold us to account-ensuring delivery of **£350m** additional net value to consumers. Retained islands connections within uncertainty mechanisms, preventing consumer spend on investment which may not be required – up to **£1.5bn** Totex with avoided potential unjustified recovery value of **£49m**.

"We strongly appreciate SSENs decision to make the draft business plan publicly available – something you did not have to do. We believe this has set a precedent in encouraging other companies to also publish their plans. We also welcome the opportunity to respond to a formal consultation – again something that not all companies have done." **Citizens Advice Scotland, Response to our T2 Consultation**

1.2 Embedding Stakeholder Engagement Expertise

Objective 5 Embedded ✓

The stakeholder ask

Our stakeholders asked for consistency of stakeholder engagement across all areas of our business.

What we did

We carried out face to face and telephone interviews with internal and external stakeholders to gather views on how we could embed stakeholder engagement across the business to improve consistency of engagement experience. Both groups told us to improve the stakeholder engagement training we provide our employees. We carried out an initial assessment to determine what training would be required for which types of roles and identified several courses which could be delivered to these different roles and identified the best content for the best price. We designed and implemented a Stakeholder

Engagement training programme tailored to specific job roles and the capabilities required to deliver the objectives of our engagement strategy:

1. Four Stakeholder Engagement Champions who project manage engagement plans received a 3-day expert level accredited stakeholder engagement course which included:
2. 80 embedded stakeholder engagement leads (selected by their Director) who own stakeholder relationships and undertake regular engagement received a one day engagement course provided by an external specialist with content based on the AA1000 approach and tailored to our strategy.
3. Seven Tractivity administrators received Tractivity training in order to embed stakeholder engagement management and tracking within Directorates (cost £2,500 for licences). Previously this was managed by the central Stakeholder team. This will reduce the risk of uncoordinated engagement across different business teams.

To ensure application of learning in delivery, updated objective setting guidance was issued requiring all employees to have at least one performance objective on stakeholder engagement. The Communication Policy Manager provided support to line managers for implementation of this requirement. The 2019/20 training programme cost £40,000. The Stakeholder team have now been trained to deliver the one-day engagement course, rolling out to all employees in 2020, saving £150k on external training.

Outcomes

- Increased engagement capability embedded across the business
- Embedded ownership of engagement
- Embedded engagement tracking and measurement
- Inhouse training capability will save around **£150k** in the first year

Aileen McLeod Director of Business Planning and Commercial "I'm getting great feedback from across the team on this training. Regardless of people's roles and types of stakeholders, all reports are very positive."

1.3 Involving internal stakeholders in strategic decisions

Objectives 1 & 4 Embedded ✓ Sector Leading ✓

The stakeholder ask

Stakeholders were pleased with the engagement of employees in the co-creation of our engagement strategy and encouraged us to increase employee engagement in other strategic decisions. They said that this would ensure our engagement strategy was consistently applied across all stakeholder groups and would increase diversity in decision making.

What we did

Our employees are a high impact and expert stakeholder group. To better involve employees in decisions affecting them and to ensure decision-making bodies are more representative of consumer demographics, as well as supporting a culture of transparency, we formed a Shadow Board in June 2019. Chaired by our Managing Director, the Shadow Board reviews decisions and feeds in directly to the

Transmission Executive Committee (TEC). In April 2019 an internal recruitment campaign was launched and communicated to our employees via our Internal Communications channels - SharePoint, email, roadshows and intranet - inviting colleagues across all Transmission teams to apply. 35 colleagues applied and 15 were appointed. The Shadow Board met 9 times in 2019/20, reviewed 34 TEC papers and made 15 recommendations. They contributed to decisions such as: investment in the Shetland link, workforce sustainability and recruitment and our 2020 Engagement Plans. The process ensures employees have a voice and feedback is given from the TEC to the Shadow Board on any resulting outcomes. For example, the Shadow Board challenged the TEC to add Transmission specific social media to the 2020 Engagement Plan for more accessible communications and to support recruitment and this approach was adopted in the Plan.

Outcomes

- Challenge and diverse thought in decision making
- Direct employees voice in strategic business decisions
- Development opportunity for members - to maximise this opportunity the membership is refreshed annually
- Initiative to establish Transmission specific social media accounts added to the 2020 Engagement Plan - Transmission LinkedIn account will deliver numerous benefits including approximately **£38K** savings on an external job platform
- Forthcoming LinkedIn recruitment campaign targeting **59,000** web impressions and reach of around **500** targeted and suitable high calibre candidates

"The Shadow Board has given me an invaluable birds eye view of the Transmission business and we know that our views are taken on board by the TEC because the Managing Director of Transmission provides us with that feedback loop." - **Hannah Cummins, Regulatory Economist**



The stakeholder ask

Based on feedback from our stakeholders and regulator, we were asked to adopt a holistic approach to stakeholder engagement across channels.

What we did

In response to the needs of; specialist influencers, communities, customers, enablers, utilities companies and our regulator, we adopted a holistic approach to engagement for our strategic and some operational engagements. We have actively increased the scope of our digital channels, including social media. Stakeholder engagement activities included our Sustainability Plan and Network for Net Zero, RIIO-T2 consultation and business plan, procurement and supply chain. Content has been hosted on our digital platforms, cascaded widely through social media

channels and our stakeholder update channels including articles, blogs, reports, consultation documentation, infographics and video (cost 5k p.a). This is easily accessible, creating an archive of our engagement journey. The digital content team are available 24 hours a day to directly engage and answer any question customers, consumers and stakeholders might have on the knowledge shared. Within our Stakeholder Engagement Strategy, we set out our objective to share knowledge and develop joint expertise. Digital platforms have allowed us to increase our reach, engage with new stakeholders and create new channels for dialogue. Engagement with stakeholders is fundamental to meeting the needs of our customers and consumers. Content sharing on our digital platforms has increased the reach of our stakeholder engagement activities. We are continuing to expand on this initiative - we have established a dedicated Transmission LinkedIn channel and developing a virtual conferencing site.

Outcomes

Supported and **expanded the reach of our engagement** on key activities that shape the way our network is built and operated. All consultation activity, including feedback and findings is shared on our digital platforms and supported by communications content such as articles, blogs and video. **Seven FTE staff** manage direct engagement with customers, consumers and stakeholders across the social media platforms. They are available 24/7 to provide support and engage with knowledge sharing content feedback. The Stakeholder Satisfaction Survey found that **96% of visitors to the website were satisfied** with the website, 78% of stakeholders had visited the website. We use analytical data to measure to reach of the cascaded of communications including daily monitoring of the content shared.

