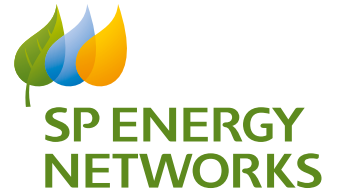


SP Energy Networks Sustainable Business Strategy 2019



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Foreword



Frank Mitchell, SP Energy Networks, CEO

As a leading electricity networks business, our aim is to create a better future quicker. We play a critical role in meeting the UK's ambitious climate change targets and in enabling the transition to a low carbon economy. While we do this, it's key that our business reduces its own environmental impacts and delivers sustainable value for current and future customers.

In the year since we launched this strategy, we have seen a stark, yet positive shift in the priority given to climate change, decarbonisation and environmental concerns both in the UK and globally. The profile of network operators has risen, and will continue to rise as our critical role in decarbonisation of energy, heat and transport and sustainable development becomes mainstream. In response, our vision of sustainability is becoming central to all that we do as we strive to become the utility of the future, running through our business plans, underpinning our approach to innovation and shaping our day-to-day service.

Our stakeholders have provided clear feedback to us that not only must we deliver this transition, we must have the vision and ambition to become a sustainability leader.

This strategy describes the Vision, Drivers and Goals we have set to achieve that leadership position and ensure we continue to facilitate the low carbon transition and minimise our environmental impacts in an efficient and effective way. It has been co-created with key stakeholders, its development underpinned by the UN Sustainable Development Goals and the UK's climate targets under the Paris Agreement.



Colin Taylor, Director, Processes & Technology, Chair of SPEN Executive Sustainability Steering Group

Our challenge now is to achieve our ambitious Goals and Objectives. Underpinned by our Sustainability Plan, we are adapting our business culture and processes to support the digitalisation, decarbonisation, decentralisation and democratisation of the UK's energy markets, whilst greatly reducing our direct impacts.

Established in 2017, our Sustainability Stakeholder Working Group is guiding us through this transformation; collaborating to achieve common goals and address complex sustainability issues. Innovation and stakeholder engagement are key to our success.

Our Strategy is evolving as we learn from these activities and flex our plan to stay ahead of international developments. This strategy is reviewed annually; if you have any feedback on this document, can identify actions we can take or have ideas for collaboration opportunities, we would be very interested to hear from you.

If you would like to participate in the annual review of the SP Energy Networks Sustainable Business Strategy, please contact our Sustainability Team by email at Sustainable@spenergy.co.uk

or register on our Online Community

<https://spen-stakeholder-community.explainonline.co.uk/>

Introduction

Our responsibilities are clear. We must enable the UK economy's low carbon transformation and play our part in mitigating climate change. While we do this, we must minimise the environmental impact of our business and network, making decisions that meet current and future needs.

Tough national and international targets aimed at keeping global temperature rises well within a maximum of 2°C, and subsequent reports underlining the importance of sub-1.5°C increases, are driving the UK economy to decarbonise at pace.

Our network licences play a vital role in enabling this rapid transition. In our licence areas, 3.6 gigawatts (GW) of thermal generation plant has closed in recent years. At the same time, we have connected around 7GW of renewable generation, over half of which is connected to our distribution network. Renewables already connected to our networks exceed total demand of around 6.4GW, and contracted and proposed generation schemes will nearly double this figure in the coming years. The geographical locations of our three licences mean that we provide vital links between areas of outstanding renewable energy resource – in the Highlands and Borders of Scotland and in the North of Wales – and the corresponding centres of electricity demand in the Central Belt and in the North of England.

We are focussed on delivering fast and efficient renewables connections. Through the proactive management of our network, we provide the capacity needed to enable the economic transfer of renewable energy from- and through our licence areas.

Beyond climate change targets, we have a key part to play in the UK delivery of the United Nations Sustainable Development Goals.

Our networks cover a wide variety of landscapes, habitats and communities, all of whom we must serve and protect. Our activities utilise a large and diverse supply chain, and we have a responsibility to work with these suppliers to manage the environmental impacts of the services and products they provide us.

In 2016, a group of our prominent stakeholders agreed we should take the lead and respond to these challenges by placing sustainability at the core of what we do. By using innovation and investment built around our Sustainable Business Strategy,

SP Transmission PLC (SPT)
SP Distribution PLC (SPD)
2 million customers

SP Manweb PLC (SPM)
1.5 million customers

we can support the low carbon transition and ensure we reduce our own footprint right across our business.

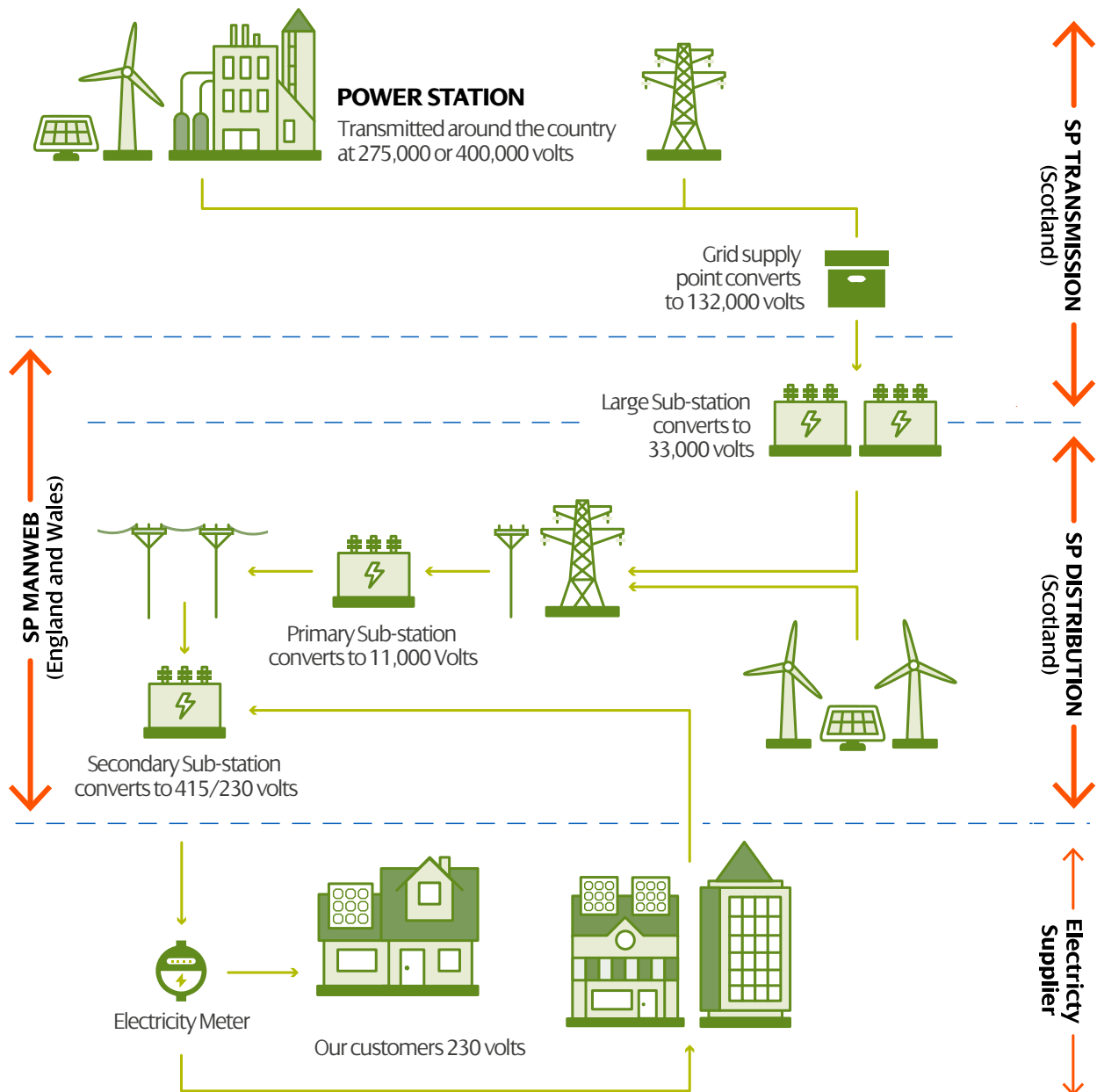
Our strategy takes into account our many roles. We distribute electricity to 3.5 million customers across our network, regardless of who they pay their bill to.

In our licence areas, we are the point of contact for all enquires relating to the electricity network. The safety and security of electricity supply is paramount to our operations.

We employ approximately 3,000 people directly, 2,500 contractors and support tens of thousands more jobs in our supply chain.

We own three regulated electricity network businesses in the UK: SP Transmission plc (SPT), SP Distribution plc (SPD) and SP Manweb plc (SPM).





Our transmission (SPT) and distribution (SPD) network in Scotland covers an area of almost 23,000km² in central and southern Scotland.¹

Our distribution network in England and Wales (SPM) covers approximately 12,000km² in North Wales, Merseyside, Cheshire, and North Shropshire.²

As the licensed Transmission Owner (TO) in southern Scotland, we operate, maintain and invest in our network of 132 substations, 7,700 poles and steel towers, 4,000km overhead lines and 320km underground cables at high voltages.

Across both our Distribution Network Operator (DNO) Licence areas (SPM & SPD), our network comprises approximately 30,000 substations, 604,000 poles, 3,700 steel towers, 40,000km of overhead lines and 65,000km of underground cables which deliver electricity to meters in our licence areas.

We are investing £2.6bn in our transmission network during the current RII0-T1 price control period (2013-21) and £4.4bn in our distribution networks during RII0-ED1 (2015-23). These investments will improve performance, ensure security of energy supply and facilitate the connection of low carbon technology.

SP Energy Networks is part of Iberdrola Group, a globally leading utility with a sustainable business model at the heart of its decision making processes. Our sustainability ambitions complement those of our parent company.

¹<http://www.scottishpower.com/userfiles/file/SPEN-Infographic.pdf>
https://www.spenergynetworks.co.uk/userfiles/file/201403_SPEN_SPDistribution%20PlanOnAPage.pdf

²https://www.spenergynetworks.co.uk/userfiles/file/201403_SPEN_SPMANwebPlanOnAPage.pdf

Our Vision



Our vision is to be a sustainable networks business. We will embed the principles of sustainability in our decision making, by working with our stakeholders to:



Efficiently manage and develop our network in support of the low carbon transition; and,



Achieve neutral or positive environmental and social impacts.

We will be a leader in this area. Our actions to become a sustainable network operator will drive our supply chain and support our customers and communities to become more sustainable.

Climate change resilience

We will develop our network to mitigate impacts of climate change.

Carbon and energy reduction

We will be a carbon neutral company throughout our value and supply chains, and will actively support our customers and local communities towards achieving this goal.

Sustainable resource use

The principles of a circular economy and efficient use of resources will be embedded in our business. The materials required for network construction and operation will come from sustainable sources.

We will produce zero waste, with the components of all end-of-life assets being reused or recycled into new products.

Land and biodiversity improvement, water efficiency and protection

We will protect and continually enhance the biodiversity around our assets and support national and local strategies. Our decision making

will incorporate the principles of Natural Capital Assessment to ensure that levels of natural assets are at least protected, if not enhanced.

Sustainable society

We will have a net positive impact on the environment and the communities in which we operate.

We will work in collaboration with national and local stakeholders to understand their needs and to maximize the positive social and economic impacts of our operations on communities, including education, skills and employment.

Our 'sustainable business' model will be characterised by:

Consideration of environmental, social and economic costs and benefits in decision making;

Collaboration with stakeholders; and,

Transparency in decision-making processes and reporting of performance.

Opportunities and Challenges

As the sustainability agenda gathers pace, we are moving from defining the business case for sustainability towards sustainability defining our 'case for business' as a central driver.

Our strategy is targeted to keep ahead of the burgeoning range of international and national policies aimed at reducing environmental impact whilst driving the rapid decarbonisation, decentralisation, digitalisation and democratisation of the energy sector. A more detailed summary of our analysis against each of these developments is provided in Appendix 1.

Recent legislative, regulatory and governmental changes

Government Environmental Plans – Published in January 2018, 'A Green Future: Our 25 Year Plan to Improve the Environment', sets out what the UK Government will do to improve the environment within a generation, leaving it in a better state than it was found.

