

Delivering a smart, sustainable energy future

A consultation on the Scottish Hydro Electric Transmission
Draft Sustainability Strategy



Scottish & Southern
Electricity Networks

About us

We are Scottish Hydro Electric Transmission (SHE Transmission), part of the SSE Group, responsible for the electricity transmission network in the north of Scotland. We operate under the name of Scottish and Southern Electricity Networks, together with our sister companies, Scottish Hydro Electric Power Distribution (SHEPD) and Southern Electric Power Distribution (SEPD), who operate the lower voltage distribution networks in the north of Scotland and central southern England.

As the Transmission Owner (TO) we maintain and invest in the high voltage 132kV, 275kV and 400kV electricity transmission network in the north of Scotland. Our network consists of underground cables, overhead lines on wooden poles and steel towers, and electricity substations, extending over a quarter of the UK's land mass crossing some of its most challenging terrain.

We power our communities by providing a safe and reliable supply of electricity. We do this by taking the electricity from generators and transporting it at high voltages over long distances through our transmission network for distribution to homes and businesses in villages, towns and cities.

Our draft Sustainability Strategy

This draft Sustainability Strategy consultation provides a first view of our sustainability ambitions and presents an opportunity for stakeholders to directly influence the refinement of these ambitions and the development of specific targets and methods of measuring progress.

There are questions throughout the document where we are asking for your input on whether we have identified the right areas to target, whether the information and views we have received so far reflect your understanding; and whether the targets and measurement approaches that we are proposing are suitably ambitious and rigorous.

The responses to this consultation will be used to refine our sustainability strategy and to help us with setting specific targets. Feedback will be reported in future communications but will be generalised and not attributed to specific respondents. We will not be publishing responses.



Our framework for sustainable business activity

SHE Transmission is owned by SSE plc. SSE plc produces, distributes and supplies electricity and gas, and operates in GB and Ireland. It is publically listed on the London Stock Exchange and its headquarters are in Perth, Scotland.

As an SSE Group company, SHE Transmission is attentive to the Group approach to sustainability.

The strategic underpinning for SSE's sustainability strategy is the understanding that its core purpose is the provision of an essential service that people, organisations and businesses need and that this has in the past been provided by the public sector. This special status means there is an added responsibility for SSE Group businesses to conduct themselves in a way that enhances value to the society which they are part of, when meeting core business objectives.

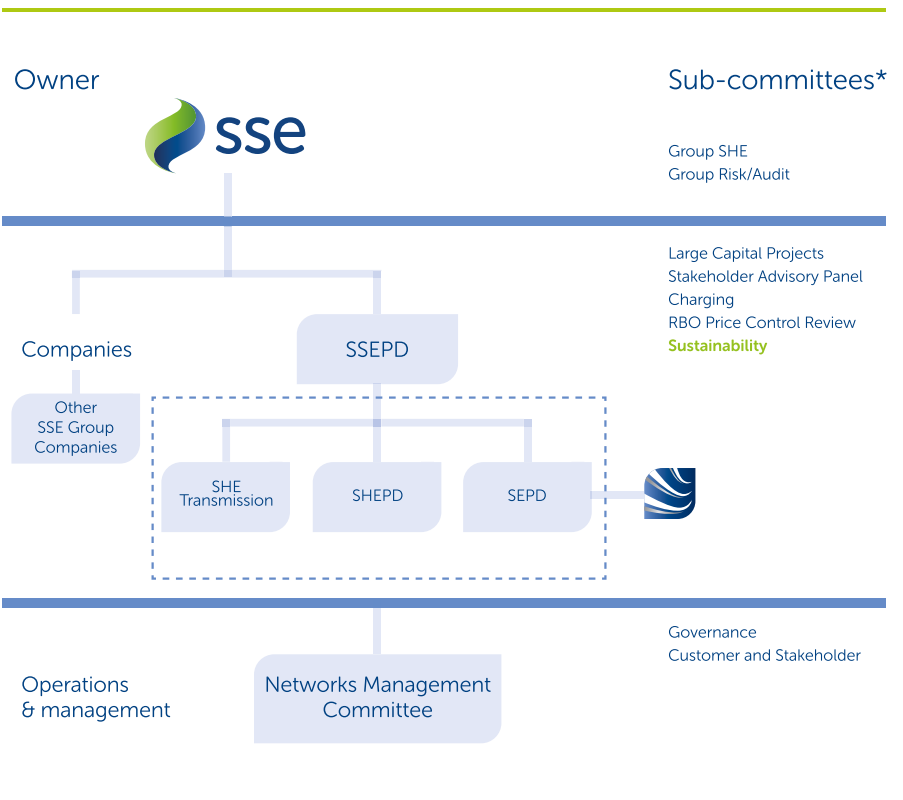
SSE's responsibility framework features its defined core purpose, its values and a core group of policies reflected in its Guide to ethical business conduct for SSE employees.

Sustainability governance

SSE's Chief Executive has overall lead responsibility for sustainability across the SSE Group, including at Board-level. The three electricity networks owned by SSE plc are managed separately from other SSE plc businesses under the ownership of Scottish and Southern Energy Power Distribution (SSEPD) which trades under the name Scottish and Southern Electricity Networks.