"96% of customers and stakeholders were satisfied with how SHE Transmission handles communication."
SMR annual Stakeholder Satisfaction Survey 2019/20.



Section D Innovation in direct response to the needs of our Stakeholders

2.1 Delivering savings through HVDC multi contract innovation

Objective 7 New ✓

The stakeholder ask

Our end consumers generation customers, and our regulator (Ofgem) require us to achieve the lowest cost best value deal for the Shetland subsea electricity link.

What we did

In response to feedback from our stakeholder groups (enablers, end consumers and members of the public) we explored all opportunities to reduce costs on the new Shetland link. For the first time, a multi contract approach is being implemented for these proposals. Whereas this procurement route is standard practice in other sectors such as construction, historically the energy industry has considered this too risky for HVDC infrastructure. Our supply chain engagement

coupled with our experience in successful HVDC delivery helped us manage this risk and release the benefits to customers and consumers. Having prepared the Business Case and CBA, we presented the Procurement Strategy to our senior leadership team. Our Strategy identified an increased risk to SSEN by adopting a multi contract approach. We outlined the mitigation measures, particularly the requirement for increased supervision of the contract delivery. Pre-Application events were held in Wick and Lerwick (July 2019). Our follow up actions in response to feedback were shared with interested parties and the public at further events in October 2019. Works were split into four work packages for tender to increase supply chain competition: civil engineering, technical works, subsea cabling and the substation. As a result of competitive tendering we received highly competitive bids, particularly the subsea cabling package.

Outcomes

In March 2020 Ofgem confirmed they are minded to approve a **600MW** subsea electricity transmission link from Shetland to mainland Scotland. The link will allow new wind farms on Shetland to export renewable electricity to GB and ensure security of supply on the islands. As a result of our innovative procurement approach, end consumers will benefit from huge savings. Even though we increased our contract management resource by **50%** greater than a turnkey approach, to mitigate risk, the reduction in CAPEX was **£88m** (current estimate), **reducing cost to consumers**. Once contracts are secured, we will share our sector leading practices across the business and industry.

"Today's announcement will help stimulate economic growth as the economy recovers from COVID-19, as well as unlocking Shetland's potential to supply low cost renewable electricity for consumers across Great Britain."

Jonathan Brearley, Chief Executive of Ofgem (on the announcement of approval),



2.2 Whole system approach to meeting customer needs

Objectives 2 & 3 Embedded ✓ Sector Leading ✓ CBA ✓

The stakeholder ask

Distribution Network Operator required security of supply solution for its Island customers, removing reliance on end of life diesel power station as only source of energy. Renewable energy developer asked for capacity to export generation to the mainland. Government asked for renewable energy to contribute to Net Zero targets. GB consumers (bill payers) required an affordable solution.

What we did

In October 2019, we held bilateral meetings with stakeholders to discuss and understand each project position. There were differing views amongst the stakeholders which presented a challenge to manage their best interests. Pausing the Shetland Link to undertake a reassessment of the technical solution would result in a programme delay and this would have a significant impact to the anchor project

(Viking Energy). There was also concerns that with the closure of Lerwick Power Station, delay to the link would risk security of supply, jeopardise future economic growth in Shetland and prevent 600MW renewable generation connecting onto GB network. In November 2019, a round table was held with stakeholders impacted by the needs case decision including developers, Oil and Gas representatives, Scottish Renewables, Shetland Island Council and GHD Consulting. We supported transparent discussion around each party position and together reaffirmed realistic options, and renewed commitment to progress. With this input, we maintained confidence in the original 600MW Needs Case being the most economical solution and also, as requested, we reconsidered the alternative options of 450MW and 800MW links. We engaged with SHEPD and ESO on maintaining the proposed Whole System solution which allows connection of both transmission and embedded generation also responds to potential significant demand from the oil and gas Industry who are exploring decarbonising their operations.

Utilising these inputs we considered additional CBA runs in our Needs Case re-submission (January 2020) with and without the demand compared to the original 2018 submission. By working in partnership with our stakeholders, we were able to overcome many of the challenges faced and reach mutually acceptable outcomes despite each group having different priorities which is line with Objective 1 of the strategy.

Outcomes

The Needs Case allows for future proofing of the infrastructure, facilitating additional growth without requiring reinforcement. This will allow **600MW** of renewable generation on to the GB network. The Transmission Whole System interaction enabled SSEN Distribution's Whole System solution and **avoided a minimum £394m cost** of the alternative solution by contributing £251m to the Transmission link, **saving consumers around £140m**.

"I thought the workshop held in Glasgow and the skype call held in March/April with SIC, various Shetland developers and Networks to discuss the pros and cons of the link were very effective and well run." **Mike Seaton, Viking Energy**

2.3 Co-creating supply chain environmental targets

Objectives 2 & 3 Embedded ✓ Sector Leading ✓ CBA ✓

The stakeholder ask

To influence the supply chain to commit waste reduction and to Greenhouse Gas (GHG) emissions reduction in line with science based targets (SBTs), due to the higher contribution to waste and GHG emissions from our construction activity which is contracted to our supply chain than from our own direct activities.

What we did

During 2019, we shared our sustainability strategy and action plan by email with over 150 stakeholders to increase awareness of our plans and gather feedback. We also held a sustainability workshop and six round table events with high impact and expert stakeholders (cost £11,600 inc. VAT) where we gathered views from stakeholders (including suppliers and potential future suppliers) on suitably ambitious levels of targets for the supply chain and what elements of waste and emissions should be covered.

As suppliers would be highly impacted by these changes they requested additional opportunity to contribute to the new requirements. In response, in early 2020 we held bilateral sustainability meetings with our lead suppliers and with other network companies to share best practice on sustainable procurement including GHG and waste targets. We also issued our first ever sustainability questionnaire to 28 of our supply chain and responses showed that our largest suppliers were willing to set their own SBTs to complement our goal. Suppliers also provided preferences on reporting and waste targets. We issued a second questionnaire to gather further views and test acceptability of our plans in September 2019. This feedback was used to develop our new Sustainable Supplier Code which changed our approach to contractual obligations imposed on subcontractors. Including requirements for suppliers to set SBTs on large contracts and zero waste targets. Our Supply Chain Sustainability requirements and Code were communicated externally in our published sustainability Action Plan.