Industrial Strategy – The 2017 UK Industrial Strategy set out how the UK would build on its strengths as an enterprising, inventive, innovative and competitive economy.

Ofgem RIIO-2 Price Controls – The next electricity price controls, (starting in 2021 for transmission and 2023 for distribution), will consolidate outputs into three main categories; improving the customer experience; supporting the energy system transition; and improving the network and its operation.

Climate change and Sustainable Development

Intergovernmental Panel on Climate Change Special Report 15 – The Special Report on Global Warming of 1.5°C was approved by the IPCC in October and is a key scientific input into the 2018 Katowice Climate Change Conference, when governments review the Paris Agreement to tackle climate change.

Scottish Government Climate Change Plan – Released in February 2018, the Scottish Government published its climate change plan, outlining the path to a low carbon economy and a greener, fairer and healthier Scotland in 2032, while helping to deliver sustainable economic growth.

UK Government National Adaptation Programme – The 2018 National Adaptation Programme (NAP) and the Third Strategy for Climate Adaptation Reporting *'sets out the action government is, and will be, taking to address the risks and opportunities posed by a changing climate'*.

United Nations 2030 Agenda for Sustainable Development – Adopted by UN member states in 2015, The 2030 Agenda is 'a shared blueprint for peace and prosperity for people and the planet, now and into the future'.

Decarbonisation of Energy

Climate Change Committee Progress Report to Parliament 2018 – The UK's greenhouse gas emissions have reduced by 43% compared to 1990 levels on the way to a target of at least an 80% reduction by 2050, however, the UK is currently not on track to meet its legally binding fourth and fifth carbon budgets.

UK Government Clean Growth Strategy – This 2017 strategy aims to support economic growth while reducing greenhouse gas emissions. It highlights the UK's strong economic growth and emissions reductions since 1990 – outstripping G7 averages – and emphasises that work to cut emissions must be done while ensuring our economy remains competitive.

Scottish Government Energy Strategy – Released in late 2017, Scotland's first Energy Strategy *'sets out the Scottish Government's vision for the future energy system in Scotland. It articulates six energy priorities for a whole-system approach that considers both the use and the supply of energy for heat, power and transport.'*

Welsh Government Consultation on Decarbonisation – in line with the Environment (Wales) Act, which sets a target of 80% net emissions reduction by 2050, this 2018 consultation sought to understand public opinion on a range of potential actions on the Welsh emissions sectors.

Decarbonisation of Transport

UK Government Road to Zero Strategy – Released in 2018, this strategy sets out the ambition for at least 50% of new car sales, and up to 40% of new vans, to be ultra-low emission by 2030. However, the cross-party report **Electric Vehicles: Driving the Transition** released in October 2018 criticises **Road to Zero**, favouring a more ambitious target of 100% of new cars and vans being zero emission by 2032. The report states 'Poor provision of charging infrastructure is one of the greatest barriers to growth of the UK EV market. The existing charging network is lacking in size and geographic coverage, with substantial disparities in the provision of public charge points across the country'.

Opportunities and Challenges continued

Scottish Government Energy Strategy – Beyond its ambition to phase out the need for new petrol and diesel cars and vans by 2032, the 2017 Scottish Energy Strategy provides two possible visions of the ways in which we'll be using energy for transport by 2050.

Scenario 1 – An Electric Future and Scenario 2 – A Hydrogen Future.

Decarbonisation of Heat

BEIS/Ofgem call for evidence – in 2018, 'A future framework for heat in buildings' asked how policy frameworks could enable the market to transition towards decarbonised heating options, including how policy makers might engage with market players, the feasibility of a firm end date for high carbon installations, and the potential for buildings to transition away from high carbon heating options.

Decentralisation, Digitalisation and Democratisation

Ofgem/BEIS Upgrading our Energy System – Smart Systems and Flexibility Plan: Progress Update –

Published in July 2017, **Upgrading our energy system:** smart systems and flexibility plan laid out how Government and Ofgem are working with industry 'to deliver a smarter, more flexible energy system by: removing barriers to smart technologies, including storage; enabling smart homes and businesses; and making markets work for flexibility.'

Open Networks Project – A key enabler of the smart systems and flexibility plan, this unprecedented cross-industry project will transform the way our energy networks work, underpinning the delivery of the smart grid.

Biodiversity

UN Convention on Biological Diversity – the 2018 convention in Egypt closed with 196 governments agreeing to 'scale up investments in nature and people towards 2020 and beyond'. The Sharm El Sheikh Declaration was adopted, agreeing for the UN General Assembly to convene a Summit on biodiversity for heads of State by 2020.

Mainstreaming international biodiversity goals for the private sector – produced by the Joint Nature Conservation Committee, this report aims to highlight the relevance of international biodiversity goals to the private sector and show the action that businesses can take to support and enhance biodiversity. The report covers the five internationally agreed biodiversity

goals: mainstreaming biodiversity; reduce pressures on biodiversity; safeguard biodiversity; benefits for all; and enhance implementation.

DEFRA UK Biodiversity Indicators 2018 – this report sets out the UK's progress in line with the Convention on Biological Diversity Strategic Plan for Biodiversity, including the Aichi Biodiversity Targets agreed in 2010.

Resources

Planetary Boundaries – This concept identifies nine global processes that together regulate the land, ocean, atmospheric, and life conditions upon which all society depends. Current science shows that four out of nine of these planetary boundaries 'have now been crossed as a result of human activity: climate change, loss of biosphere integrity, land-system change, altered biogeochemical cycles (phosphorus and nitrogen)'.

Making Things Last: A Circular Economy Strategy

for Scotland – Building on Scotland's progress in the zero waste and resource efficiency agendas, this 2016 strategy sets out priorities for moving to a more circular economy, 'where products and materials are kept in high value use for as long as possible.'

Blue Planet II – This documentary series presented by David Attenborough, explored the world's oceans, documenting the ways in which biodiversity is being negatively affected by anthropogenic activity, including highlighting the extensive threat of marine plastic, galvanising society into practical action to reduce reliance upon plastics.

Customer and shareholder value

Energy Consumers' Missing Billions – This 2017 Citizen's Advice report highlighted concerns that UK operators were making more profit than expected and underlined the need for transparency and value for money for all UK consumers.

Things can only get beta: An opportunity to get

financing costs right for consumers – This 2018

Citizen's Advice report highlighted that regulators must enable necessary investment, but not 'over-reward investors at the cost of consumers'.

Scottish Government: The Just Transition Commission

– Launched in 2018, this taskforce will advise on how to 'maximise the opportunities of decarbonisation, in terms of fair work and tackling inequalities, while delivering a sustainable and inclusive labour market'.

Our Strategy

Our Process

The mechanism for laying out our Sustainable Business Strategy is important, as it allows us to consult with all of our stakeholders, internally and externally. Providing a vehicle to discuss sustainability issues relevant to SPEN means we can better engage with all of our stakeholders on this topic.

Our approach is explained in further detail in the following sections. In short, it includes:

Our Drivers

Our six sustainability drivers are designed to drive our activities towards achieving our vision of a sustainable networks business.

Our Goals

Where we hold good quality accurate data, we have identified quantified impact reduction goals for three time frames: 2023, 2030 and 2050.

Our Plan

A detailed breakdown of our planned activities for the year ahead, categorised first by strategic Drivers, then by delivery Objectives and Process Workstreams. Key Performance Indicators (KPI) are utilised where it is possible to measure and track data. The nature of sustainability means some areas are not quantifiable, so these are tracked with qualitative assessment.

Our Big Leaps

To implement pilot projects to trial new and innovative approaches, processes or technologies. These pilots will be in line with our existing SPEN Innovation Strategy and associated processes, with successful outcomes incorporated into existing business processes following approval by the newly formed Executive Sustainability Steering Group (ESSG).

Our Shared Journey

The strategic direction has been agreed by the ESSG which is also responsible for its implementation and annual review. Internal stakeholder engagement will utilise existing communication channels and we will introduce Ambassadors for Sustainability. External stakeholder engagement follows our existing SPEN Stakeholder Engagement Strategy, with the key route being the new Sustainability Stakeholder Working Group.

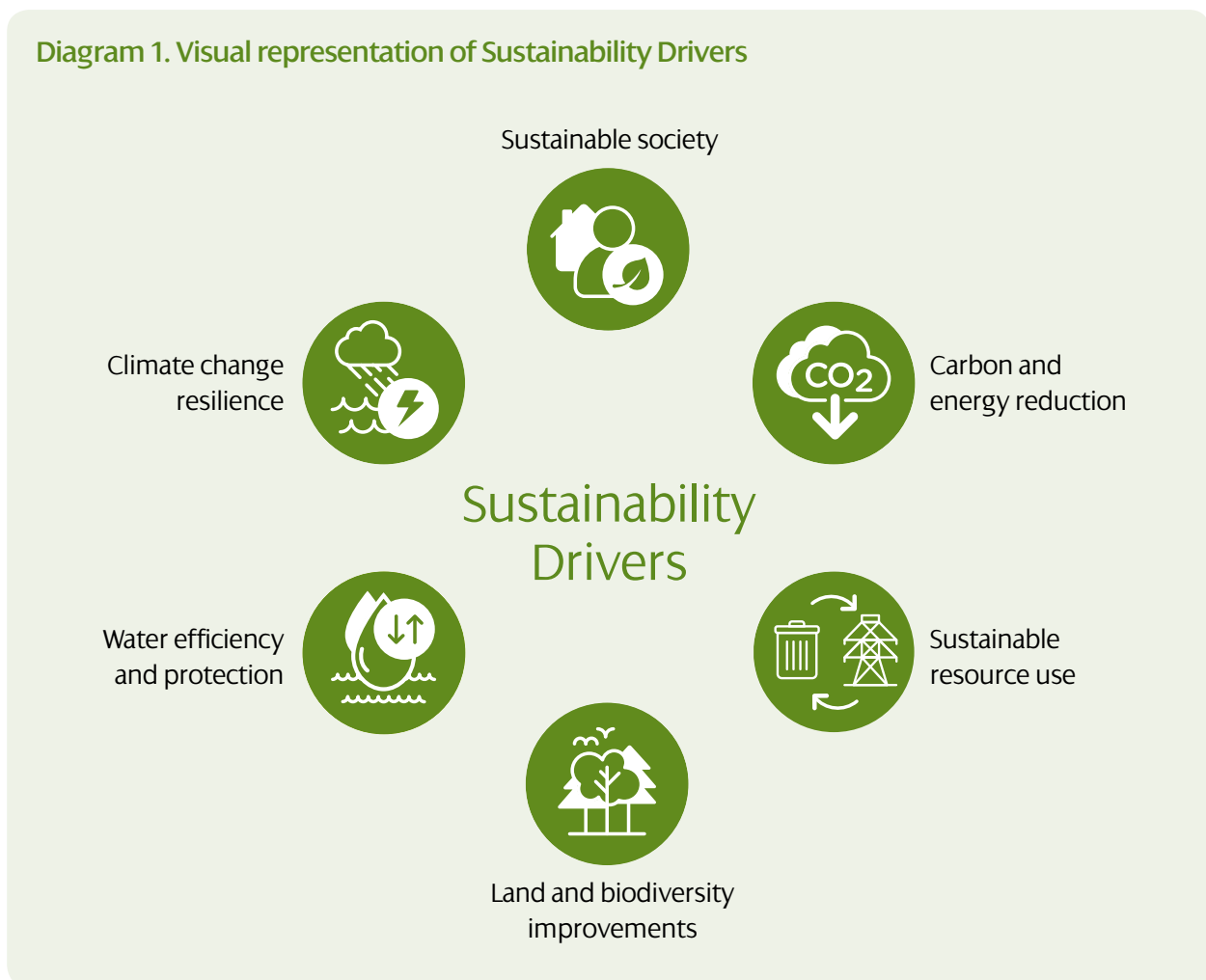
Our Drivers

Our Sustainability Drivers outline the six key areas of activity required in order to deliver our vision of a sustainable networks business.

These Drivers guide the activities and projects we take forward, they allow us to connect activities across the business that contribute to delivery of our Goals and Objectives, and facilitate communication of our activities and successes (see Diagram 1).