SSEPD has a separate Board, separate sub-committees and separate operations and management committees. Under this structure, the Managing Director of Networks has responsibility for sustainability across the networks businesses, including at SSEPD Board-level. The Director of Transmission has responsibility for implementing the strategy within SHE Transmission. The SSEPD Sustainability Sub-committee was established in September 2017 to oversee delivery of the sustainability strategy, the transition to low carbon energy systems and high standards of environmental management.

The remit of the subcommittee also includes ensuring consideration of sustainability in other Networks activities, including: strategy, network planning, connections, networks development, and innovation. It is chaired by Dave Gardner, Director of Transmission, and includes representation from other SSEPD Board members Rachel McEwen (SSE Director of Sustainability) and David Rutherford.



SSE's Responsible House

SSE's 'Responsible House' provides the basis from which stakeholders can understand how its activities and relationships add value. With the core purpose of the company providing the context, SSE's sustainability value describes what being sustainable means to SSE.

Three 'bricks' of the house outline the way in which the core businesses across the SSE Group add value as service providers, operators of existing assets and developers of new assets. Three more bricks describe the way in which the SSE Group adds value through core relationships with employees, suppliers and society as a whole. The house is underpinned by an ethos of 'doing no harm' to people or the environment.

SHE Transmission's activities and relationships are covered by the Responsible House. The SHE Transmission sustainability strategy sets out aspects of those activities and relationships specific to our business and our role as the Transmission Owner in the north of Scotland.

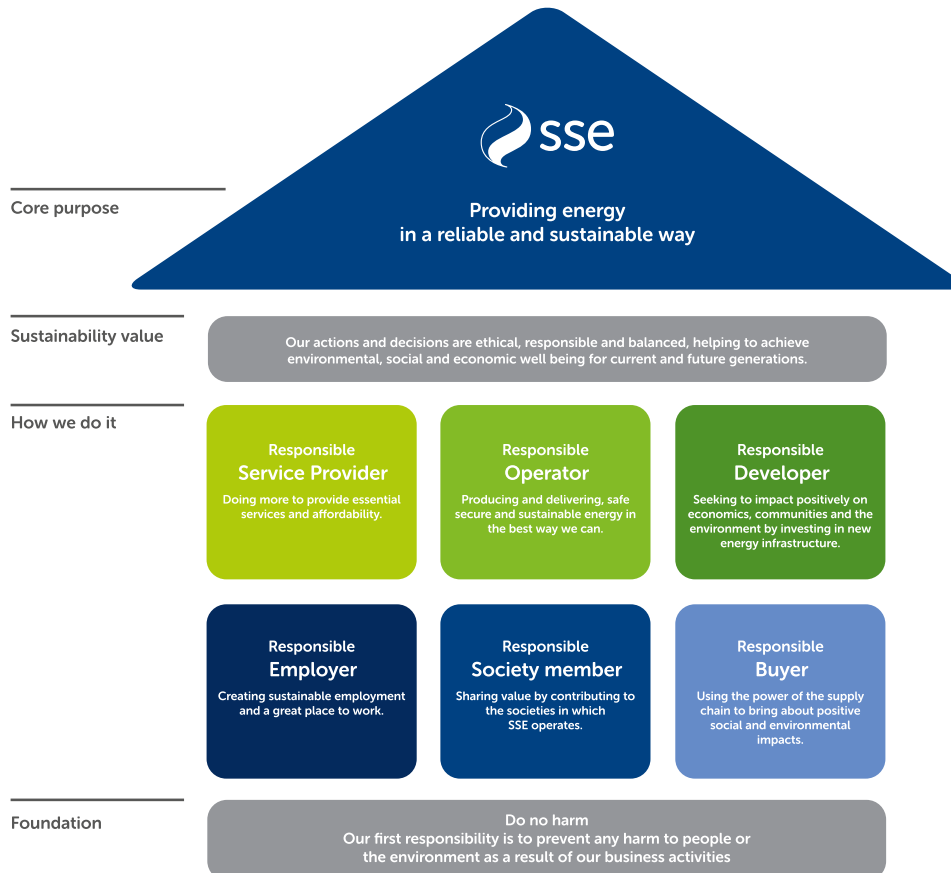
What being sustainable means to SHE Transmission

In line with the SSE Group approach SHE Transmission has adopted the Brundtland definition of sustainable development from Our Common Future¹:

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

This is captured in SSE's long-standing sustainability value:

Our actions and decisions are ethical, responsible and balanced, helping to achieve environmental, social and economic well-being for current and future generations.



¹ Our Common Future. A report of the World Commission on Environment and Development, 1987

Our previous Sustainability Strategy (2013 - 2017)

Our strategic priority for our 2013-2021 Business Plan is to enable the transition to a low carbon economy.

Driven by renewable energy targets and government subsidies, the abundant renewable energy resources in the north of Scotland – wind and water – have been harnessed, resulting in rapid growth in renewable energy generation. In support of these changes, we embarked on an extensive programme of capital investment in our network so that new low carbon generation can connect and the energy produced be transported to homes and businesses. Throughout the first half of this price control our sustainability focus has been:

The RIIO-T1 Price Control

SHE Transmission operates under a licence granted and monitored by the energy industry regulator Ofgem. Ofgem determines how much revenue we can earn from customers to cover the cost of maintaining and reinforcing the electricity network.

This is carried out through a 'price control' which sets out how much return can be earned from that investment. The price control mechanism currently in force is called "RIIO T1". This mechanism took effect on 1st April 2013 and will run until 31st March 2021.