This sector leading work meets our Stakeholder Engagement Strategy objective to increase insights, work collaboratively in partnership and act to achieve a decarbonised future.

Outcomes

- New Sustainability Supplier Code with SBT and waste target requirements
- Supply chain targets on waste and carbon included in new framework agreements for the first time
- Two thirds of our suppliers by spend will set science-based targets by 2025
- Suppliers are now reporting quarterly on carbon, waste and resource use on our projects
- The new requirements include measurement of embedded carbon during construction and reporting against targets set within supply chain tenders, and impose mandatory environmental certification of products used on site.

"Our scope 3 supply chain GHG target requires two-thirds of our suppliers by spend to set a science based target by 2025. It is a bold and industry leading target which we anticipate other will follow, leading the wider benefits across our value chain and industry." **Alex Sutton, Sustainability Manager SSEN Transmission**

2.4 Collaboration on HVDC Black Start savings

Objectives 2, 3 & 4 Sector Leading ✓

The stakeholder ask

A primary enabler stakeholder, the Scottish Government, commissioned our HVDC Centre to lead a review on how to maximise the use of HVDC schemes to support Black-Start energisation from a technical perspective.

What we did

HVDC has the potential to provide excellent black start capabilities (as well as fast frequency support and synthetic inertia services), and there are a significant number of HVDC schemes planning to connect to the GB network. We worked in partnership with our HVDC technical experts and specialist influencers from Scottish Power, National Grid and the Scottish Government. Together we carried out an in depth

study of how HVDC schemes can support Black Start and system restoration. The study included; review of Black Start arrangements alongside analysis of HVDC Black Start capabilities; Evaluation of global HVDC Black Start experience and global black-out events; Mapping these findings against GB's current and future HVDC schemes to identify practical opportunities; and Developing specific recommendations, in consultation with Stakeholders, to maximise the use of HVDC schemes to improve GB's Black Start arrangements. Based on this review, eight key recommendations were consulted on GB Transmission at a workshop held in September 2019. Based on the feedback received by our stakeholders and in conjunction with our collaborative review, we were able to conclude that there are key high-level and innovative opportunities that could be explored to maximise the use of HVDC for Black start and system restoration

in GB. The key findings were presented in technical reports, networks magazine article, industry conference and summarised on the HVDC Centre webpage and the full report was published on 4th December 2019.

Outcomes

Will lead to a reduction in cost of Black Start services, a more stable system, and a reduction in the time to restore the system. A value to GB consumers from more rapid HVDC restoration of between £4.73m p.a. and £14.63m p.a. with a central estimate of £9.7m p.a. If the HVDC centre contribution is 10% then **this would result in a benefit of £970k per annum**, providing savings to GB consumers

The HVDC Centre is a joint NIC project between SSEN Transmission, SPEN and NGET which we manage and deliver

"Open discussion between multiple parties coordinated well; good report available before the event; a good format." (NGET participant)

"An opportunity to share alternative perspective and achieve understanding; and an opportunity to discuss and agree actions and direction to progress." (SPEN participant)

"Well organised and informative." (SPEN participant)

2.5 A new solution for visual amenity

Objective 3 Embedded ✓ Sector Leading ✓

The stakeholder ask

In response to Communities and Specialist Influencer stakeholder concerns about visual impact of overhead lines in areas of natural beauty, we were asked to find a tower which minimises this, meeting out stakeholder requirements.

What we did

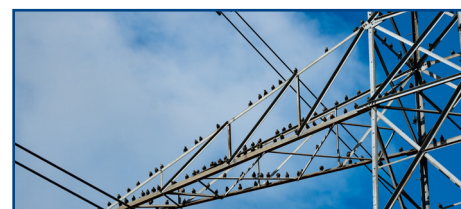
Establishing new infrastructure in national designated landscapes is essential to connect renewable generation, and to meet Net Zero. We are in Phase 2 of deploying a New Suite of Transmission Structures (NeSTS), which will reach construction stage this year. The NeSTS tower type achieves long spans, minimising visual impact. In October 2019 we shared

our progress with stakeholders at the Low Carbon Networks and Innovation Conference. NeSTS towers are connecting Aberarder wind farm. We presented visualisations of proposed tower types in the landscape at a consultation events to Communities, Enablers, Specialist Influencers and Statutory Consultees. The Project Steering Group hold bimonthly meetings, with representation from all interested stakeholder groups. We have assembled a cohesive cross-organisational team of Transmission and Distribution colleagues. NeSTS is a £7.5m project funded by the Network Innovation Competition (NIC) in 2015, and our key supplier is Energyline. Through this engagement, we enabled our stakeholders to steer the NeSTS design. Stakeholders were consulted timeously, when there was an opportunity for change to be enacted in response to their feedback.

By doing so we have arrived at a mutually acceptable outcome, which meets the needs of our stakeholders and contributes to our responsibility to enable GB to transition to a low carbon economy.

Outcomes

Our innovative design minimises the footprint of the foundations and lowers visual, biodiversity and construction impacts. Lower overhead line whole life asset costs via reduced land, construction, maintenance and outage requirements. Our bespoke Cost Benefit Analysis (CBA) tool calculated a likely outturn **saving of up to £174 million**. Our ambition is for other TO's to adopt NeSTS structure and realise benefit across a greater reach of stakeholders.



Section E Our dedicated work serving the interests of harder to reach communities and stakeholders

3.1 Engaging with vulnerable and hard to reach end consumers

Objective 2 New ✓

The stakeholder ask

Our stakeholders have told us to increase our engagement with hard to reach and vulnerable customers.