We review our Drivers regularly, and in 2018, we have chosen to combine 'Raw material optimisation' and 'Waste management and minimisation' drivers into one – 'Sustainable resource use', recognising that we need to view raw materials and waste as part of the same cycle as we move towards a more circular resource use model.

Diagram 1. Visual representation of Sustainability Drivers



Commitment to the United Nations Sustainable Development Goals

These drivers are designed to prioritise the key activities that our business must undertake in order to support the delivery of the United Nations Sustainable Development Goals (SDGs). In 2018, we commenced an activity to carry out a detailed, bottom-up mapping down to individual SDG objective and indicator level. This work is already increasing our understanding of the relationship between SDG indicators and our Sustainability Drivers, emphasising the need to fully align our activities with the SDGs, whilst retaining the specificity of our Drivers.

As part of this detailed mapping activity, due to complete in 2019, we are collaborating with our key sustainability stakeholders, in order to test our assumptions, understand shared priorities and develop collaborative initiatives on shared areas of priority.

Our sustainability drivers and commitment to the United Nations Sustainable Development Goals (SDGs) complement the ambitions of our parent company, Iberdrola Group, a globally leading utility with a sustainable business model at the heart of its decision making processes.

Our Group website gives details of [Iberdrola's leading sustainability agenda](#) and our Group [strategy for contributing to the goals](#).

SPEN Driver	No. SDG Indicators Aligned
Sustainable Society	76
Carbon & Energy Reduction	48
Climate Change Resilience	38
Sustainable Resource Use	36
Land and Biodiversity Improvement	29
Water Efficiency and Protection	29

We have identified two Main Focus goals:



Four Direct Contribution goals:



And recognise our indirect contribution to the 11 remaining goals:






Our Goals

Where we hold good quality accurate data, we have identified quantified impact reduction goals for three time frames: 2023, 2030 and 2050.

The RIIO-T1 and RIIO-ED1 price controls end in 2021 and 2023 respectively. Looking further ahead, the UK 2030 interim CO₂ reduction target coincides with the approximate end date of T2 and ED2. Beyond that, the UK Government and Devolved Administrations' CO₂ reduction targets are set for 2050. Taken together, there is a clear rationale to set Goals for short, medium and long term deadlines of 2023, 2030 and 2050. The successful implementation of this Strategy will position us as a leader in sustainability in our sector.

Our strategy is to continually improve the breadth and quality of the data we hold, refining our key goals as new data streams become available to us.

Table 1. Summary of Key Goals and Rationale

	 Carbon and energy reduction	 Sustainable Resource Use	 Water efficiency and protection
2023	-15% carbon footprint*	Divert 95% of waste from landfill	-10% in water use*
2030	-80% carbon footprint*	100% waste recycled or re-used	-25% in water use*
2050	Carbon neutral*	Zero waste	-50% in water use*
Rationale	Essential to meeting global and national CO ₂ reduction targets.	Essential to meeting landfill diversion targets particularly in Scotland where the Scottish Government has Zero Waste Strategy target of 5% to landfill by 2025.	Climate change models forecast reduced summer rainfall putting pressure on scarce water resources. Treating water to potable standards and transportation of water is costly and uses energy.

*targets from a baseline of 2013/2014 (carbon footprint target excluding losses)

Our Plan

The implementation of this Strategy is managed through our detailed annual Sustainability Plan. The Plan identifies, prioritises and tracks the specific objectives and actions related to each Driver.

Each Objective is measured against high level Key Performance Indicators (KPIs) and specific actions detail how we will work to fulfil the Objectives.

We annually review existing environmental and sustainability data in order to:

Guide the Objectives, KPIs and Actions for the period to 2023;

Quantify our inputs and outputs in relation to material uses and emissions including waste, electricity, fuel and CO₂; and

Facilitate the setting of business-wide SMART targets for Objectives.



Table 2. Summary of Sustainability Plan – Objectives



Carbon and Energy Reduction

- 1.1 Reduce our carbon footprint (excluding network losses) by 15% by 2023 and by 80% by 2030
- 1.2 Reduce electricity losses from network by 163GWh by end 2023
- 1.3 Reduce fleet vehicle fuel use and business travel carbon footprint by 15% by 2023
- 1.4 Reduce depot and substation energy use by 25% by 2023
- 1.5 Minimise the increase in volumes of SF6 gas on our network by reducing the volume and leakage rate in new switchgear.
- 1.6 Undertake collaborative activities to encourage the technical and commercial parity of alternatives to SF6



Climate Change Resilience

- 2.1 Increase resilience of network to extreme weather events



Land and Biodiversity Improvement

- 3.1 Assess visual amenity and ecological impact when managing and maintaining our network in sensitive environments.
- 3.2 Implement a process to assess biodiversity and make relevant business decisions to promote net biodiversity gain.
- 3.3 Implement management process for invasive and non-native species on our land and along our network by 2023
- 3.4 Incorporate Natural Capital Assessment in our processes where beneficial
- 3.5 Understand risks associated with land contamination



Sustainable Resource Use

- 4.1 Divert 95% of waste from landfill by end 2023 and 100% by end 2030.
- 4.2 Introduce Life Cycle Analysis to SPEN processes
- 4.3 Establish baseline raw material usage levels
- 4.4 Identify top five resource consumption priorities and set quantified targets by 2020



Water Efficiency and Protection

- 5.1 Have zero water pollution incidents
- 5.2 Reduce oil leakage rate
- 5.3 Reduce water consumption by 10% by 2023
- 5.4 Improve the quality of water discharges



Sustainable Society

- 6.1 Work with our supply chain to better quantify and manage scope 3 carbon emissions
- 6.2 Reduce the timescales and costs for low carbon connections
- 6.3 Understand SPEN mapping to the Sustainable Development Goals and address gaps as required
- 6.4 Work proactively to ensure that our network can accommodate decarbonisation of transport and heat
- 6.5 Broaden Sustainable Society Driver as appropriate

The Sustainability Plan also describes our Process Workstreams, using a similar format containing Objectives, KPI Targets and Improvement Actions.

Table 3. Summary of Sustainability Plan – Process Workstreams



IMS and Business Processes

- 8.1 Fully comply with all Environmental legal obligations
- 8.2 Maintain an EMS compliant with ISO14001
- 8.3 Continuous improvement of the EMS
- 8.4 Increase knowledge and commitment of staff
- 8.5 Deliver the environmental aspects of SPEN training plan

Stakeholder Engagement and Collaboration

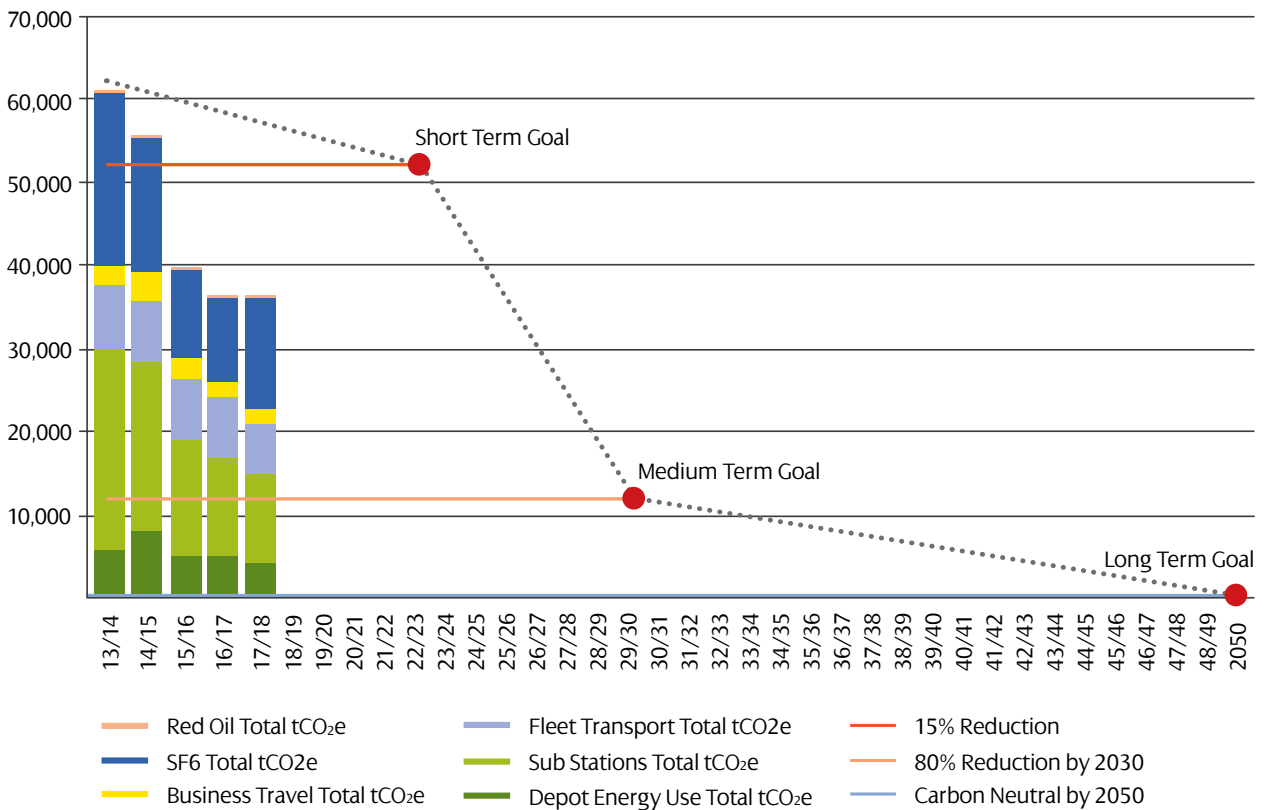
- 9.1 Align with key stakeholders' views of a Sustainable Networks Business
- 9.2 Achieve leadership status under EDR and be recognised as leaders
- 9.3 Identify priority areas for collaboration with key stakeholders