RIIO stands for Revenue = Incentives + Innovation + Outputs.

Providing the supporting infrastructure for low carbon generation

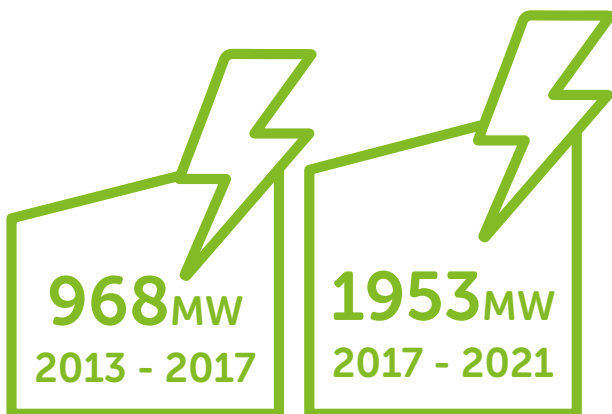
Developing and building our projects in a sustainable manner

Reducing the greenhouse gas emissions of our business and our network

We have made significant progress in these areas through:

- new approaches in system planning, connections and network development;
- the adoption of innovative technologies;
- collaboration with developers, suppliers, and other network companies; and,
- growing our team to support the increased construction programme and the operation and maintenance of the expanded network.

CONNECTED GENERATION (MW)



OUR TEAM Since April 2013 staff numbers have grown by 50% from 284 to 427.



Division of employees between business areas.



Emerging trends

We are now in the second half of this price control, and there are new trends emerging that we must respond to if we are to continue delivering for our customers, and for society as a whole.



Decentralisation

Almost 50% of the generation connected to our network is connected at distribution level.

System operations are changing to accommodate this and to increase efficiency of investment.

With fewer large thermal plants to provide services to the system operator, distributed energy resources will need to be enabled to provide services to support system operation.

System planning must also adapt to consider whole system implications of changes at the distribution level.

This will ensure the optimum solution is identified, whether this requires investment on the transmission system, distribution system, or the provision of services from flexibility markets.



Offshore

Increasing volumes of offshore wind farms are expected to connect to our network in the coming years, including Moray and Beatrice.

The Crown Estate is consulting on further offshore leasing rounds which could mean further developments in this area.

In addition, the UK Government published its Clean Growth Strategy on 12th October, announcing the next CfD auction in Spring 2019 – £575m across all technologies.

The Clean Growth Strategy confirmed that “wind projects on the remote islands of Scotland that directly benefit local communities will be eligible for the next Pot 2 auction, subject to obtaining State aid approval”.

To enable this, we will be developing the Islands projects: Orkney, the Western Isles and Shetland.



Flexibility

With such high proportions of generation coming from variable renewable energy generation, there is an increasing need for flexibility services as the energy system is decarbonised.

As set out in the UK Government’s Smart Systems and Flexibility Plan, distributed energy providers must be enabled to compete in this flexibility market to increase competition and ensure the best outcome for consumers.

We must work hard to remove barriers to this and ensure that transmission system issues do not unnecessarily restrict this transition.

For the transmission network, increased flexibility also means a potential increase in bulk flows to accommodate increased interconnection to allow the trading of renewable energy with our European neighbours, supporting generation decarbonisation and system balancing.



Demand

As the electricity system becomes increasingly decarbonised, the focus of the decarbonisation agenda is shifting to other sources of energy consumption, including heat and transport.

With electrification providing an attractive lower carbon alternative to traditional transport and heating fuels, future energy scenarios show that an increase in electricity demand is highly feasible.

The likely mismatch between the timing and output of renewable energy generation and the scale and timing of new sources of demand increases the need for flexibility and could also require network investment.

In supporting the next phase of the low carbon transition, we need to start thinking beyond low carbon electricity generation and ensure that we also enable this decarbonisation of other energy uses.



High renewable operations

Decarbonisation has led to a reduction in the thermal plant on the system. These power stations provided essential services to the system operator to ensure system security.

Now, the vast majority of generation connected to our network is variable renewable generation.

With fewer large thermal plants to provide these services, distributed energy resources will need to be enabled to provide services to support system operation.

In a system accommodating high volumes of variable generation output, the standards and assumptions used to design and plan the network also need to change to reflect this and to ensure the best use of the infrastructure.

In addition, we must ensure that we take the actions required to enable the growth of renewable energy generation to continue, while protecting the resilience of the network.



1. What other emerging trends are likely to influence future network development and our role in enabling the transition to a low carbon economy?

Beyond carbon and climate change

While enabling decarbonisation in pursuit of climate change goals is the most material contribution that we can make to sustainability, our economic, social and environmental impacts are also significant. SHE Transmission's role as a buyer and as an employer, and our role in communities and society as whole, provide opportunities for us to take further action on sustainability.

The UN Sustainable Development Goals provide a common framework for targeting improvements in wider sustainability. As a responsible business, we are determined to play our part, alongside governments, civil society and individuals, to ensure that these goals are reached.

In addition to goal 13 Climate Action, SHE Transmission actively supports, in order of materiality for our business.