What we did

As Transmission Operator there is no direct customer relationship with end consumers, and for us they are a group which is harder to reach but vitally important to engage with. Based on stakeholder feedback, it is vitally important to address high-risk categories of consumers in the north of Scotland and islands. In our network area, around 150,000 consumers are currently on Priority Services Register (PSR). To support vulnerable consumers and introduce measures to tackle fuel poverty, we are working in partnership

with third parties to utilise established engagement activities to support vulnerable consumers within the community. We invited Home Energy Scotland (HES) to participate in a stakeholder consultation event for our Business Plan which unlocked an opportunity for more involved dialogue with HES, and further discussion took place to explore shared objectives. Our aim is to facilitate HES attendance at our public consultation events, assisting with travel costs and materials on the day. HES will provide energy advisors to attend and offer impartial advice. Although events will now be virtual due to COVID-19, we are looking at new ways of online engagement with HES as planned. With no direct customer relationship to our vulnerable end consumers, it's a challenge to provide the kind of support they may need. By enabling HES to attend our events, they can provide a route to practical advice

for customers experiencing fuel poverty, difficulties with bills, or accessing help. Vulnerable consumers are included 'Members of the Public' category within our Strategy. We will also utilise the HES initiative to gain knowledge of the needs of hard to reach end customers.

Outcomes

In the past, stakeholders attending our consumer events asked questions around fuel poverty and vulnerability. By working in partnership with HES, vulnerable end consumers can speak directly with HES and access support. After COVID-19, we will work in partnership with HES, increasing our reach with this group and gaining insight into their needs. We will co-create more opportunities with HES to reach vulnerable consumers in 2020.

"Home Energy Scotland is acutely aware of the need to help people who need it most. Not everyone is willing or able to call the phone line, perhaps due to disabilities or language barriers. So, in recent years, we have expanded to include outreach teams who work closely with employers, community groups, NHS trusts, charities and social work departments, enabling them to access harder-to-reach audiences." Home Energy Scotland

3.2 Reaching out to young people and communities

Objectives 6 Embedded ✓

The stakeholder ask

Our stakeholders asked us to extend our reach to young people and communities through practical support and meaningful engagement.

What we did

All colleagues are encouraged to Be the Difference by volunteering in the communities they live and work. As a large utility company, our skills base is wide and we can offer support from across our business. Staff can suggest their own projects or, in order to make access as straightforward as possible, we have a Be the Difference Database. Here staff can find details of all the people, charities and projects that have actively come to us asking for some help. Since the launch of the volunteering programme, we've helped over 2,500 projects. This has led to millions of pounds of time and skills being donated to charities, schools and local community groups. In the past 12 months, 97 staff have volunteered through the programme,

with 23 taking part in school-specific projects. This resulted in 137 days (1027.5 hours) spent by staff volunteering at local projects and events. This engagement has included:

196 hours spent in primary or secondary schools
90 hours spent litter picking
67.5 hours spent volunteering in Food Banks
67.5 hours spent volunteering at nature reserves
66.5 hours volunteering at sporting events
52.5 hours spent planting trees
45 hours spent removing Giant Hogweed
22.5 hours spent as a volunteer Youth Mentor

We monitor staff volunteering days centrally. At the end of each year, we calculate the community value using the median base salary for that financial year and report this in our annual Sustainability Report. As of 19 March 2020, due to the ongoing COVID-19 outbreak, all face-to-face Be the Difference volunteering days are unfortunately suspended.

In response, employee support is available for those who choose to volunteer in the community during the pandemic (one week's salary will be paid by SSE).

Outcomes

The Be the Difference initiative is designed to demonstrate our responsibility as a member of the community. The initiative provided £23,939 of community value. Many of the Be the Difference engagements related to specific talks around STEM subjects, energy and careers advice. These help to engage pupils with the energy environment, strengthening safety messaging and promoting the idea of a career with SSE or within the wider energy industry. Outcomes for stakeholders include:

- Increased awareness of charities, organisations, and community groups
- Supported financial and operative needs
- Stronger relationships with local businesses
- Practical help for real projects
- Over £5.5k was raised for Highland Hospice

Ella, Emilia, Abby and Emily, New Deer Pupil Council: "Thank you for donating the benches to us, we have been using them already. They are very helpful to us because people sit on them for eating our snacks. We also are happy that you gave us areas that we can plant in when the weather is better. Then we can have plants growing and make soup from vegetables that we grow. The garden is tidier than before and is safer for us to play. We love all the bags of goodies. Some of us like the fidget spinner highlighters the best. The bright stuff helps us keep safe from traffic in the dark nights and mornings. Thank you again."



The stakeholder ask

Following challenges in entering areas of land when we were required to inspect, maintain or repair existing infrastructure, our landowner and tenant stakeholders asked us to improve our communication when giving notice for accessing their properties.

What we did

First, we undertook a full review of the landowner details we held across the whole of our existing network infrastructure. We found that due to multiple factors including: asset age (up to 60 years), land ownership changes and turnover of staff, our records did not always hold the most up to date contact details. This resulted in landowners being hard to reach and, in some cases, notice of access was not reaching the right contact. In order to rapidly improve

our service and reduce the risk of access refusal, we had our operations staff manually knock on doors to provide the 4-6 week notice of access which is set out in our wayleave charter. This provided an opportunity to engage directly with exiting landowners and ask how we could improve communication with them, as well as gather the up to date contact details.

The results of this engagement identified a need for land access records to be held on a circuit by circuit basis. Records were previously held in relation to new infrastructure projects as they were agreed during project development. To facilitate this process change and ensure ongoing engagement met the commitments in the charter and were delivered consistently, a dedicated wayleave officer was recruited into the operations business. This new Wayleave Officer is responsible for maintaining up to date landowner details on existing infrastructure and

has proactively contacted land owners across the north of Scotland and ensured that all land agreements and contact details are up to date. This has removed the need for on location notification by operations staff. Additionally, we initiated an additional 24/48-hour notification of access to meet the stakeholder ask for more specific information on access timing.

Outcomes

- Additional 24/48-hour notification of access as standard
- Greater certainty of access
- **Access refusal rate reduced to less than 1%**
- Avoidance of unnecessary visits to provide notification, delivering an **efficiency saving of £90k per annum**

Local Landowner: "Thank you for keeping us up to date with the planned maintenance and confirming when works had finished and you were leaving site."

3.4 Improving engagement with under-represented diversity groups

The stakeholder ask

Stakeholders have encouraged us to address the significant diversity challenge in energy and become more inclusive of difference in its widest sense. The gender pay gap was identified by stakeholders as a specific area for improvement in our business.