Sustainable Business Model

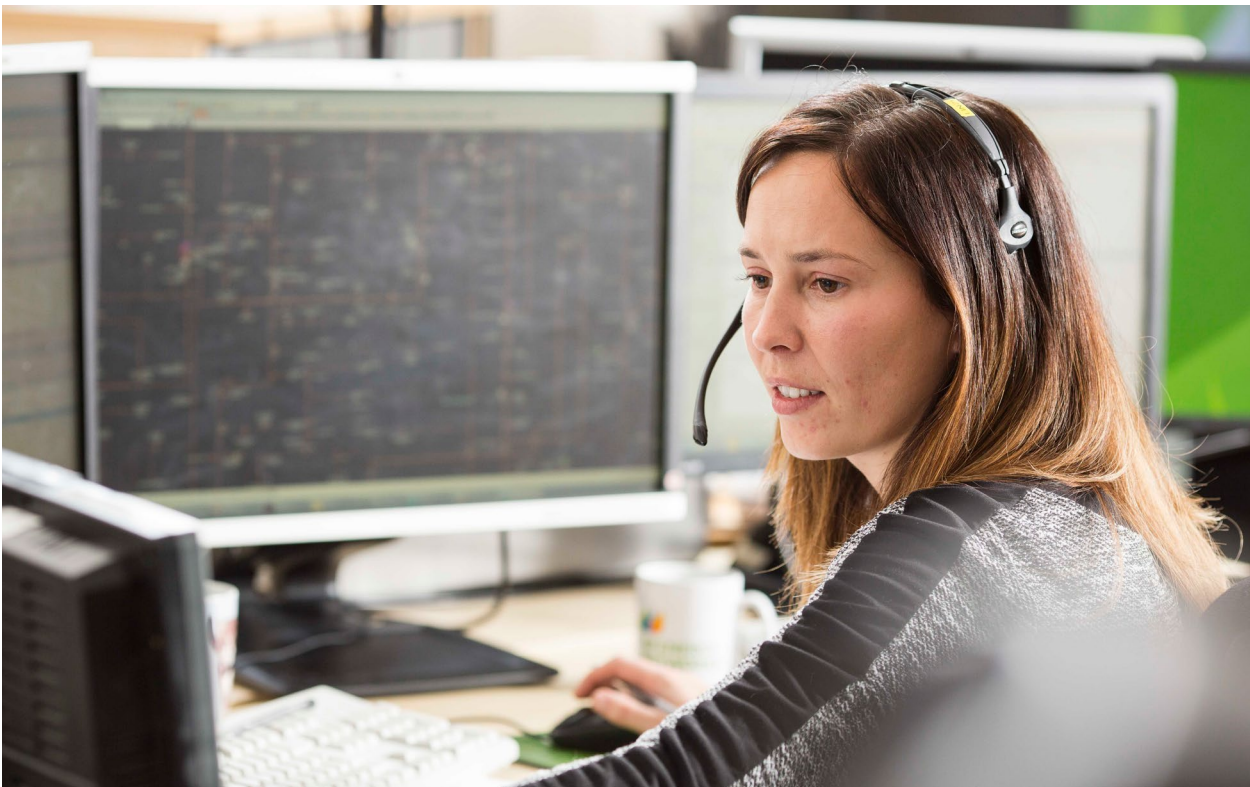
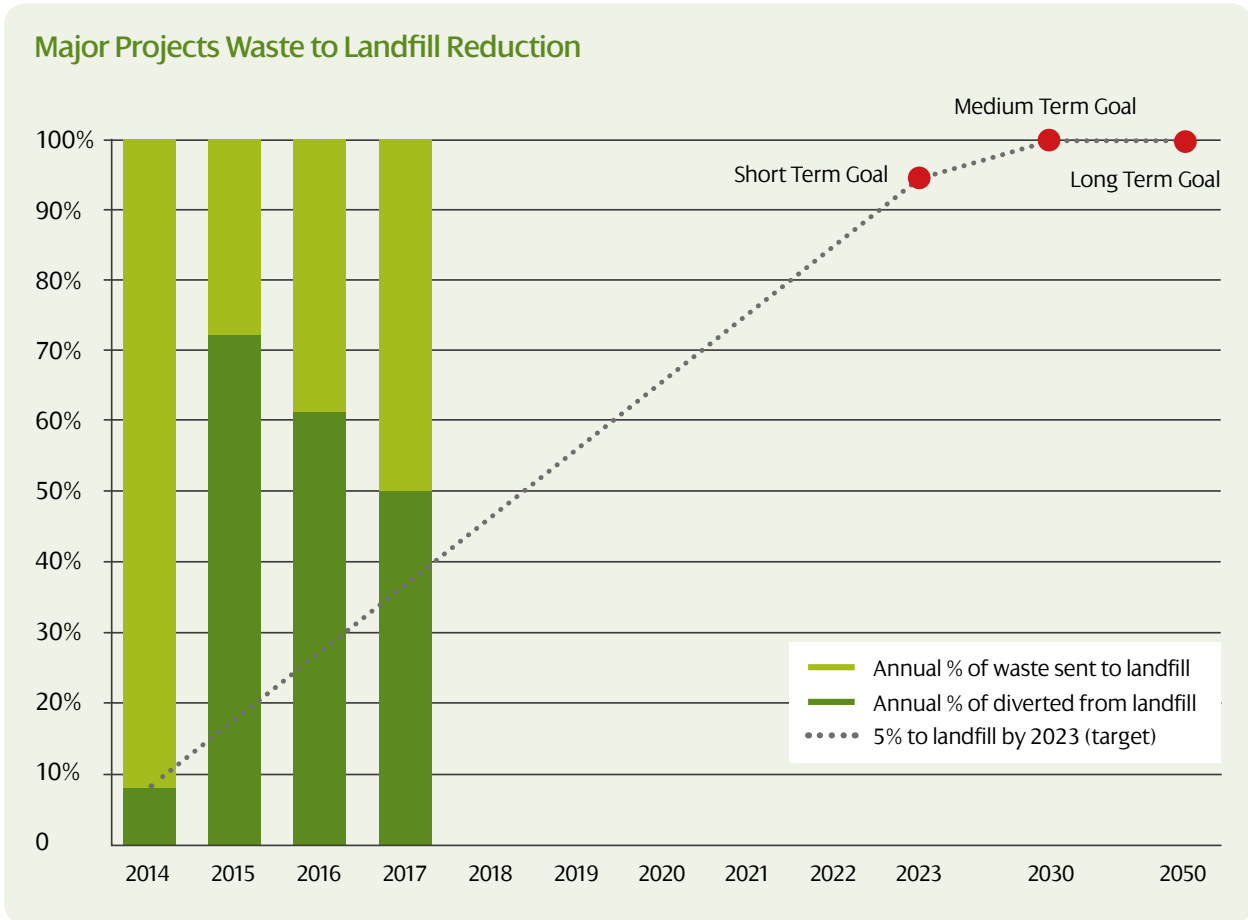
- 10.1 Integration of environmental, social and economic issues in business decision making

Summarised environmental data are presented in the following graphs, showing the baseline year (2013/14) and the trajectory to our targets. The graphs are updated on an annual basis and included within our Sustainability reports.

SP Energy Networks Business Carbon Footprint CO₂ Reduction Target



SPEN Waste Reduction Target



Our Big Leaps

The timeline to deliver the Goals and Objectives of this Strategy is as challenging as they are wide ranging. In some instances it is not clear what actions will deliver the required impact reductions. The adoption of specific pilot projects will enable SPEN to test the success of proposed initiatives before a SPEN-wide roll out, thus reducing financial and other risks.

We will trial new and innovative approaches, processes and technologies in to allow us to assess the associated benefits and understand any risks and costs.



These pilot studies will complement the wider SPEN innovation approach of 'Think Big, Start Small and Scale Fast' and the SPEN Innovation Strategy. Where pilot study boundaries are defined at a specific location, there is the opportunity for Districts and Depots within our organisation to develop an expert understanding of the issues covered and to share that knowledge more widely with other Districts. The pilot studies will be approved by the Executive Sustainability Steering Group ESSG following submission of a business case and progress will be reported quarterly.

The business case will:

- Provide a rationale for the need to deploy the pilot study and why the location has been selected;
- State clearly the measures of success;
- Identify the risks and opportunities associated;
- Set the pilot project duration and review checkpoints;
- Confirm the initial data required and ongoing data monitoring;
- List the staff resources required to conduct the study; and,
- Set out financial costs where applicable.

Upon completion of the pilot study a recommendation will be made to the ESSG regarding roll-out.

The outputs will include the provision of a proposal to the ESSG recommending, where the pilot has been successful, either further testing or roll-out across SPEN. Following ESSG approval, the project will be subject to the usual process for full approval and funding, via the Energy Networks Executive Team.

Our Shared Journey

The Executive Sustainability Steering Group was established to give prominence to the Sustainability agenda within SPEN. The Group has Board-level membership and is chaired by the Director of Processes and Technology.

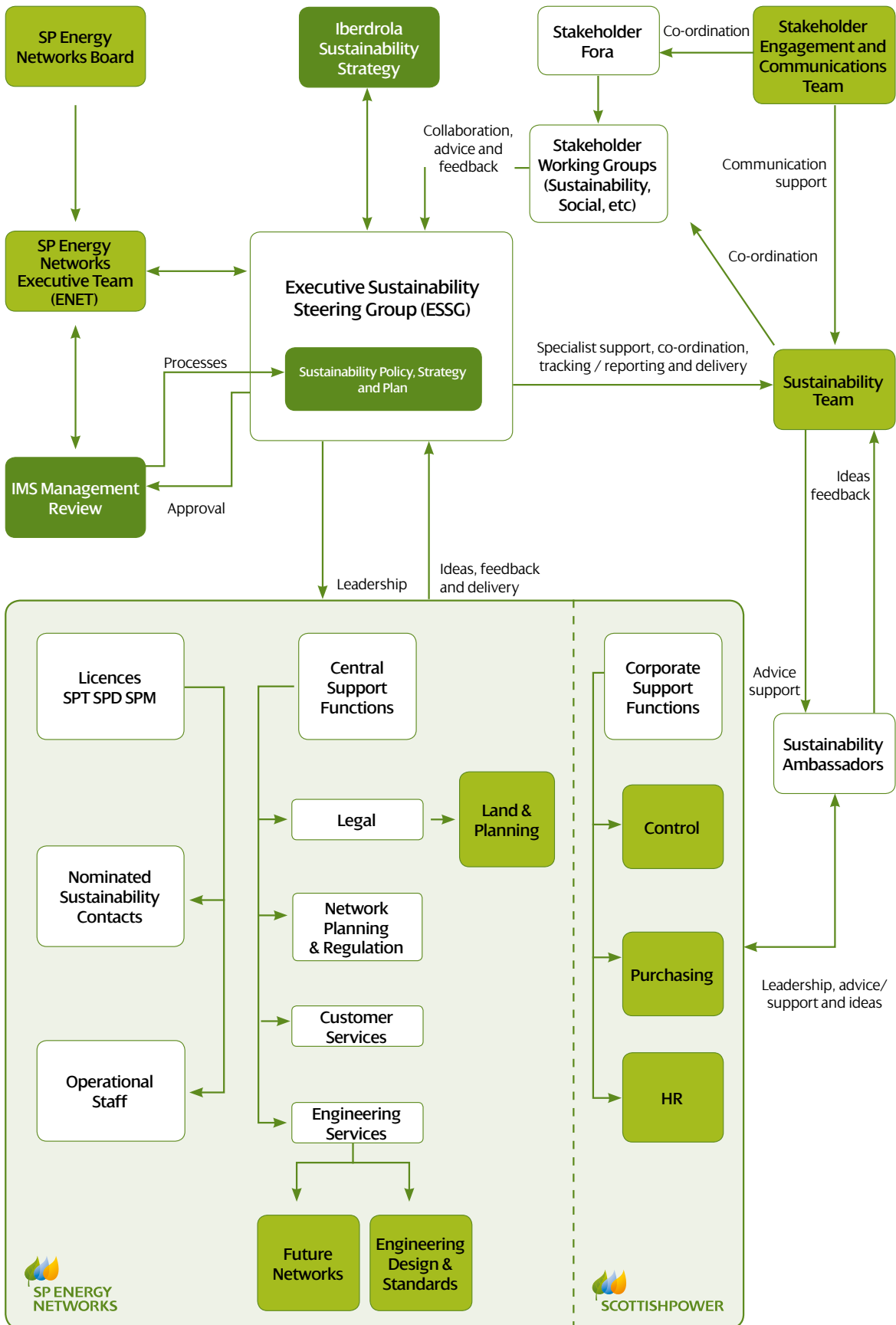
The ESSG meets on a quarterly basis to discuss a broad range of sustainability issues including performance, reporting, stakeholder engagement and, most importantly, to discuss and approve the evolution of this Strategy (please see ESSG Terms of Reference).

The Sustainability Team is responsible for drafting, updating and monitoring progress of the Strategy and the Sustainability Plan and for securing approval by the ESSG. This team is located within the Processes and Technology Directorate and provides specialist advice and support throughout SPEN to facilitate the achievement of our Sustainability Goals and Vision. The Sustainability governance structure is presented in Diagram 4 overleaf.



Frank Mitchell, CEO of SP Energy Networks and his executive team met with Steve Malkin, CEO of Planet First, to recognise SPEN's commitment to business carbon footprint reduction.

Diagram 4. Sustainability Governance Structure



Internal Stakeholder Engagement

The Sustainability Team consult on the Strategy, its Drivers and Objectives with both office and field based staff. The purpose of this is to determine how their roles can contribute to achieving the desired outcomes, and to continue to identify new Sustainability Objectives and Improvement Actions for the period to 2023 and beyond.

The consultation includes:

- Departmental workshops and presentations
- Senior Management briefings
- District Environmental Champion briefings
- Staff discussion groups
- One-to-one engagement
- Web-based survey through email web-link
- Yammer social media platform

Through consultative engagement, the Sustainability Team identifies colleagues with particular skills or interests in the issues pertinent to the delivery of the Strategy. Through training, coaching and guidance from the Sustainability Team, colleagues will become Ambassadors for Sustainability.

They will assist in the delivery of Objectives related to their activities and support location-specific roll-outs of initiatives that may not be directly related to their current role.

Engagement with the Ambassadors is maintained on a regular basis throughout the year to communicate targets, initiatives and results. This is undertaken through individual face to face discussions, hosting of group discussions, the administration of a Yammer portal and ad-hoc emails and telephone calls.