7 AFFORDABLE AND CLEAN ENERGY



9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



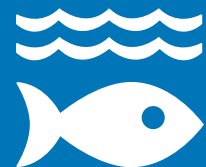
8 DECENT WORK AND ECONOMIC GROWTH



15 LIFE ON LAND



14 LIFE BELOW WATER



11 SUSTAINABLE CITIES AND COMMUNITIES



5 GENDER EQUALITY













2. Are there any other UN Sustainable Development Goals that you believe we should include in our strategy?

Engaging with stakeholders

In developing our strategy, we have sought to understand the views and needs of our stakeholders, and to use this to inform our decisions on materiality of different issues and to help determine our goals. This consultation provides a further opportunity for stakeholders to feed in their views and to challenge those captured here.

All of our stakeholders challenged us to make our sustainability drivers:

- shorter;
- less repetitive; and,
- active, rather than passive.

Stakeholder group	Engagement methods	Key issues	Inclusion in new ambitions (see pages 10-21)
 Energy consumers	We presented our old sustainability drivers and new ambitions to the SSEN Stakeholder Advisory Panel, a group of individuals that work for a variety of organisations including NGOs. This panel helps to represent the interests of customers including vulnerable and hard to reach customers and low carbon generators.	<ul style="list-style-type: none"> • Affordability of energy • Quality of customer service • Responsiveness to need • Clarity and accessibility in terminology used • Gender equality 	Connecting for society Supporting thriving communities UN Sustainable Development Goals
 Non-governmental organisations (NGO) and voluntary bodies	We regularly engage with NGOs and voluntary bodies through our Communities and Environment teams with working relationships established with NGOs, such as The National Trust for Scotland, RSPB Scotland and the Scottish Wildlife Trust that have helped us capture their concerns.	<ul style="list-style-type: none"> • Wildlife impacts • Biodiversity • Visual impact • Heritage and archaeological impacts 	Promoting natural environment Supporting thriving communities Connecting for society
 Sustainability professionals	When we published our 2016/17 Environmental Discretionary Reward Annual Statement we sought feedback from sustainability professionals in other industries through a series of interviews, to get their views on our previous drivers and our direction of travel.	<ul style="list-style-type: none"> • Climate change • Business risks • Sustainability reporting 	Purpose Mitigating climate change Target setting
 Energy generators and developers	Sustainability workshops were held with over 50 representatives of generation and storage developers at the National Grid Customer Seminar in October 2017.	<ul style="list-style-type: none"> • Timely connections • Proactively managed projects • Transparency in how we work 	Connecting for society Promoting natural environment Thriving Communities
 Suppliers and contractors	The attendees at the workshops we delivered at the National Grid Customer Seminar in October 2017 also included representatives of our suppliers and contractors.	<ul style="list-style-type: none"> • Specific targets required • Broad ambitions needed, not just on waste, water and carbon • Impact on communities • Whole system impacts, not just our own 	Supporting thriving communities Connecting for society Mitigating climate change
 Government and regulators	We discussed our sustainability strategy development through a face to face meeting with the Scottish Government in April 2017 and have engaged with the Environmental Discretionary Reward team at Ofgem throughout the year, and with the EDR panel in October 2017. We regularly engage with environmental regulators and governmental organisations with working relationships established with SEPA, Scottish Natural Heritage and the National Parks Authority, often undertaking collaborative studies and research projects. Through these activities, we have gained an understanding of their key concerns.	<ul style="list-style-type: none"> • Continued primary focus on delivering effective decarbonisation • Collaboration • Economic impact of investments • Conduct of large businesses • Environmental impacts • Visual impact 	Mitigating climate change Connecting for society Supporting thriving communities Promoting natural environment Growing careers UN Sustainable Development Goals Target setting
 Other network companies	We have collaborated with other Transmission Owners (TOs), the System Operator (SO) and Distribution Network Owners (DNOs), in our work surrounding the EDR and presented them our sustainability strategy for feedback. This has been supplemented through discussion in meetings with the Environmental Discretionary Reward Practitioners Group.	<ul style="list-style-type: none"> • Sustainable, cost effective infrastructure • Stakeholder engagement • Innovation 	Mitigating climate change Connecting for society Supporting thriving communities Promoting natural environment Growing careers
 Communities	Our community engagement team provided feedback on issues raised at community engagement events for our projects. The consultation on the SSEN Resilient Communities Fund also provided insight into community issues.	<ul style="list-style-type: none"> • Environmental impact on communities • Invest in communities • Regular engagement • Visual impact 	Connecting for society Supporting thriving communities Promoting natural environment
 Employees	Sustainability issues and the draft ambitions were presented to our two staff advisory panels, once in May and again in September.	<ul style="list-style-type: none"> • Strategy implementation and the need for specific targets • Focus of the business on sustainability factors • Driving change 	Mitigating climate change Supporting thriving communities Promoting natural environment Growing careers Target setting
 Shareholders	The views of investors were provided by the SSE Group Sustainability Team who regularly engage with investors on sustainability topics. These comments are from the group sustainability report.	<ul style="list-style-type: none"> • Financial Performance • Investment plans • Operational performance • Environmental, Social and Governance performance • Climate change related risk 	Mitigating climate change Connecting for society Supporting thriving communities Promoting natural environment Growing careers



3. What other stakeholder groups would you like to see represented in future engagement activities?



4. For the identified stakeholders, are there any other key issues that should be included in our review?

Our New Sustainability Strategy

PURPOSE: Enabling the transition to a low carbon economy

Our strategic purpose, to enable a low carbon energy system, has not changed, but as the system is progressively decarbonised we are recognising that to achieve the optimum outcome for customers the transition needs to be smart.