What we did

Within our workforce certain metrics of inclusion and diversity are not representative of the prevailing demographics in the areas in which we are based. This includes gender with an 8:2 ratio of male and female employees. Targets set in response to this are captured in our sustainability strategy and include: Increase our Transmission Executive committee from 16% women to 25% women by March 2021; Increase the number of women in roles earning over £70,000 to 20% women by March 2021. (Indexed from 1st April 2017).

Upon reviewing our recruitment information, it was clear that we were not achieving enough diversity in our talent pools for new recruits or for promotions, meaning this group was under-represented in our engagement with future employees.

We undertook a strategic review of Inclusion and Diversity (I&D) activity and introduced a dedicated I&D working group and action plan focused on inclusion and diversity in recruitment. Actions delivered during 2019/20 included a new e-learning programme on inclusive recruitment which was completed by all hiring managers and removal of minimum qualification or entry requirements for 'pipeline' roles.

We also began new tracking of recruitment to provide better insights on these issues. We now report quarterly on metrics including: roles openly advertised, flexible working roles, and gender split for our most senior hires. The initiative was not solely focussed on gender improvements but on I&D in its widest sense.

Another deliverable of this initiative was an internal communications campaign of line manager briefings encouraging employees to enter their diversity details in our GDPR compliant HR records system (Harmony), to allow better tracking and insight. We also rolled out of a new Mentally Healthy Workplace course, completed by all line managers on a mandatory basis to ensure better understanding and support for affected current and future employees, again supporting inclusion.

We also engaged with our industry peers via our membership of the Energy and Utility Skills Forum, where together we established a new Common Diversity Measurement Framework based on a Royal Academy of Engineering scorecard. The new scorecards will be shared bi-annually with industry peers to facilitate benchmarking.

Another stream of our initiative has been advocacy on I&D and promoting the opportunities within SSEN Transmission to under-represented groups. Our Director of Customers and Stakeholders is a committed advocate of I&D and in May 2019 she attended the Powerful Women Annual Conference alongside over 250 delegates from across the energy sector to identify best practice and promote opportunities at SSEN. In November 2019 she spoke about her own career progression in the energy sector at an event hosted by a Women's Network at a leading Financial Services organisation. She was also due to present an award at the inaugural Equal Engineers – Engineering Talent Awards 2020, new awards designed to celebrate diversity in our sector, sponsored by us and with the key objective of raising diversity in engineering across the UK. Unfortunately, the awards have been postponed due to the COVID-19 pandemic. In recognition that our gender pay gap may discourage future employees and further restrict diversity, in June 2019 we signed up to the Equal by 30 pledge, to galvanise action on equal pay, leadership and opportunities for women in the clean energy sector.

We have surpassed our 2018 target to have 25% women on our Transmission Executive Committee by March 2021 – we achieved 27% in 2019, 16 months ahead of schedule. We are measuring the success of our actions, to maximise impact on driving better diversity across our workforce and evidence return on investment. I&D target metrics are included in our business KPIs to ensure director level focus on improvement. We use a Return on Inclusion measurement approach which identifies the level of commitment and progress on inclusivity, based on three levels: starting out, aspiring or champion. Since 2017, when we started this exercise, we have been progressing in 'aspiring'. The latest submission results have moved us into 'champion' status, demonstrating a financial return for every pound spent of £9.85. This amount has more than doubled since our initial return rate of £4.52, in 2017. This proves the efforts taken to make all our processes inclusive when encouraging people into SSE, encouraging employees to stay on with SSE and in making opportunities to progress at SSE open to all, are paying off. This year we are targeting future employees through school engagement, further work in ensuring inclusion is built into people processes and development materials aimed at our Executive Committee and Subcommittees.

Outcomes

- A financial return of **£9.85 for every pound spent** on inclusion
- **Champion status in Inclusion and Diversity** from Equal Approach.
- Pledged commitment to the **Equal by 30**, galvanising action on equal pay and the Social Mobility Pledge, committing to accessing and promoting talent from all backgrounds
- **Women on Transmission Executive Committee increased to 27%.**
- Removed minimum qualification or entry requirements for 'pipeline' roles and e-learning programme on inclusive recruitment.



“I've seen our organisation move from asking “Why should diversity matter to us?” to “How can we make sure our business is truly inclusive?”. We are embedding the principles of inclusion throughout the business to create a truly inclusive -and diverse - workplace, more reflective of the communities we serve.”

Rachel McEwen, Non-Executive Director, Scottish and Southern Electricity Power Distribution and Chief Sustainability Officer, SSE Group

Section F Effective use of project management to improve our engagement

4.1 Ensuring robust project management of environmental engagement

Objective 4 Embedded ✓

The stakeholder ask

Stakeholders asked us to improve processes and increase accountability on environmental commitments to ensure delivery of benefits from engagement. They recommended that ISO14001 accreditation would give them this confidence.

What we did

During 2019 we engaged with stakeholders to refine the ambitions in our sustainability strategy and co-create our environmental action plan. Stakeholders challenged us on how we could reassure them that we would deliver on these commitments, achieve the targeted environmental benefits, and continue to engage stakeholders during the delivery. We asked stakeholders how we could demonstrate this, and they requested we align with industry best practice by achieving certification through the international standard for environmental management ISO 14001.

The project management and engagement requirements within this environmental management system (EMS) standard ensures engagement on environmental topics is effectively managed and commitments are delivered. We assembled a working group and governance for implementing the certification comprising; Sustainability Lead; Project Sponsor, Board Sponsor; Corporate Environment Manager and established links to the EMS Team. Our working group updated existing policies and introduced new policies to ensure that our engagement strategy was applied in a way that would comply with ISO14001, including a new centrally accessed hub for tracking engagement actions and improved internal auditing. 6 of our employees undertook a 3-day training programme gaining internal audit skills and are now responsible for environmental management. We formed an EMS Steering Group to challenge and support ongoing delivery, reporting directly to the Transmission Executive Committee who own our EMS systems,

ensuring resources, policies and practices are in place to deliver environmental objectives.

Outcomes

We achieved ISO14001 certification in early 2020, costing approximately £10k. We utilised in-house expertise to develop the certified processes, realising a **saving of approximately £40k** (as opposed to external consultants). Furthermore, the use of our own specialist business resource **added value** by ensuring management solutions were tailored to our business. Our environmental management practices, are audited annually by the certification body, **giving stakeholders confidence in our delivery**. The processes established to contribute to the ISO14001 certification will ensure delivery of the actions co-created with stakeholders in our environmental action plan. Examples of this include initiatives 5.1, 5.2 and 5.4.