External Stakeholder Engagement

External engagement on the Strategy is undertaken in line with our Sustainability Stakeholder Engagement Plan, in line with the SPEN Stakeholder Engagement Strategy. Engagement is facilitated through the Sustainability Stakeholder Working Group, populated by representatives from organisations with strategic interests in sustainability in the licence areas in which we operate. The organisations represented have a largely National or UK-wide reach, but may include regional bodies. Membership of the group will evolve as the Strategy is developed and embedded.

Invitations for the membership of the working group were issued initially to the following bodies:

- Scottish Environment Protection Agency (SEPA)
- Environment Agency (EA)
- Natural Resources Wales (NRW)
- Scottish Wildlife Trust (SWT)
- Scottish Natural Heritage (SNH)
- WWF
- Environment Link
- National and Devolved Governments

Participation with the Working Group has been managed in variety of ways, to respond to stakeholder needs. This includes face to face meetings and 1-1 engagement on specific issues due to time constraints expressed as a concern by our stakeholders. In Scotland and England we have held workshops to guide us on the preparation of this Strategy and consulted on both our Transmission and Distribution Reports.

Internal and External Reporting

We publish annual reports on the progress of our Transmission and Distribution businesses and make these available at public events, with digital versions uploaded to the SPEN website. Our reports are transparent, in plain English with clear data presentation for non-technical readers so that it can be disseminated widely to interested parties.

We report interim results to key internal and external stakeholders, and an annual report will be produced for the ESSG and the Sustainability Stakeholder Working Group.

Our Approach

Our Electricity Network

Our network licences operate and maintain linear infrastructure which may be routed through, or adjacent to, woodland, farmland, peatland, parklands, watercourses, culturally or environmentally sensitive landscapes and structures. These range from near pristine to degraded habitats. We are required to connect customers to the electricity network whether they are in cities, towns, villages or individual rural properties. We recognise the need to minimise any negative effects these connections could have on the environment and communities.

Like the rest of the UK electricity network, much of our network comprises ageing infrastructure and assets.

The oldest parts have been operating for over 100 years. Back then, important factors such as health and safety, environmental considerations, social obligations, visual amenity and decentralised generation did not have the focus or priority they are given today.

Through the planning, design, construction and remote management of new assets, together with retrofit and refurbishment of existing assets, we now consider the impact of the network in ways not thought possible in the past, allowing us to monitor effects in microseconds, rather than seconds and minutes. New data streams arising from the emerging 'prosumer', smart metering, network digitalisation and decentralisation, will continue to drive 'smart grid' capability in coming years.

During planning, construction, operation, maintenance and decommissioning activities, we meet the requirements of government policies and legislation and strive to better them by integrating fair and responsible environmental practices with socio-economic considerations.

We are a regulated part of the energy industry, but while external factors such as stakeholders' willingness to pay drive our business, other elements are within our control. One example of this is the renewal of our legacy assets as they reach end of life.

This requires a dual approach: finding a new purpose for these materials, thus eliminating our waste streams, and including life cycle analysis from inception of our new components to end of life, to reduce their lifetime impacts.

Due to their complexity, many of our new operational assets are now assembled elsewhere and delivered as complete units for installation. This increases the significance of supply chain impacts, including the sourcing of raw materials, effective quality control of built components and the working conditions of those who manufacture and assemble our assets.

Monitoring, inspecting, servicing and decommissioning of these components also generates a footprint; so we aim to factor life cycle environmental considerations into investment decisions, widening the definition of fit-for-purpose for our network. By measuring and recording life cycle impacts, we will be able to identify improvement opportunities and deliver on our target to be a Sustainable Networks Business.



Collaboration and Innovation

Engagement with- and support from our employees, supply chain and the communities we serve are critical. They help us to achieve continued success in addressing these factors, and to facilitate our vision as a sustainable networks business of the future. Our increasingly knowledgeable and experienced stakeholder groups place us in a strong position to enhance our network.

The construction and management of our substations, underground cables, overhead lines and the wood poles or steel towers carrying these lines have a direct relationship to the surrounding locale, its biodiversity and the livelihoods dependent on its ecosystems. Improving our interactions with our surroundings is of increasing importance, and we facilitate this by building relationships with our local stakeholders. That way we can develop a better understanding of their needs and those of the local environment, while increasing their awareness of our network and the steps we need to take to plan, maintain and repair our assets. We recognise the unique potential of our overhead linear infrastructure and large numbers of substation assets in supporting long-term UK biodiversity aims, and envisage working with stakeholders to realise the associated benefits.

The behaviours of all parties involved in our electricity network, from suppliers and contractors to customers, are critical to achieving our vision. The criteria these stakeholders consider when making business and other decisions determine our level and speed of success.



Our employees and supply chain partners are experts on our network, with detailed knowledge of our assets and the operations undertaken to install, maintain and repair them. By fostering collaboration between staff, our supply chain and other stakeholders, we will determine and address the priorities for change. We will use our status as a leader in the energy sector to influence practices across our industry and supply chain, encouraging innovative thinking and investment to support it.

New processes, techniques and technological innovation have the potential to improve our performance through:

- Getting more from our existing assets
- Reducing the resource requirements and environmental impacts of new assets
- Reducing impacts associated with decommissioned assets, including waste
- Increasing the security of supply
- Improving the quality and efficiency of service, and
- Reducing the risks posed to our employees, contractors and the general public.

A closer relationship with our suppliers will help us to better understand our use of resources. It will help us reduce our use of raw materials, improve our re-use and recycling rates over time and divert waste from landfill.

By working in this way with all of our stakeholders, we can build greater efficiency into our business processes and improve our decision making.



Enablers

Achieving our vision of sustainability depends upon building a shared purpose across our industry, driving innovation and investment, effective prioritisation and robust measurement and tracking of progress.

RIIO Price Controls

RIIO-2 will be the next price control for electricity operators, starting in 2021 for transmission operators and 2023 for distribution. This control is based on the RIIO model (Revenue = Incentives + Innovation + Outputs), designed to encourage network companies to:

- *'Put stakeholders at the heart of their decision-making process.*
- *Invest efficiently to ensure continued safe and reliable services.*
- *Innovate to reduce network costs for current and future consumers.*
- *Play a full role in delivering a low carbon economy and wider environmental objectives.'*

Our ability to deliver the sustainable networks business of the future relies upon the capacity of the RIIO-2 framework to support investment and decision making that will result in long-term socio-economic and environmental benefits for all customers and stakeholders.

Network companies are facing significant risks due to proposed reduced rates of shareholder returns at a time where further investment in our networks is required to facilitate the decarbonisation, decentralisation, digitalisation and democratisation of our energy economy.

Against a backdrop of significant political uncertainty, it is imperative that certainty is provided to network companies and their shareholders to ensure they have the ability to invest in order to support the long term growth of their communities and cities.

It is therefore vital that our regulator, Ofgem, places increased focus on sustainable solutions, ensuring that these are considered on a long term basis in order to protect our future consumers, our economy and environment.

In the long term, increased sustainable solutions will result in a net benefit for the consumer and will deliver significant wider positive impacts.

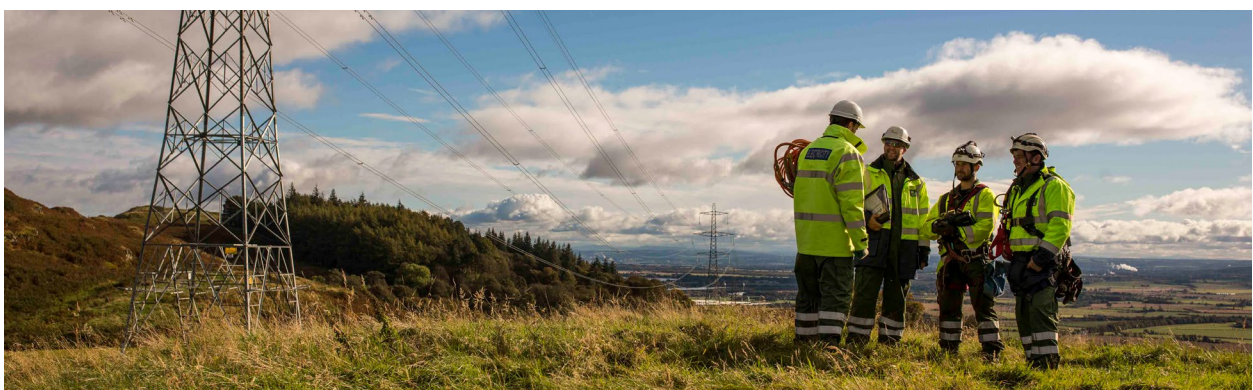
Open Networks Project

The Open Networks Project brings together nine of UK and Ireland's electricity network operators, academics, NGOs, government and energy regulator Ofgem in a major initiative to transform the way energy networks operate and support the development of a smart grid.

The project aims to improve the coordination of network operation between transmission and distribution operators, improve the experience of customers connecting to, or interacting with, the energy network, develop new ways of balancing energy flows on the distribution network, and reassess who pays what for network services.

As such, teams from across our transmission and distribution businesses are heavily involved in the wide range of workstreams and consultations being carried out as part of the project.

Outcomes from this project will heavily influence our ability to enable the exponential uptake of low carbon technologies and manage our network assets better in real time, potentially reducing impacts across all of our Sustainability Drivers.



Innovation Strategy

Sustainability cannot be achieved without innovation, and innovation must aim for sustainable solutions. Our need to move towards more sustainable practices stimulates innovation by setting a high premium on fresh ideas, stimulating creativity in our business, and encouraging us to appreciate our whole value chain in decision making. Equally, the ability to innovate quickly and flexibly enables both the big leaps and incremental changes needed to realise our vision of a Sustainable Networks Business.

Our innovation strategy is therefore designed to enable sustainable benefits in three key areas - flexibility, customer focus and sustainability.

Seed funding

The Scottish Government's ambitious drive to a low carbon economy will ultimately require a transformation in all forms of transport and heating. This is dependent upon the key infrastructure that our energy network provides. Stakeholders told us that there was a need for a fund to support communities in moving towards a green economy, whilst also preparing the energy network. In response, SPEN pledged to voluntarily contribute up to £15m (since extended to £20m) over a two-year period (2018-2020) to support initiatives that will enable communities and businesses to develop their ideas and to fund the implementation of those ambitious projects that support Scotland's low carbon future, helping accelerate existing ideas and potentially supporting projects that may not otherwise occur.

As often the first to see the direct environmental and community impacts of our activities, our people are a vital bridge to sustainability. In 2018, we established our internal sustainability fund Sustainable Ideas 'Si' to enable our people to identify and remove the obstacles our business faces in moving towards a sustainable future.

There are some sustainability challenges that require us to work collaboratively with other organisations to find solutions. Our collaboration fund provides resources to allow us to progress projects in collaboration with external organisations, where they are better placed than SPEN to deliver. The fund considers well-defined, collaborative projects that aim to deliver positive impacts against one or more of our Sustainability Drivers or objectives.

A common language

The United Nations Sustainable Development Goals provide a common platform and vocabulary for countries and organisations with appropriate ambition and focus to align and target their sustainability activities for maximum positive impact.

Our understanding of, and our alignment with both the goals and the aspirations of our key stakeholders is central to the direction and prioritisation of our activities. The release of national SDG implementation plans will enable us to further prioritise our activities towards the areas of greatest need.

Data and target setting

Effective target setting and data management is an essential enabler on the journey to becoming a sustainable networks business. Annual Planet Mark™ sustainability certification of our Business Carbon Footprint data enables us to improve how we collect and manage data and reduce impact year on year. Our continuing work with suppliers and contractors to improve the collection and management of data on carbon and from waste and resource streams is enabling us to identify and overcome obstacles to achieving our carbon targets and to effective waste reduction, re-use and recycling. In 2019, we will consider the potential to set a Science Based Target to confirm that our ambitious business carbon footprint reduction targets are in line with those expected of our sector and with the latest science on climate change.

Appendix 1: The Development of our Strategy

The foundations of our strategy

The ongoing development of our Sustainable Business Strategy considers our unique position as a UK networks business in the context of wider factors:

- External Policy Frameworks
- Stakeholder Engagement
- Company Policy

External Policy Framework

The UN Framework Convention on Climate Change Paris Conference of the Parties (COP21) agreed ambitious carbon reduction targets aimed at keeping global temperature increases well below 2°C compared to pre-industrial levels. This agreement has since been ratified by over 180 countries including the UK. The Paris agreement builds upon existing UK and devolved legislation which targets an 80% CO₂ reduction by 2050 at UK level (with a 50% sub-target by 2030) on 1990 levels.