Our experiences, and the insight provided by our stakeholders, highlight the need for us to expand our ambitions beyond standalone decarbonisation aims, and to ensure that our activities are mindful of other social, economic and environmental issues. Rather than complicating our core purpose, we have built these broader considerations into five ambitions through which we will deliver that overarching aim.

Feedback from our targeted engagements, both internal and external, has led us to concentrate on a smaller number of key ambitions (now five, down from our original 11 drivers), to be specific and to be bold. Collectively our five new ambitions still cover all the aspects of our original 11 drivers, plus some of the new areas identified through emerging trends. They do this by being broader in their ambition, with specific tailored targets in development that pinpoint focussed actions.

In the following pages, we set out for each ambition:

- Why this ambition is included and what it means to us;
- The targets under development; and,
- Proposed methods for measuring our progress.

Through the questions against each ambition we invite you to:

- Challenge our assumptions on what is required;
- Comment on our targets; and,
- Provide advice on approaches to measurement.

We would also welcome more general views and comments on the ambitions and whether they meet your interests as a stakeholder.

Our sustainability ambitions



Connecting for society

Working collaboratively to deliver a whole system solution that promotes affordability.

Our main strategic driver over the past decade in transmission has been the timely delivery of large scale capital investment in new infrastructure to accommodate increasing levels of renewable electricity generation across the north of Scotland.

In 2016/17 our capital expenditure totalled £450 million, bringing our total investment since April 2013 to just under £1.9 billion². Including that connected at a distribution level, our network now supports over 5GW of clean, renewable electricity generation, enough to power over four million homes.

As we enter the next phase of our programme with continued investment in connections and wider network developments, it is essential that we meet the wider societal expectations that accompany this investment, particularly affordability.

Affordability of connections is essential for renewable energy generators developing projects in markets with reduced subsidies and challenging economics. For end consumers, the impact of our investments may be small when calculated as a share of individual energy bills, but investment must be efficiently delivered to ensure best value for society.

Delivering best value for money for our connections customers and GB bill payers will require collaboration in:

1. Expanding network planning and development approaches to assess options across the whole energy system (transmission, distribution, supply and services) and to consider social, economic and environmental impacts.
2. Working efficiently with our supply chain partners to continue our strong track record of delivering on time, to budget and with the right quality – meeting the needs and expectations of our customers.
3. Continuing to develop innovative solutions – including technological innovations – such as our flagship Caithness Moray HVDC link – as well as techniques to extend and enhance the operational life and capability of existing assets.

To deliver this ambition we must be deeply interconnected to the society we serve and operate within. We will achieve this through regular and meaningful stakeholder engagement and collaborative working.

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Over the eight year Business Plan, we forecast that we will have invested over £3 billion in the supporting infrastructure and connections required for the transition to a low carbon economy.”

² All figures are in 2016/17 prices and include Transmission Investment for Renewable Generation

Setting targets

Our primary target is to ensure all investment decisions are assessed against a Cost Benefit Analysis (CBA) framework which includes social, environmental and economic aspects, with sufficient engagement to inform decisions on trade-offs between different factors.

This will require development of new system planning and development approaches that quantify these factors against our usual economic considerations, and that can appropriately compare transmission asset based solutions with solutions on the distribution network, or alternative flexible and market based solutions.

Developing this new framework will allow us to measure in-depth across social, environmental, economic and stakeholder values. It will also allow us to communicate more effectively with our stakeholders about the trade-offs necessary in our decision making. This framework will also support the identification and adoption of alternative approaches to network development where these can deliver better value, whether that value is economic, social or environmental.

To move completely to these new approaches will likely necessitate changes in the standards and frameworks that we adhere to in system planning and operations. The complexity of these should not be understated and as such, significant further analysis and discussion with the System Operator and the regulator will be required before specific targets on adoption of new approaches can be set.

Measuring progress

To help measure our progress towards this ambition we will begin reporting on how many projects were assessed through the new framework each year.

To provide insight into the changes in approach and decision making that this drives, we will also report on how many projects included an unconventional approach such as new system designs, new commercial arrangements, or new technologies. Factors such as efficiency of investment are already reported as part of our Annual Performance Report but these will be included within our sustainability reports to provide an update on progress in this context. Similarly, innovation developments will now also be reported in sustainability reporting, with a focus on connections activity and works that enable further renewable energy connections.

Quantifying how we work collaboratively with our partners and stakeholders will require a two-stage approach:

1. The continual monitoring and adjustment of our engagement process throughout the year, which is clearly communicated and trackable.
2. Reporting of how the collaboration and engagement has resulted in changes to our standard approaches or options selection, and how this compares with stakeholder expectations.

Current performance



More than **500MW** of renewable generation capacity connected in the north of Scotland in 2016/17 making it a record year



Scottish Green Energy Awards Judges Award for Beauty Denny for its contribution to decarbonising electricity-generation



Two-considerate construction scheme awards on Caithness Moray



239MW of connections delivered ahead of enabling works **in 2016/17**



5. What factors would you like to see included within our whole system cost benefit analysis?

Mitigating climate change

To manage resources over the whole asset lifecycle, working towards a science based greenhouse gas target.

While our most material contribution to action against climate change is our role in enabling the transition to lower carbon electricity generation, we are also determined to tackle our own carbon emissions (both direct and indirect), and to ensure that these actions are aligned with current climate science.