"Achieving this accreditation demonstrates to our stakeholders that this is the standard we are operating to from an environment and sustainability perspective. ISO 14001 will drive and continuously improve the standards that we will apply in meeting our objectives." **Rob McDonald, Managing Director, SSEN Transmission**

4.2 Accountability on engagement management

Objective 5 Embedded ✓

The stakeholder ask

Our stakeholders and regulator require us to deliver our engagement activities in a consistent and structured way, using clear governance and robust project management.

What we did

We looked within and beyond our sector for best practice, reviewing activity of: other Transmission Owners, new market entrants and Distribution Network Operators; the water industry and the GB public sector. We identified best practice: clear governance and robust processes are essential to embed stakeholder engagement into day-to-day business. In response we changed our Operating Model in 2019, and created clear lines of

accountability and decision making. Utilising our best practice insight, we implemented a robust project management structure for stakeholder engagement. In line with Objective 5 of our Strategy (consistency and accountability), we established a clear governance process embedded in our Transmission Executive Committee (TEC), including a template for Board papers with a mandatory stakeholder engagement section. Our senior leaders take ownership for engagement initiatives within their Directorate, establishing accountability and a single point of senior level responsibility. Our Director of Customers and Stakeholders sits on the (TEC), ensuring stakeholder views are acted on at all levels of the organisation and embedded in the business. Further governance is provided by stakeholder groups such as the Stakeholder Working Group, Stakeholder Advisory Panel and Shadow Board.

Outcomes

Following our stakeholder engagement training, **80+ expert leads (20% of employees)** were identified within business teams to champion and support best practice. Engagement initiatives are standardised within an Engagement Plan template, including a **toolkit with guidance**. To ensure continuous improvement, we will embed at least **five new tools or processes** in 2020/21.



"Your new structure is positive, it will ensure you keep an eye on the overall big picture, as it can be easy to get trapped in the detail when running individual events" **National Charity**

4.3 Expanded engagement teams delivering early engagement

Objective 3, 4 & 5 Embedded ✓

The stakeholder ask

Early engagement on projects in development to allow for meaningful influence on decision making with robust and transparent processes for decisions on trade-offs and provision of feedback

What we did

Directly in response to stakeholder requests for early engagement and no pre-judgement of best solution, we strive to achieve mutually acceptable and agreed outcomes. This is challenging when different stakeholder groups have conflicting views and interests on the same project as is the case on Skye. To tackle this, we initiated our Skye project optioneering and consultation as a pilot for consensus decision making through early and collaborative engagement with the aim of achieving a mutually acceptable outcome. This required early engagement on options with all stakeholder groups together to work towards a consensus. The complexity of the project and the significant number and range of stakeholders required an expanded approach to project management of the engagement. A 'Communications and Engagement'

Working Group was established to review and agree all communications and engagement activity. This group reports to the Project Review Board (who approve project decisions) with issues raised and escalated accordingly. Membership of the Working Group includes all the main disciplines involved in communication and engagement on the project including: Community and Consumer, Corporate Affairs, Stakeholder Engagement, Development, Land, Planning, Customer Experience, and Procurement. Project Management is provided by the manager of the Communities team who received training in consensus decision making and creative problem solving including de Bono's six coloured hats and negotiating techniques. In our first engagement, a collaborative workshop with the Energy Consents Unit, Statutory Consultees and Elected Members, we co-created the engagement plan for the project optioneering and planning phase and provided first view of the potential options for the project. As a live document, the Communications and Engagement Plan will be updated on an ongoing basis. This model of engagement project management has been replicated on our Shetland project and is now standard for all large or complex developments.

Unlike previous approaches to public consultation of this kind, uniquely we left all options open for stakeholders to review and debate. By not approaching the consultation with a preferred solution (our past approach) we ensured that stakeholders will be meaningfully involved in the decision-making process and the resolution of conflicts. This ensures transparency in the trade-offs to be made between different interests. The next stage was open consultation events due to take place on Skye in March 2019. Unfortunately, these were postponed due to COVID-19 and have been redesigned virtually.

Outcomes

- **New expanded engagement project teams**
- **Transparency of trade-offs** between conflicting views and the hierarchy of how the various factors influencing decisions have been considered e.g. economic implications (cost to consumers) versus environmental designations vs visual impact concerns
- **Consistent monitoring** using Tractivity. Pre-empting potential opposition during Statutory Consultation period, reducing risk and cost

"We welcome that several pathways are being considered in order to identify the most appropriate approach to this project. We look forward to being involved in the project and to continuing the useful engagement undertaken so far." **Historic Environment Scotland**

Section G Emerging smart practice shared with industry

5.1 Leading industry adoption of SF₆ alternatives

Objective 7 Embedded ✓ Sector Leading ✓ CBA ✓

The stakeholder ask

To identify and adopt solutions to replace SF₆ as part of tackling our greenhouse gas emissions. For us to work with our supply chain to develop solutions where they are not currently available on the market and to promote these solutions to others in the industry.

What we did

We expanded our partnerships with suppliers on SF₆ alternatives to focus on specific gaps in solutions including HVDC and circuit breakers. This led to installation of SF₆ gas free circuit breakers at our Dunbeath substation in partnership with Siemens in October 2019. These circuit breakers are the first of their kind in the UK. The technology provides the same level of performance and reliability, without the need for SF₆ gas and with no Global Warming Potential. We shared our learning from this project with the industry in Network Magazine, a leading industry publication, on our website and across our digital platforms in 2019. This formed one part of a wider initiative promoting our industry leading work on SF₆ alternatives in pursuit of net zero targets and driving industry change. The initiative had three strands: Promotion of best practice; co-creation of specifications for adoption across the industry; leading industry change.