The Committee on Climate Change 2018 report to parliament highlights that 75% of UK's 43% reduction in greenhouse gas emissions compared to 1990 levels have come from the power sector, while all other sectors have remained flat. Although it's vital that we continue to enable low carbon generation to connect to our network, our networks are key enablers in the decarbonisation of many of the other sectors, such as transport, heat, industry, buildings, waste and f-gases.

This requires SPEN to innovate and invest to continue supporting the low carbon transition, to minimise our own direct Business Carbon Footprint and facilitate carbon reductions throughout our supply chain. Our ambitious targets, aiming for 80% reduction in Business Carbon Footprint by 2030, based on a 2013/14 baseline, and our subsequent 2050 goal of carbon neutrality recognise this leading role.

In the context of wider sustainability issues, this Strategy, in line with the Iberdrola Strategy, has been guided by the policy framework set out by the 17 United Nations Sustainable Development Goals, as described in Our Drivers on Page 10.

Stakeholder Engagement

In 2016 the SPEN Sustainability Team organised two external stakeholder panels with a sustainability focus. These involved representatives from the Scottish Government, Local Authorities, academics, skills development agencies and NGOs. A number of detailed suggestions were made during the two facilitated discussion topics presented at the panels. In particular, there was agreement among stakeholders that SPEN should aim to be a leader in the area of sustainability.

In 2017, the draft Strategy document was presented to three stakeholder panels to provide SPEN with the opportunity to consult on the content and scope.

Also in 2017, the Sustainability Stakeholder Working Group was formed, and has been instrumental in guiding the ongoing development of this Strategy.

Company Policy

Our Strategy aligns with the Sustainability Policy of our parent company, Iberdrola. Iberdrola holds a leadership position within the utilities industry, calling for tougher action on climate change issues from politicians, a greater penetration of renewables in the energy mix globally and setting ambitious targets to become carbon neutral by 2050. In support of these aims, SPEN formed the Executive Sustainability Steering Group (ESSG), an executive level body, and set a business-wide carbon reduction goal during 2015: a 15% reduction in CO₂ emissions by 2023 (excluding losses) against a baseline year of 2013/2014.

Stakeholders' recommendation that SPEN should become a leader in sustainability was discussed and agreed by the ESSG in March 2016. It was decided that SPEN should work in collaboration with external stakeholders to meet sustainable development aspirations. The ESSG continues to guide the ongoing delivery of this Strategy and the related Sustainability Plan.

Identifying and assessing opportunities and challenges

As the sustainability agenda gathers pace, we are moving from defining the business case for sustainability towards sustainability defining our 'case for business' as a central driver.

Our strategy is targeted to keep ahead of the burgeoning range of international and national policies aimed at reducing environmental impact whilst driving the rapid decarbonisation, decentralisation, digitalisation and democratisation of the energy sector.

Teams across our business work to influence, understand, and act on a wide range of policy changes each year. In addition to participation in a wide range of industry working groups and other stakeholder engagement, we are active in responding to consultations where proposed policy changes may affect our stakeholders or business. As each national or international policy update is developed, we seek to understand the opportunities and challenges that it holds for our business and stakeholders.

Despite the great number and range of policy changes proposed or published in the year since we developed this strategy, the ambitious goals and objectives we set originally still deliver the scale of change necessary to stay at the forefront of sustainable business.

Recent legislative, regulatory and governmental changes

Government Environmental Plans – Published in January 2018, *'A Green Future: Our 25 Year Plan to Improve the Environment'*, sets out what the UK Government will do to improve the environment within a generation, leaving it in a better state than it was found. It covers a range of aims including supporting clean air and water, sustainable resource use, climate change mitigation and adaptation and supporting biodiversity and biosecurity. A 2018 Scottish Government consultation on Developing an Environment Strategy for Scotland sought input to the development of a strategy laying out a strategic approach on environmental policy to protect and enhance the environment, safeguard natural capital and continue Scotland's leading role in addressing environmental challenges. A 2018 Welsh Government consultation, 'Achieving our low-carbon pathway to 2030' also sought to understand the actions required to achieve Wales' ambitious low carbon targets. We look forward to the eventual plans that result from these consultations.

As a company that owns assets with lifespans upwards of 40 years, these long term plans provide useful opportunities for us to prioritise the environmental and sustainability actions that we need to complete in the coming decades in order to reduce both our own impacts and those of wider society. The challenge will

be in the speed with which the regulatory environment evolves to reward the activities required from energy networks companies to enable this transformation.

Industrial Strategy – The 2017 UK Industrial Strategy set out how the UK would build on its strengths as an enterprising, inventive, innovative and competitive economy. It laid out four Grand Challenges around artificial intelligence; maximising the advantages for UK industry from the global shift to clean growth; leading the future of mobility and using innovation to help support an ageing society. These Grand Challenges represent several distinct opportunities for our business, including the digitisation of networks and energy markets, our role in enabling mass rollout of electric vehicle charging infrastructure, our role in providing consistent, economic services to all customers and our role in enabling society to benefit from swift decarbonisation.

Ofgem RIIO-2 Price Controls – The next electricity price controls, (starting in 2021 for transmission and 2023 for distribution), will consolidate outputs into three main categories; improving the customer experience; supporting the energy system transition; and improving the network and its operation. Our drive is to influence the regulatory instruments under development to deliver these aims, leading the industry to take a holistic, long-term view of sustainability. The pace of change during this transformative period is often 'lumpy', and there is considerable variability of need across geographies, technologies and communities. Regulation needs to allow us sufficient flexibility to tailor and prioritise the development of our network and services to meet the specific needs of the communities we serve on an appropriate timeline. The right regulatory framework and settlements under RIIO-2 are crucial to our ability to deliver the investments needed to enable the UK's energy transition.

Climate change and Sustainable Development

Intergovernmental Panel on Climate Change Special Report 15 – The Special Report on Global Warming of 1.5°C was approved by the IPCC in October and is a key scientific input into the 2018 Katowice Climate Change Conference, when governments review the Paris Agreement to tackle climate change. This report states that global warming is likely to reach 1.5°C between 2030 and 2052 if it continues to increase at the current rate, that to keep increases to within 1.5°C will require urgent and significant action, and highlights the wide ranging benefits of limiting overall warming to within 1.5°C.

Models indicate that to stay below or close to 1.5°C warming require anthropogenic CO₂ emissions reductions of 45% from 2010 levels by 2030 and net zero by around 2050. As a company that has set ambitious CO₂ emissions reductions targets aiming for 80% reduction by 2030 and carbon neutrality by 2050 based on 2013-14 levels, this report further legitimises our targets, underlining our mandate for completing the transformative actions necessary. This scale of transformation is only possible if it is underpinned by the supportive and timely legislation and regulation.

Scottish Government Climate Change Plan – Released in February 2018, the Scottish Government published its climate change plan, outlining the path to a low carbon economy and a greener, fairer and healthier Scotland in 2032, while helping to deliver sustainable economic growth. In line with the 2017 Energy Strategy, its vision for the energy sector is that 50% of all Scotland's energy needs will come from renewables by 2030, while emissions from the electricity sector will fall by 28% by 2032. The plan proposes increased reliance upon electricity as a power source for heat and transport, supporting the rollout of ultra-low emissions vehicles and integrated local energy systems, underpinned by innovative smart energy systems. Whilst delivering this, businesses must achieve emissions reductions from buildings of 53% and move to ultra-low emissions fleet vehicles.

UK Government National Adaptation Programme – The 2018 National Adaptation Programme (NAP) and the Third Strategy for Climate Adaptation Reporting 'sets out the action government is, and will be, taking to address the risks and opportunities posed by a changing climate'. The NAP highlights and prioritises six key areas of risk and opportunity - flooding and coastal change; high temperatures; water shortages; risks to natural capital; risks to food production and new and emerging pests and diseases affecting people, plants and animals. With perhaps the exception of food production, all of these risks and opportunities have the potential for direct impact upon the services and network we provide. For example, flooding of substations can interrupt electricity supply; longer periods of higher temperatures can lead to changes in the performance of electrical equipment; our network and activities cover vast areas of landscape, so we have the opportunity to protect and enhance natural capital; and we have the opportunity to manage emerging invasive species as we operate and maintain our network. As the NAP lays out, there is uncertainty over when and where the effects of climate change may be felt, and the picture is an evolving one. Therefore our challenge is to be able to carry out the right adaptation activities in a timely and efficient way, within the bounds of our regulatory settlement.

United Nations 2030 Agenda for Sustainable Development – Adopted by UN member states in 2015, The 2030 Agenda is 'a shared blueprint for peace and prosperity for people and the planet, now and into the future'. The Agenda recognises the alleviation of Poverty as its central aim and is supported by the 17 Sustainable Development Goals (SDGs), which call for all parties 'to take the bold and transformative steps which are urgently needed to shift the world onto a sustainable and resilient path.' Our challenge is to balance the economic, social and environmental aspects of all we do to ensure that our delivery of benefits against one SDG doesn't come at the cost of negative impacts against another SDG.

Decarbonisation of Energy

Climate Change Committee Progress Report to Parliament 2018 – The UK's greenhouse gas emissions have reduced by 43% compared to 1990 levels on the way to a target of at least an 80% reduction by 2050, however, the UK is currently not on track to meet its legally binding fourth and fifth carbon budgets. Within a fairly sobering report, decarbonisation of the UK power sector is a rare good news story, making up 75% of emissions reductions since 2012, with other sectors remaining relatively flat in the same period. The reductions in the power sector have largely come from the closure of fossil fuel generation plants and increased uptake of renewables, which UK networks businesses are supporting and enabling. However, UK networks also have direct and indirect impacts in the majority of the other sectors covered by this report: F-gases, Waste, Transport, Industry and Buildings. F-gases such as Sulphur Hexafluoride pose both a uniquely acute challenge and opportunity to energy networks companies. Transmission assets traditionally use air or oil as an insulator for equipment, however Sulphur Hexafluoride (SF₆) gas is a safer and more cost efficient electrical insulator, which also requires a smaller area of land, reducing the footprint required by as much as 85%. It is for these reasons that network companies currently install SF₆ insulated assets, primarily on transmission networks. However, SF₆ is a greenhouse gas 22,800 x more potent than carbon dioxide, and accidental leaks or leaks caused by maintenance activities, however small, therefore contribute significantly to overall greenhouse gas emissions. Our challenge is that we must remove the use of SF₆ on our network in order to achieve our Business Carbon Footprint reduction, but that we must also do this in an economical way, whilst continuing to provide value for money for our customers and stakeholders. Alternatives to SF₆ are available, but there is a risk that these will not reach widespread adoption if they cannot reach cost parity with SF₆ solutions.

Our opportunity is to seek to stimulate the market to provide a range of viable and competitive alternatives, by using SF6 alternatives where we can prove cost benefit and working closely with suppliers to test and develop solutions.

UK Government Clean Growth Strategy – This 2017 strategy aims to support economic growth while reducing greenhouse gas emissions. It highlights the UK's strong economic growth and emissions reductions since 1990 – outstripping G7 averages – and emphasises that work to cut emissions must be done while ensuring our economy remains competitive. Energy networks have played a key part in both emissions reductions and economic growth to date, and our challenge is to continue to be an enabler of these ambitions as energy, transport and heating are further decarbonised. We expect this to become incrementally more challenging as we move closer to net zero emissions. The right investment at the right time is essential to the delivery of these aims.

Scottish Government Energy Strategy – Released in late 2017, Scotland's first Energy Strategy *'sets out the Scottish Government's vision for the future energy system in Scotland. It articulates six energy priorities for a whole-system approach that considers both the use and the supply of energy for heat, power and transport.'* Supporting Scotland's Climate Change Plan, this strategy highlights that Scotland should have the capacity, connections, flexibility and resilience necessary to maintain secure and reliable supplies of energy to all of our homes and businesses as our energy transition takes place. This vision represents a wide range of opportunities and challenges for our network. The connection, adjustment or removal of generation sources connected to our network require us to find new solutions to managing voltage and inertia on our networks, and encourage us to find smart ways of delivering the network capacity required through improved commercial arrangements, more efficient use of existing assets and investment in network reinforcement. The decarbonisation of transport and heat will create additional demand for electricity and increase the need for us to stimulate flexibility markets.