As such, our ambition is to achieve the level of decarbonisation in line with what is required to keep the global temperature increase below 2°C compared to pre-industrial temperatures³. This is what we mean by a science based target.

Due to the long lifetime of many of our assets, much of the infrastructure that we are installing today in order to increase low carbon electricity generation, will still be in operation in 2050.

Setting a science based target will provide us with a clearly defined pathway to future-proof our growth by specifying how much and how quickly we need to reduce our greenhouse gas emission.

This will require us to assess the full lifecycle of our assets when making investment decisions, considering their impacts during construction, in operation and when replaced.

The network expansion that we have delivered and continue to deliver to support the low carbon transition, could result in an increase in our operational emissions. To tackle this, we are focussing on our two most significant operational greenhouse gas emissions: transport emissions and SF6 leakage.

In 2016/2017 SSE reported transmission losses from the SHE Transmission network within its scope 3 emissions. While we do not control the electricity flows that determine network losses, there are actions we can take to reduce losses, such as the application of lower loss conductors and more HVDC networks.

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Setting a science based target will provide us with a clearly defined pathway to future-proof our growth by specifying how much and how quickly we need to reduce our greenhouse gas emission.

³ For more information, see the Fifth Assessment Report of the intergovernmental Panel on Climate Change (IPCC AR5).

Setting targets

Setting a science based greenhouse gas emissions target will require calculation of our carbon budget through one of three approaches:

- sector-based approach, where the carbon budget is determined by industry sector and then allocated to companies within each sector;
- absolute-based approach, where each company is assigned the same percentage of absolute emission reductions as is required globally; and
- economic-based approach, where the carbon budget is equated to global GDP and a company's share is determined by its gross profit.

In setting our science based target, it is essential that this does not inadvertently prohibit activities that would further climate change aims by restricting the development of infrastructure required for the connection and transportation of low carbon electricity. As such, our carbon budget must account for the growth in our asset base.

SHE Transmission is currently considering an absolute-based approach to setting its science based target. One of the challenges in this is that we do not have control over network losses as these are a feature of how the system is balanced by the system operator. Our initial action will be to develop a science based target within 24 months of making the formal commitment to set a science based carbon target.

Measuring progress

We have significantly improved the reporting of our greenhouse gas emissions over the last four years. In line with reporting guidelines⁴, data is collected for:

- Building Energy Usage (Buildings electricity, Buildings other, Substation electricity)
- Business Transport (Road, Air & Rail)
- Operational Transport (Road, Air & Rail)
- Fugitive Emissions (Sulphur Hexafluoride - SF6)

This current reporting covers scope 1, scope 2 and scope 3 emissions⁵. We will continue to report these emissions while our science based target is developed and will begin reporting against the science based target once it is set.

Inclusion of carbon considerations in investment decisions will be essential to ensure that decisions made today do not compromise future delivery of these aims. A new methodology will be required for factoring carbon into investment decisions, this can also be used to measure progress.

⁴ UK Government's environmental reporting guidelines (DEFRA, June 2013), the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (World Resources Institute and the World Business Council for Sustainable Development, 2004), and ISO 14064- 1:2006 Specification for Quantification and Reporting of Greenhouse Gas Emissions

⁵ **Scope 1:** direct greenhouse gas emissions occurring from sources owned or controlled by the company e.g. our vehicles and on-site boilers. **Scope 2:** indirect greenhouse gas emissions from the generation of purchased electricity consumed by the company. **Scope 3:** indirect greenhouse gas emissions resulting from a company's activities but which occur from sources not owned or controlled by the company e.g. business travel, grid losses and contractor emissions.

Current performance

32.5%
Reduction



in our Business Carbon Footprint from 2013/14 to 124,173.19 tCO₂e

35%
Reduction



in emissions from our electrical losses from 2013/14 to 110,004.30 tCO₂e

24.5%
Reduction



in SF₆ leakage from our assets since targets were set in 2014, meeting our reduction target for the first time

33.1 tCO₂e total
scope 1 and 2

Emissions per FTE employee in transmission



6. Which Science Based Target approach do you think is most appropriate for the SHE Transmission business?

Supporting thriving communities

To maximise the local (social and economic) benefit of our investments

Without the continued support of the communities in which our assets are located, we wouldn't be the business we are today or become the business we want to be in the future. We want to ensure that these communities benefit from our investments.

In the last few years we have made significant progress in quantifying the contribution that our major projects make to the UK and Scottish economies, and this analysis has included measurement of the local socio-economic benefits of our projects, for example, our Caithness-Moray project.

Within these major projects, our local procurement programmes such as Open 4 Business (O4B), have brought benefits to local communities by increasing the involvement of local businesses in the works, either contracting directly with ourselves, or through our principle contractors.

Beyond our major projects, we provide additional support to communities across our network area through our Resilient Communities Fund. The fund is currently used to support projects that will help the community during extreme weather events or when electricity supply is lost, with a focus on vulnerable customers.

Our investments in our communities are not only financial, our employees also commit their time to supporting projects in our communities through Be the Difference, an initiative through which employees volunteer in the community for a day. Over 100 days have been used so far this year to undertake projects including beach tidies, dog rescues, giving Science Technology Engineering and Mathematics (STEM) talks in school and universities, and renovating a hospital garden.

We want to ensure that our works continue to benefit our local communities and that we are maximising the benefit that they receive from our project investment, community support investment and local volunteering.