1. Promotion was delivered through press and our website (reach of over 4,000) and directly to other network companies via the Energy Networks Association (ENA). Online communications were cascaded through SSE Group and SSEN platforms. We also worked with our technology partners Siemens and GE to develop content to be shared across their digital platforms. Our Head of Standards and Specifications was invited to speak at an Institute of Mechanical Engineers conference, Switchgear: Reducing the Climate Impact of SF₆, to help further promote this best practice. Unfortunately, this event has been postponed due to COVID-19 lockdown.
2. Through direct discussions with supplier partners, we co-created new specifications for gas insulated switchgear which discourage use of SF₆ and made multiple changes to the initial draft based on feedback, for example: agreeing naming conventions, equipment identification and colouring requirements and valve requirement for the new gas types. Due to our lead in this, the ENA has agreed to adopt the proposals we agree with the suppliers and to incorporate them into the UK standards. To make adoption by other utilities easier we also agreed to sponsor the ENA assessment of Siemens and ABB 132kV live tank circuit breakers, accelerating wider adoption.
3. We are working with the ENA and Scottish Power Electricity Networks to submit a proposal to the HSE seeking a derogation to the Pressure System Safety

Regulations for switchgear which doesn't use SF₆. A derogation exists for SF₆ switchgear and is appropriate for switchgear using alternative gases. We have employed an engineer to provide the justification for the derogation drawing on our experience with the Dunbeath project and Scottish Power are leading discussions with the HSE. We have also engaged with the British Electrotechnical and Allied Manufacturers' Association on this and they have agreed to support our position.

Outcomes

- Enhanced partnerships and industry **collaboration**
- First for UK deployment of **SF₆ free circuit breakers**
- Commitment to delivery at **five more sites** in development
- New strategy on the Management of Insulation and Interruption Gases with commitments for adopting SF₆ alternatives and reducing SF₆ leakage which will avoid the installation of 6.6 tonnes of SF₆ by 2021 and further 19.9 tonnes of SF₆ by 2025/26. This is estimated to **avoid around 37,000 tCO₂e over their asset life**
- Established new standards and specification for SF₆ alternative gases and agreement for industry adoption
- Funding of equipment testing to support wider adoption of SF₆ free technologies
- **Industry and regulatory change agreements**

We have been shortlisted for an industry award for our ground-breaking work at Dunbeath. In publishing the details of the energisation of the first SF₆ alternatives we have raised awareness of the issue with our customers, consumers and stakeholders leading to feedback on our future plans to remove SF₆ across the network at project development consultations and RIIO T2 engagement events.

5.2 International best practice on biodiversity net gain

Objective 7 Embedded ✓ Sector Leading ✓ CBA ✓

The stakeholder ask

Our stakeholders asked us to strive for Environmental Net Gain by avoiding or minimising biodiversity impacts when undertaking infrastructure projects on land.

What we did

We developed a sector leading Biodiversity Net Gain (BNG) Optioneering tool which uses high level data sets. It is used to give an indicative BNG score for multiple options so that the implications of each option can be fully considered prior to deciding on a final option. Following stakeholder feedback, we worked closely with an external consultancy WSP to develop our ambitions and push the boundaries of what we could achieve on BNG. We held a roundtable which allowed us to demonstrate how the policy had developed, and subsequently our BNG Consultation was published in July 2019. In parallel to this, a more targeted campaign was launched contacting; enablers specialist influencers; communities and members of the public. This targeted group of stakeholders then attended two consultation workshops held in 2019 in Glasgow and London. These workshops resulted in

the co-creation of target levels for BNG. When our stakeholders told us the importance of early engagement with local experts, the supply chain and developing partnerships with key groups, we specifically developed within our methodology realistic touchpoints with certain stakeholders at the early stages of the project. All formal consultation responses were positive and recognised us as being sector leading in our commitments and ambitions in BNG. The final stage of our engagement were bilateral meetings with key stakeholders including The Scottish Environment Protection Agency (SEPA), Scottish Natural Heritage (SNH) and Scottish Wildlife Trust in November 2019. These collaborative engagements allowed our stakeholders to review our final proposals and discuss opportunities for future partnerships.

Our stakeholders provided input to decision making at a policy level which can now be applied consistently across all projects. By having multiple groups involved we were able to apply the enhanced objectives of our Stakeholder Engagement Strategy by achieving mutually acceptable outcomes and forming partnerships with key stakeholder groups. As well as the external engagement activities, an internal consultation was conducted to ensure that our staff at a working level had the opportunity to shape the

initiative and embed it within the business. A suite of internal guidance documents has been developed and our performance will be measured against the clear set of targets within the policy. A dedicated database will be established to monitor our net gain statistics and measured against KPI's.

To promote this best practice for adoption we applied for numerous awards which would raise awareness across the industry and in other sectors. We were shortlisted by the Royal and Town Planning Institute Awards for Planning Excellence marketed to a membership of 25,000 and a social media following of over 32,000 from the built environment community in the UK and internationally; winners in the International Green Apple Awards which recognise, reward and promote environmental best practice around the world, expanding our reach to an international audience; The Green Energy Awards which bring together over 1200 professionals from the renewables sector; and were finalists in the Network Magazine Awards which reach the UK's gas, power and heat networks and supply chain. All awards also promoted via our own digital channels and received coverage in industry, national and regional press.

Outcomes

We have committed to **no net loss** on any projects consented from 1st April 2020. We have also committed to **>105%-109%** enhancement on biodiversity (including habitat quality) post development, measured by our version of the "Defra Bio Metric 2.0" measurement tool for all projects gaining consent from 2025 onwards. We trialled the BNG Optioneering tool for two projects and demonstrated **34% net gain** for Spittal substation and **47% net gain** at Tomatin. In addition, our approach to promoting the natural environment and lead position on BNG is demonstrated by a **consumer amenity value from the willingness to pay study of £158.6m**.



SNH "We are pleased SSEN Transmission are taking an industry lead in adopting BNG principles".

SEPA "Your commitment to enhancing biodiversity across the whole of your portfolio, with staff working on this objective from boardroom to contractors, demonstrates leadership to the wider strategic infrastructure sector."

Best Practice Award for the Approach to Biodiversity Net Gain received from Green Energy Awards in December 2019.

The stakeholder ask

Stakeholders including customers, government, the infrastructure commission, investors, sustainability specialists and consumer groups requested inclusion of Net Zero scenarios in GB electricity system modelling. Stakeholders raised concerns in summer 2019 that wider GB system modelling (Future Energy Scenarios – FES) undertaken by the system operator (SO) failed to offer scenarios consistent with Net Zero emissions, meaning GB system planning was not consistent with stakeholder asks, or our own modelling which includes net zero.