Welsh Government Consultation on Decarbonisation – in line with the Environment (Wales) Act, which sets a target of 80% net emissions reduction by 2050, this 2018 consultation sought to understand public opinion on a range of potential actions on the Welsh emissions sectors. It presented a series of potential actions across agriculture, land use & forestry, buildings, industry, public sector, transport and waste. We continue our work to enable the low carbon transition in Wales, from the introduction of Active Network Management in

generation sites across North Wales, to our project to stimulate and enable the decarbonisation of transport in the area.

Decarbonisation of Transport

UK Government Road to Zero Strategy – Released in 2018, this strategy sets out the ambition for at least 50% of new car sales, and up to 40% of new vans, to be ultra-low emission by 2030. It commits to support the huge expansion of green infrastructure across the country to support cleaner air, a better environment and a clean economy. However, the cross-party report **Electric Vehicles: Driving the Transition** released in October 2018 criticises **Road to Zero**, favouring a more ambitious target of 100% of new cars and vans being zero emission by 2032. The report states *'Poor provision of charging infrastructure is one of the greatest barriers to growth of the UK EV market. The existing charging network is lacking in size and geographic coverage, with substantial disparities in the provision of public charge points across the country.'*

Regardless of the official targets and timelines, our priority is to be an enabler of mass uptake of ultra-low emissions vehicles, removing obstacles to uptake where possible. This means working with government, our regulator, industry peers, the automotive industry, local councils and other ultra-low emissions vehicle stakeholder groups to understand emerging need and adapt our network to enable ambitions in a cost effective way. Given the wide range of uncertainty around uptake, charging behaviours and regulation, staying ahead of the wave represents a considerable challenge for our business and industry.

Scottish Government Energy Strategy – Beyond its ambition to phase out the need for new petrol and diesel cars and vans by 2032, the 2017 Scottish Energy Strategy provides two possible visions of the ways in which we'll be using energy for transport by 2050.

Scenario 1 – An Electric Future envisions 100% of cars and light goods vehicles powered by electricity by 2050, supported by 'smarter electricity networks and [are] more informed and flexible consumers meaning demand is managed smoothly'. This scenario includes high availability of diverse charging options, and suggests use of electrolysed hydrogen and/or battery power to power goods vehicles and ferries.

Scenario 2 – A Hydrogen Future envisions 100% of cars and light goods vehicles powered by hydrogen by 2050, with partial decarbonisation of larger road vehicles such as buses and HGVs and significant use of hydrogen powered rail freight options. In this vision, existing service stations would be converted to supply hydrogen, reducing the need for an extensive charging network, however, our network must support the creation of the power-to-hydrogen projects required

for electrolysis. It's likely that the transport network of the future will utilise elements of both of these scenarios, so our role is to ensure that the network provides the capacity, flexibility and availability to support the transition as it evolves.

Decarbonisation of Heat

BEIS/Ofgem call for evidence – in 2018, 'A future framework for heat in buildings' asked how policy frameworks could enable the market to transition towards decarbonised heating options, including how policy makers might engage with market players, the feasibility of a firm end date for high carbon installations, and the potential for buildings to transition away from high carbon heating options. One significant concern is the question of how we can coordinate network reinforcement with the uptake of decarbonised heat and transport within a market driven transition. The introduction of policies that will serve as a market catalyst would be welcomed, but their performance needs to be closely monitored to ensure they deliver the desired volume of transitions. There is a real risk that delays to network reinforcement (or alternative) might present a barrier to the transition to decarbonised heat and transport.

Decentralisation, Digitalisation and Democratisation

Ofgem/BEIS Upgrading our Energy System – Smart Systems and Flexibility Plan: Progress Update – Published in July 2017, **Upgrading our energy system: smart systems and flexibility plan** laid out how Government and Ofgem are working with industry *'to deliver a smarter, more flexible energy system by: removing barriers to smart technologies, including storage; enabling smart homes and businesses; and making markets work for flexibility.'* The 2018 update report highlights progress made against the 29 original actions and lays out a further nine commitments identified since the original plan was developed. The plan actions aim to support a number of the key elements of a smart, flexible energy system: encouraging the uptake of storage and small scale renewable generation; an emphasis on broadening the ability for all system users to provide demand side response (including domestic vehicle to grid options); increased competition in the balancing mechanism; rolling out smart meters and reducing the risks for consumers participating in the smart energy system. The plan also highlights actions to maintain health and safety, cyber security and effective stakeholder engagement through the transition.

To date, the government, Ofgem and the industry have launched 11 consultations and calls for evidence; published 19 reports, guidance documents, pieces of legislation and regulation; launched 8 new innovation competitions committing around £400m funding for innovation in battery use, DSR, innovative domestic applications, vehicle-to-grid and new technologies and business models to value and trade flexibility in the electricity system; and established 5 working groups and committees in support of the smart systems and flexibility plan. The sheer scale of the change necessary for our business model, network, skills, and interaction with other system players to develop the smart system of the future is hard to overestimate. The electricity system (both market and networks) will be unrecognisable from its current form once all of the actions in this plan are embedded, as services are decentralised, networks and business models are digitalised and the energy market is democratised enabling all to benefit from buying and selling services.

For network operators, this transformation represents an unprecedented opportunity to shape the system for the benefit of society for generations to come. The challenge is that this huge change sits within a context of political uncertainty, increasing pressure to further reduce customer costs and already challenging business-as-usual investment programmes.

Open Networks Project – A key enabler of the smart systems and flexibility plan, this unprecedented cross-industry project will transform the way our energy networks work, underpinning the delivery of the smart grid. Recognised in the 2017 BEIS & Ofgem Smart Systems and Flexibility Plan as a 'key initiative' to enable decarbonisation, the project brings together Ofgem, 9 of UK and Ireland's electricity network operators, academics, NGOs and Government departments. The project aims to promote greater competition in energy markets, enable users to have greater control of their energy and ensure that energy networks are operated as efficiently and intelligently as possible. Central to this is an exploration of the options for smaller players to enter energy balancing markets, supported by increased network and commercial flexibility.

This project represents a number of significant opportunities and challenges, including the opportunity to bring innovative solutions to maturity and bring about the policy changes that will ensure the new market model will serve society well, and the need to understand and plan the right investments within our short term business plans to be ready for the transition.

Biodiversity

UN Convention on Biological Diversity – the 2018 convention in Egypt closed with 196 governments agreeing to *'scale up investments in nature and people towards 2020 and beyond'*. The Sharm El Sheikh Declaration was adopted, agreeing for the UN General Assembly to convene a Summit on biodiversity for heads of State by 2020. With an international lack of progress against the last two major biodiversity agreements (2002 and 2010), pressure is mounting on governments and organisations to take credible, far-reaching action to limit the loss of biodiversity.

We have an opportunity to ensure that our networks and business practices proactively enhance biodiversity – for example, by using new technology and approaches to minimise our impact on habitats as we maintain the network, or by siting 'green' assets next to our linear and substation infrastructure. But this opportunity depends upon the extent to which our regulatory allowances will allow us to invest now to deliver these far-reaching, long term benefits to biodiversity.

Mainstreaming international biodiversity goals for the private sector – produced by the Joint Nature Conservation Committee, this report aims to highlight the relevance of international biodiversity goals to the private sector and show the action that businesses can take to support and enhance biodiversity. The report covers the five internationally agreed biodiversity goals: mainstreaming biodiversity; reduce pressures on biodiversity; safeguard biodiversity; benefits for all; and enhance implementation. As an operator with assets that stretch across a wide range of habitats, we have the responsibility to mainstream biodiversity in all that we do. Our challenge is to maintain biodiversity and positive environmental impact as a high priority amongst our people and supply chain, in amongst the other competing priorities of time, cost and safety.

UK Biodiversity Indicators 2018 – produced by the Joint Nature Conservation Committee, this report sets out the UK's progress in line with the Convention on Biological Diversity Strategic Plan for Biodiversity, including the Aichi Biodiversity Targets agreed in 2010. As a devolved responsibility, England, Scotland Wales and Northern Ireland have each developed, or are developing biodiversity or environment strategies, supported by indicators to track their progress. The UK indicators are used specifically for international reporting and have been selected in consultation with the devolved administrations.

The report is stark, outlining that relative abundance of priority species in the UK has decreased by close to 70% since 1970. It also highlights a 50% increase in the number of invasive non-native species established in or along 10% or more of the land area or coastline of Great Britain since 1960.

It is clear that maintaining current biological diversity is not enough – as above, we have the opportunity to ensure that our networks and business practices proactively enhance biodiversity, but this opportunity depends upon the extent to which our regulatory allowances will allow us to invest now to deliver these far-reaching, long term benefits.

The Living Planet Report 2018 – This biennial report produced by WWF provides an in-depth analysis of the state of the earth's ecosystems services and lays out a 2020-2050 roadmap for halting the currently accelerating degradation of nature. Linking to the Aichi Protocol and UN Sustainable Development Goals, it encourages organisations and individuals to turn these broad goals into ambitious and specific targets, identify ways of measuring their progress and carry out specific actions to deliver the targets.

Our Sustainable Business Strategy supports the delivery of ambitious land and biodiversity improvement objectives, but is wholly reliant upon relevant regulatory frameworks enabling us to deliver the pace of change required.

Resources

Planetary Boundaries – This concept identifies nine global processes that together regulate the land, ocean, atmospheric, and life conditions upon which all society depends. Current science shows that four out of nine of these planetary boundaries *'have now been crossed as a result of human activity: climate change, loss of biosphere integrity, land-system change, altered biogeochemical cycles (phosphorus and nitrogen)'*. We have the opportunity to play our part in bringing planetary resources and processes back within safe boundaries, and key to this is using resources sustainably throughout our direct- and supply chain activities.

Making Things Last: A Circular Economy Strategy for Scotland – Building on Scotland's progress in the zero waste and resource efficiency agendas, this 2016 strategy sets out priorities for moving to a more circular economy, 'where products and materials are kept in high value use for as long as possible.'

Blue Planet II – This documentary series presented by David Attenborough, explored the world's oceans, documenting the ways in which biodiversity is being negatively affected by anthropogenic activity, including highlighting the extensive threat of marine plastic, galvanising society into practical action to reduce reliance upon plastics.

Key to all three of these aspects is understanding where our biggest impacts lie, getting the basics of waste reduction right, ensuring that all of our people have sufficient training, and working in partnership with our wider supply chain and stakeholders to stimulate circular resource use. The challenge is that moving towards circular resource use requires us to influence all parts of our supply chain, create some completely new ways of working and resource streams, and develop and test innovative ways of working, all of which require a long-term view, a coordinated industry-wide approach and an element of trial and error. All of this is within the context of challenging efficiency targets and allowances set through regulatory price controls.

Customer and shareholder value

Energy Consumers' Missing Billions – This 2017 Citizen's Advice report highlighted concerns that UK operators were making more profit than expected and underlined the need for transparency and value for money for all UK consumers. The report recommended bill rebates for customers, shorter-term forecasting and indexing of costs, tougher incentive mechanisms and the ability for consumer bodies to request a review of a price control if they believed that financial returns are excessive. A subsequent Citizen's Advice Report – **Things can only get beta: An opportunity to get financing costs right for consumers** – highlighted that regulators must enable necessary investment, but not *'over-reward investors at the cost of consumers'*.

In reality, the UK price is less than the average in Europe, and for network-related costs, 17% lower than at privatisation. UK regulatory arrangements for energy networks are some of the most advanced in the world. Our base profitability levels are fixed by Ofgem after scrutiny from stakeholders via public consultation, a process that we strongly support.

Our challenge is to ensure that stakeholders and customers understand that profits are typically realised over a long period of time, and that allowed returns need to recognise the risk that investors must accept in making long term investments, particularly during such a transformative time for energy networks.

As asset lives can range from 40 years upwards, investing in our business means making a long-term commitment to the renewal, maintenance and operation of vast network of assets that will provide a safe, reliable and secure supply to customers for the next 40 to 60 years and beyond.