Setting targets

To ensure that we continue to maximise the local benefit of our investments we are looking to set a minimum threshold for the share of local content in our portfolio of projects, with the intention of increasing this threshold throughout the remainder of this price control and into the next.

We will also continue to support our wider communities through a Communities Fund, allocating a minimum of 33% of any Stakeholder Engagement Incentive income that we receive to the communities in which we work. The remit of the Fund is consulted upon each year to check that it still meets the needs of the communities in which we operate. Any changes to the Fund will be informed by the outcome of that consultation.

Measuring progress

To meaningfully measure whether we are making progress on our ambition, we believe that we will need to quantify and publish:

- the local socio-economic impact of each £ we spend;
- the local content ratio of our major project investments;
- the award of funds through our Resilient Communities Fund; and,
- the number of volunteering days used in local communities.

Current performance

217 
local people

employed on the Caithness Moray Project

91,156 
bed nights

in local accommodation to date for the Caithness Moray Project, worth an estimated £4.55m

Over 
£100m

of contracts awarded through O4B initiative

Over 
£200,000

projected award for 2018 to the Resilient Communities Fund

27% 

possible volunteer days through Be the Difference taken in 2016



7. What does maximum benefit mean for your community, and is local content a good way to measure this?

Growing careers

Committing to a safe and inclusive culture for our employees; adding value through good jobs, training and development.

The past decade has been a period of rapid change in the energy sector and, for transmission, huge growth; our workforce has grown significantly to support this. Our expanded network requires an increasing number of skilled employees to keep it running effectively and to manage the transition to an increasingly decarbonised and decentralised system.

Our ambition is to attract, develop and retain a sustainable pipeline of highly engaged employees, and in doing so, help to address the lack of diversity and skills shortage in our industry. Like many engineering focused businesses, many of our roles are in vocations traditionally dominated by men. This has resulted in a higher proportion of men compared to women in our workforce. Because of the lower number of women in senior roles, our pay gap is approximately 30%. By driving inclusion in line with the SSE group vision in all aspects, not just gender, we aim to overcome this disparity.

We have a responsibility to invest in our employees and add value through the creation of good jobs, training and development. By doing this, it's not just SSE Transmission or the wider company that benefits – society and the individuals do too.

With an aging workforce, we are also faced with a looming skills shortage. We must ensure that we have a strong pipeline to recruit and develop talent. By attracting, developing and retaining a skilled and diverse pipeline of employees, we believe we will maximise productivity and help ensure the long-term success of our business.

In addition to the over 400 people directly employed, the number of people employed by our contractors to work on our projects is significant. We are using our role as a buyer to improve standards via our procurement contracts. We ask our contractors to at least meet our minimum standards, paying employees working on our projects the Living wage, and meeting Modern Slavery Act legislation.



Setting targets

In line with the SSE Group ambitions on human capital and diversity and inclusion, we aim to set targets that challenge us to focus on our most important factors, using an evidence-based approach that drives real change and will allow us to meet the challenges of the future. This will include setting targets to:

1. Ensure our workforce has the required skills and opportunities to meet our future business requirements; committing ourselves to providing structured, time allocated training for them.
2. Promote a work culture based on fairness, respect and dignity, resulting in an inclusive and diverse workforce.
3. Ensure standards are met both in SHE transmission and our contractors.

We will also contribute to the delivery of SSE Group targets in this area:

4. Return on investment from diversity and inclusion initiatives of £15 per £1 in 2020.
5. Increasing the number of women earning over £40,000 per year to at least 25% by 2025.

Measuring progress

To meaningfully measure progress in these areas we will track and report on leading and lagging indicators. This will include:

For target 1

- A) Tracking the number of internal job moves of SHET employees each year, additionally reporting on the proportion of employees moving to promoted posts.
- B) Reporting on the investment in new trainees, apprentices and graduates joining SHE transmission each year.
- C) Reporting investment in training and development.
- D) Undertaking a resilience report annually to make sure training and development addresses risks to the business (i.e. large number of staff retiring).

For target 2


- A) Report on diversity and inclusion metrics, including SHET's gender pay gap for ourselves and our primary lead contractors
- B) Track the number of incidents reported through SSE's 'Speak up' externally-hosted whistleblowing phone line.

For target 3


- A) Reporting any breaches of our commitment that employees and contractors are paid at least the real Living Wage, as set by the Living Wage Foundation each year.
- B) Reporting any breaches of the Modern Slavery Act throughout our supply chain, having this embedded as a requirement in all procurement contracts awarded.

Current performance

33.4 % 
Pay gap m/f in transmission

 **Male**
349
(82%)

APRIL 2017

427  **Female**
78
(18%)

 **59%**
of our staff are under 45 years old.

Inclusion Strategy

Our Inclusion Strategy for 2017-2020 focuses on five key areas, building on the 'IN, ON, UP' elements the strategy to date:

IN - Candidate attraction and recruitment

ON - Retention of talent and managing leavers to maintain positive brand exposure

ON - Embedding inclusive values throughout the organisation

ON - Mentoring, networks and partnerships and

UP - Progression, promotion and creating opportunities



8. What do you feel are the greatest challenges in the field of developing our human capital?

Promoting natural environment: to deliver a net benefit

Measuring the biodiversity net gain of our projects.

As a responsible developer, we have a responsibility to protect and promote the natural environment.