What we did

In response to this feedback (and following unsuccessful efforts to influence the SO to include a Net Zero scenario in FES 2019 through standard engagement channels for transmission network owners), we designed a programme of engagement for 2019/20. The focus was to influence the SO to introduce Net Zero Scenarios in FES 2020. We supported this with our own data and modelling assumptions. Our scenario planning experts attended all SO FES workshops and webinars (four in total). We responded to the SO's Call for Evidence with a clear objective of advocating for our stakeholders by ensuring the 2020 FES include at least one scenario consistent with Net Zero targets. We held one to one meetings with the SO to share our expert knowledge, experience and data gathered from stakeholders.

"Decentralisation is no longer the most useful variable to flex to explore uncertainty"
National Grid ESO, February 2020 FES Engagement Report

We have been modelling Net Zero scenarios since 2018, using data gathered from current and future customers, government, network companies and energy innovators. Thanks to this stakeholder influence and the modelling we undertook in response, we were the first network company to publish scenarios consistent with Net Zero (1.5 degrees scenario – Proactive Decarbonisation, August 2018) and did so 10 months ahead of government Net Zero targets being set (June 2019). Our Net Zero scenarios informed our responses to the SO on their network analysis and our investment planning is designed to accommodate the Net Zero scenario. In summer 2019, stakeholders requested pathways to Net Zero (i.e. speed of development required to achieve targets) and impact on network reinforcement in our region. To address this, we published additional modelling in our "Planning for Net Zero" report in November 2019 (cost £53k). The four best practice factors in our scenario work were:

1. Collaborative development with stakeholders.
2. Scenarios must include at least one scenario meeting Net Zero targets.
3. Scenarios must meet regional Net Zero targets (earlier than the GB target i.e. Scottish Government Net Zero target date is 2045 against GB 2050).
4. Large scale and decentralised renewable energy generation will both be required in order to meet net zero targets; therefore, scenarios should not be modelled on an and/or basis for this factor.

We also undertook a wider programme of promotion of Net Zero scenarios to raise awareness of the need for this modelling and share our process and modelling with industry other sectors. We attended four industry conferences and Westminster forums (400 attendees), and our messages were picked up and quoted in industry press. We held knowledge sharing meetings with Scotia Gas Network and Scottish Hydro Electric Power Distribution due to the overlay of our network areas and interdependence for whole system modelling.

Outcomes

- The SO confirmed that FES 2020, will include three Net Zero scenarios
- One FES 2020 scenario will meet Net Zero "early" by meeting regional targets
- Removal of decentralisation as a criterion to differentiate scenarios in FES 2020
- Network planning suite including the Network Options Assessment and Electricity Ten Year Statement, will be consistent with Net Zero pathways, essential to delivering targets for renewable electricity and associated carbon reductions
- Our modelling shows that adopting Net Zero pathways results in **displacement of 60 million tonnes of CO₂e** between now and 2030 from renewable generation connected to our network, with a value of **approximately £4.5 billion, reflecting an avoided cost to society** based on the BEIS non-traded carbon price forecast. Without this change to the GB network planning scenarios, we would not have been able to deliver the required infrastructure

5.4 Embodied Carbon of our Infrastructure

The stakeholder ask

Our stakeholders and regulators (SEPA, Ofgem) asked us to calculate the embodied carbon of our infrastructure. Emerging industry trends and best practice underlining are gaining momentum in this area.

What we did

We undertook consultations on our Sustainability Strategy and Sustainability Action Plan and held workshops on Sustainability. Trilateral engagement with other TOs on best practice in managing and reporting embodied carbon. Engagement with select stakeholders via phone interviews for our Annual Sustainability Report. One-to-one engagement with perceived leaders in addressing embodied carbon – including Anglian Water and Skanska. We engaged

with our largest supply chain partners utilising three separate questionnaires issued to a total of 46 invitees. We assembled a cross organisational team including resource from the Sustainability Team, a Senior Business Analyst and a Regulatory Economist (for integration of carbon pricing model into wider CBA framework). In line with our Stakeholder Engagement Strategy, we actively sought stakeholder input on our embodied carbon ambitions and involved them in the planning and delivery of outcomes. We employed transparent processes for capturing stakeholder input and reporting on the resulting impact on our outcomes, including our Sustainability Strategy Update and Annual Sustainability Report (published on the website). Our approach to whole life carbon modelling and pricing in the CBA framework was commended as leading by Ofgem and we will ensure all projects are measured in this way going forward. We monitor progress via the SSEPD Board.

Outcomes

CBA Methodology outlining our approach to strategic optioneering on projects includes whole life carbon assessment of projects. Application of CBA model to our investment projects, with resulting influence on strategic decisions published for each project. Use of our carbon pricing model in the CBA framework realised total **carbon cost savings of c.£3.2m**. This avoided an impact to consumers equivalent to 45,000 tonnes CO₂. Gross Value Added (GVA) is the value of our contribution to the GB economy. Outcomes; 1. For load and non-load investments, the direct GVA is estimated at £433m with induced and indirect total of £479m (undiscounted). 2. Direct GVA for the generation projects enabled through our load investments estimated at £663m, with induced and indirect totalling £666m.

Our Forward Plan 2020/21

Building on the successes we have achieved this year on our Improvement Plan, and the level of maturity in stakeholder engagement attained in 2019/20, we have even more ambitious plans for continuous improvement this year. As with all our stakeholder engagement, we will be guided by the principles of AA1000 and the improvement recommendations provided in Accountability's Healthcheck report. We will be rolling out three layers of stakeholder engagement activity over the next year:

1. Relationship based engagement – with partners and influencers to build relationships, gain insight and share knowledge.
2. Topic specific strategic and organisational engagement initiatives – targeting beneficial outcomes for stakeholders.
3. Business as Usual engagement – day to day working level business interaction with stakeholders.

Forthcoming Stakeholder Engagement initiatives which will realise quantifiable benefits in 2020/21 include topic specific work, such as continuing advocacy on delivering Net Zero targets; further action on land access engagement and our education strategy; enhancing partnerships on tackling wildfires and multi-site bird licences; and feeding in stakeholder-led views to consultations on Contracts for Difference and the National Planning Framework.

Given the current restrictions on face-to-face engagement, we are currently working with internal and external subject matter experts to realise sector leading virtual solutions for statutory consultation and stakeholder engagement workshops.