Our capital expenditure during this price control is expected to exceed £2bn. This represents a substantial project delivery programme. As our asset lives span multiple decades, it is essential that we ensure this development expenditure is undertaken in a sustainable manner to protect our natural environment now and for the benefit of future generations.

Our recent focus has been on what contribution we can make to protect and promote the survival of protected and endangered species. The linear nature of our new and existing networks provides real opportunities to actively improve the connectivity between important habitat types and ecosystems but it is equally important to ensure that such linear corridors do not act as ecological barriers.

This is important as abundance of habitats and species of conservation value are reducing year on year, so much so that the UN has set strategies that aim to halt and reverse this trend⁶. The Scottish Government has also set out its "Scottish Biodiversity Strategy" that sets out its vision, objectives and desired outcomes^{7 8}.

Whilst biodiversity is valuable in its own right, it is also crucial to the maintenance of natural systems on which we all depend (for example: pollination of crops, flood management and air quality regulation). Protecting and enhancing biodiversity is therefore an essential element of a truly sustainable society.

As such, our ambition is to ensure that our activities not only maintain the existing balance that exists, but help to enhance the biodiversity in our area, targeting a net gain.

Our projects also have a visual impact on the natural environment. To address this, we will ensure that the visual impact of new infrastructure is fully considered in our projects from conception, and is reduced as far as practical in line with our social, environmental and economic cost benefit analysis.



Heilo Ecology and Ramboll Environ

⁶ United Nations Convention on Biological Diversity. (2010). Strategic Plan for Biodiversity 2011-2020. United Nations, New York. <http://www.cbd.int/sp/>

⁷ Scottish Executive. (2004). Scotland's Biodiversity: It's in Your Hands. Scottish Executive, Edinburgh <http://www.scotland.gov.uk/Publications/2004/05/19366/37239>

⁸ Scottish Government, (2013). 2020 Challenge for Scotland's Biodiversity: A Strategy for the conservation and enhancement of biodiversity in Scotland. Scottish Government, Edinburgh <http://www.gov.scot/Resource/0042/00425276.pdf>

Setting targets

The building of new infrastructure projects and the operation and maintenance of existing assets provide different opportunities to enhance biodiversity. As such, our targets will be tailored to the range of activities we undertake.

For new infrastructure projects, we propose to:

- Avoid impacts by consideration of biodiversity in project design
- Work with our supply chain to gain the maximum benefit during asset replacement and upgrades
- Positively contribute to the UN and Scottish Government strategies by achieving 'No Net Loss' status for all construction projects by 2020
- Achieve biodiversity net gain for all construction projects by 2030

For maintenance and operational activities, we propose to:

- Collaborate with partners to realise opportunities for improving the biodiversity on and around our existing sites
- Enhance biodiversity through a comprehensive review of management activities

Measuring progress

To meaningfully measure our progress towards biodiversity net gain for construction projects we will:

- Develop criteria to assess the impact of our construction projects on biodiversity
- Define and develop a mechanism to report on our baseline biodiversity footprint and year on year improvements

Current performance

Zero

environmental prosecutions or major incidents in 2016/17



Over 400

staff participating in the CARE (**Commitment Awareness Rigour and Engagement**) programme to deliver the sustainability value in large capital investments



10

Hectares of substation sites seeded to support rare Great Yellow Bumblebees



100+

stakeholders consulted about plans to improve visual impact of transmission assets



9. What other factors should we include in our ambition on promoting the natural environment?

What's next

Feedback received through this consultation will be used to refine our Sustainability Strategy ahead of publication of the final strategy in spring 2018.

Summary of consultation questions

1. What other emerging trends are likely to influence future network development and our role in enabling the transition to a low carbon economy?
 2. Are there any other UN Sustainable Development Goals that you believe we should include in our strategy?
 3. What other stakeholder groups would you like to see represented in future engagement activities?
 4. For the identified stakeholders, are there any other key issues that should be included in our review?
 5. What factors would you like to see included within our whole system cost benefit analysis?
 6. Which Science Based Target approach do you think is most appropriate for the SHE Transmission business?
 7. What does maximum benefit mean for your community, and is local content a good way to measure this?
 8. What do you feel are the greatest challenges in the field of developing our human capital?
 9. What other factors should we include in our ambition on promoting the natural environment?
 10. Are there any factors that you consider to be missing from our sustainability strategy?
 11. Which ambitions did you most relate to, and why?
 12. Do these ambitions provide clarity on the areas where you or your organisation will engage with SHE Transmission on sustainability?
-

Responding to this consultation

We are inviting responses to this consultation by 23 February 2018. If you have any queries on the content of this paper, please get in touch with us at: lowcarbonteam@sse.com

Information provided in response to this consultation may be used in future documents related to our Sustainability Strategy. Responses will be generalised and not attributed to specific respondents. If you would prefer the information that you provide to be treated as confidential, then please make us aware of this when responding to the consultation.

This paper will be hosted on
www.ssen-transmission.co.uk/sustainability-and-environment

An online response form is available at:
www.ssen-transmission.co.uk/sustainability-and-environment/sustainability-strategy

Alternatively, please use the following contact methods to send in your responses:

E-mail: Lowcarbonteam@sse.com

Post: Christianna Logan, Scottish and Southern Electricity Networks,
Inveralmond House, 200 Dunkeld Road, Perth, PH1 3AQ



Scottish & Southern
Electricity Networks