Electricity network companies require a stable regulatory framework that attracts long-term asset-based investors and providers of capital. It is therefore important that long-term observations and forecasts – rather than short term market observations – are used to determine the returns that are provided and ensure these are aligned with the expectations and requirements of long-term investors..

Scottish Government: The Just Transition Commission

– Launched in 2018, this taskforce will advise on how to *'maximise the opportunities of decarbonisation, in terms of fair work and tackling inequalities, while delivering a sustainable and inclusive labour market'*. The transition to a low carbon economy has significant potential to reduce inequality and improve the lives of all, but by nature, any transition of this kind risks early adopters reaping disproportionate rewards, while those without the means to adopt early or at all may end up subsidising early adopters.

One example of this is where home owners install solar panels and become more electrically self-sufficient, needing little or no electricity from the grid on some days, but still benefitting from the reliability and availability of remaining connected to the grid. As the cost of maintaining the grid is included in this consumer's electricity bill, they pay far less (or potentially nothing) for the upkeep of the grid, meaning that others who unable to install solar panels may end up paying more to subsidise the grid costs of early adopters.

In the same way that we must strive to enhance the environment in which we operate, we must ensure that the network and energy market transformation develops in a way that supports equity and accessibility for all members of society – a truly democratised energy system.

Ongoing Strategy development

This Sustainable Business Strategy is reviewed each year by key internal and external stakeholders, including the Sustainability Stakeholder Working Group and signed off by the SPEN Executive Team and Executive Sustainability Steering Group.

In 2018, the following updates were made following extensive review and engagement:

- Raw material and waste Drivers combined into a single Driver: 'Sustainable Resource Use'
- Updated Business Carbon Footprint and Waste graphs showing actual performance to date
- Review of all Sustainability Objectives:
 - **New objectives**
 - 1.3 Reduce fleet vehicle fuel use and business travel carbon footprint by 15% by 2023
 - 1.4 Reduce depot and substation energy use by 25% by 2023
 - 1.5 Minimise the increase in volumes of SF6 gas on our network and reduce leakage rate
 - 1.6 Undertake collaborative activities to encourage the technical and commercial viability of alternatives to SF6
 - 4.4 Identify top five resource consumption priorities and set quantified targets by 2020
 - 6.1 Work with our supply chain to better quantify and manage scope 3 carbon emissions
 - 6.3 Reduce the timescales and costs for low carbon connections
 - 6.4 Understand SPEN mapping to the Sustainable Development Goals and address gaps as required
 - 6.5 Work proactively to ensure that our network can accommodate decarbonisation of transport and heat
 - 6.6 Broaden Sustainable Society Driver as appropriate
 - 8.5 Deliver the environmental aspects of SPEN training plan'
 - 9.3 Identify priority areas for collaboration with key stakeholders'.
 - **Updated objectives**
 - Assess visual amenity and ecological impact when managing and maintaining our network in sensitive environments.
 - 3.2 Implement a process to assess biodiversity and make relevant business decisions to promote net biodiversity gain. 8.1 Fully comply with all Environmental legal obligations
 - 8.2 Maintain an EMS compliant with ISO14001
 - 9.2 Achieve leadership status under EDR and be recognised as leaders.
 - **Removed objectives**
 - 1.2 Reduce Greenhouse Gas (GHG) emissions – replaced by new objectives 1.5 and 1.6.
- Inclusion of a section on Opportunities and Challenges
- Inclusion of a section on Enablers
- Updates to text throughout to reflect progress made since the launch of the Strategy.



Appendix 2: ESG Terms of Reference

Terms of Reference for the Executive Sustainability Steering Group

1. Aim of the Steering Group

These will be:

- To agree and implement the Sustainable Business Strategy and provide leadership and direction in Sustainability, Environmental Management and the Low Carbon Transition for all of SP Energy Networks' activities.
- To implement required changes to SP Energy Networks' strategies to ensure the company adopts a leadership position in the transition to a low carbon energy sector.
- To monitor and drive progress of the Sustainable Business Strategy and the Sustainable Business Plan, ensuring T1 and ED1 Environmental Commitments are met, and exceeded where relevant.
- To periodically review and develop the Sustainable Business Strategy through ongoing stakeholder feedback, lessons learned through implementation and any direction from Ofgem e.g. via the Environmental Discretionary Reward.
- To agree and implement suitable Pilot Projects proposed by external and internal stakeholders to ensure the correct methods and strategies are deployed.
- To review and approve projects brought forward as part of the SI fund or the External Collaboration Fund that support successful deliver of the Sustainable Business Strategy.

2. Members and Chair

The Chair of the Steering Group is Colin Taylor as Director of Processes & Technology.

The Members are:

- Frank Mitchell – CEO of SP Energy Networks
- Scott Mathieson – Director of Network Planning and Regulation
- Pearse Murray – Director of Transmission
- Craig Arthur – Director of SP Distribution
- Jim Sutherland – Director of RIIO-T2
- Stephen Stewart – Director of SP Manweb
- Guy Jefferson – Director of Customer Service
- Tracy Joyce – Head of Stakeholder Engagement and Communications
- Ross Baxter – Head of Land and Planning
- Jane McMillan – Head of Sustainability
- Darren Jameson – Sustainability Policy Specialist (Secretary)
- Tanya Henriksen – Sustainability Policy Specialist
- Kate McGeoch – Sustainability Policy Specialist

3. Frequency of meetings

Four meetings shall be held each calendar year at quarterly intervals.

The Chair of the Steering Group may request an interim meeting if it is considered necessary.

The Chair will nominate substitute chairs as and when required e.g. due to annual leave.

4. Responsibilities

The main responsibilities of the Steering Group are:

- To set high level strategic direction and act as highly visible champions for Sustainability.
- To agree the annual Sustainable Business Plan.
- To provide resources and support to deliver strategic aims and associated plans.
- To review the approach to facilitating the transition to a low carbon economy on an annual basis as a minimum.
- To regularly review progress of plans and KPIs against targets and deadlines.
- To review and approve pilot projects and approve implementation of resulting recommendations.
- To agree the key messages to be communicated to external stakeholders and to sign off the content of external reports and other communications.
- To review external stakeholder feedback and lessons learnt and to agree resulting changes to strategies, policies and procedures.
- To sign off the employee engagement strategy and to Champion Sustainability focussed behaviours within their respective Directorates.
- To provide updates to the SPEN Executive Team and Board on the progress of the Sustainable Business Strategy (including Sustainability risks and environmental performance).

5. Reporting procedures

The presentation slides and minutes from Steering Group meetings shall be circulated to all members of the Steering Group using a dedicated web server managed by the Sustainability Team.

6. Sub-groups

Sub-groups may be set up so that a small group of the Sustainability Steering Group members and their representatives can focus in detail on a particular issue or plan.

Sub-groups will present proposals/recommendations to the main Group for approval. All sub-group meetings shall be documented, with the Minutes being communicated to the main Group.

Appendix 3: SSWG Terms of Reference

Terms of Reference for the Sustainability Stakeholder Working Group

1. Aims of the SPEN Sustainability Stakeholder Working Group (the 'Working Group')

To guide SP Energy Networks' (SPEN) strategy to become a leading sustainable networks business and to support the low carbon transition.

To provide a platform for discussion on a range of sustainability issues, considering appropriate measures to address these issues and how potential objectives and actions are to be reflected in the SPEN Sustainability Policy, Strategy and Plan. This will include business updates from member organisations on their own progress on sustainability strategies.

To identify potential pilot projects applicable to the energy sector for presenting to the SPEN Executive Sustainability Steering Group (ESSG), with consideration for collaboration and the role of SPEN and other stakeholders in prospective pilot projects.

To participate in governance for External Collaboration Funding proposals identified by SPEN which seek to achieve the objectives set out in the SPEN Sustainability Policy, Strategy and Plan.

To discuss lessons learned from projects, with the aim of converting the successes of pilot projects into existing business processes.

To discuss how the regulation of transmission and distribution companies can be developed to ensure that these services are delivered sustainably and to feed recommendations/views into OFGEM and the RII process.

To discuss best practice in sustainability including the global energy industry, in related sectors (for example in other linear infrastructure networks) and leaders in sustainability demonstrated in unrelated industries.

This will include discussion on the experience of members organisations, including communications, behaviour change, sustainability indicators, benchmarking, standards and reporting and other relevant topics.

To discuss sustainability reports drafted by SPEN for publication, including (but not limited to) the SPEN Sustainability Footprint, the SP Transmission Annual Sustainability Statement and the Environment and Innovation Report for Distribution licences (SP Manweb in North Wales & England / SP Distribution in South Scotland).

Provide a forum for communication with the wider Iberdrola Group businesses when discussions identify issues that sit across corporate boundaries.

2. Members and Chair

The Chair of the Working Group is Jane McMillan as Head of Sustainability in SPEN's Processes & Technology Directorate. The Secretary of the Working Group is Tanya Henriksen as SPEN's Sustainability Policy Specialist in the same team.

The Member organisations are:

- SP Energy Networks
- ScottishPower
- Scottish Government
- Scottish Wildlife Trust
- SEPA
- SNH
- Keep Scotland Beautiful
- 2050 Climate Group
- WWF (providing commitment to group remotely due to resource constraints)
- Sustainable Scotland Network

Membership of the Working Group shall be reviewed as the Strategy is implemented and lessons learned. Prospective membership can be proposed by Members and, subject to agreement by all Members, the Secretary shall invite new members to join and attend the next meeting.

The membership of the Working Group shall be updated as members are identified.

3. Frequency of meetings

Meetings shall be held at approximately quarterly intervals, with additional meetings (in person or virtual) to be arranged if circumstances warrant.

Meetings shall be held in Glasgow with a preference for Tuesday at times to allow for travel.

If requested facilities to join the meeting via video or teleconference shall be provided.

4. Responsibilities

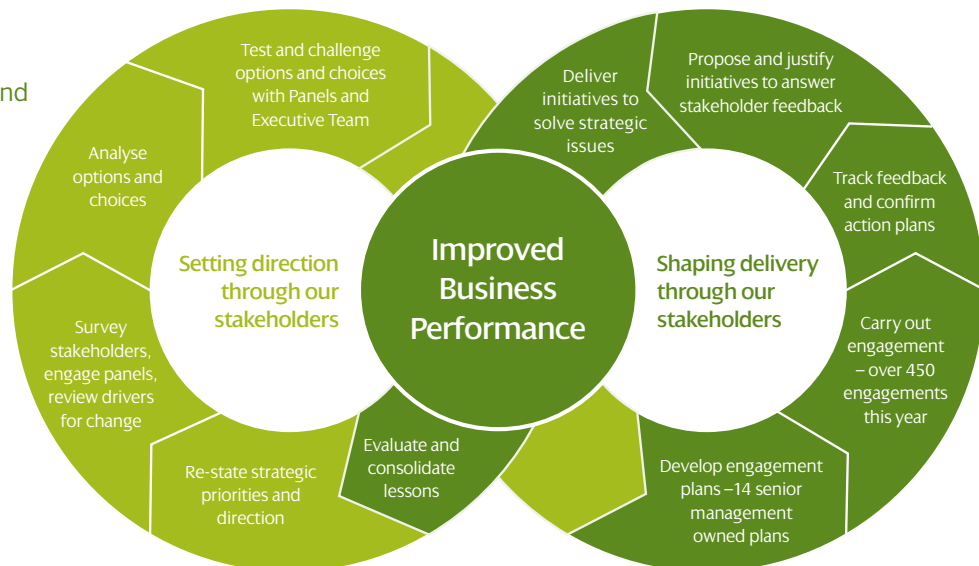
The main responsibilities of the Members of the Working Group are to:

- a) Play an active role in the Working Group by attending and participating in meetings;
- b) Represent their organisation and its sustainability aims, providing a route to other departments;
- c) Contribute to meetings with ideas, share learnings from relevant socio-economic and environmental initiatives and examples of best practice;
- d) Enable collaboration between their organisation and other members of the Working Group, including the identification of- and participation in relevant potential pilot projects.

Figure 1. The feedback loop: The 'virtuous circle' of engagement, feedback and action

Engaging with stakeholder to drive improvements is a process, not a single event

All stages of our feedback loop are supported by our Tractivity system and core engagement programme.



5. Reporting procedures

The minutes of meetings and actions log of the Working Group shall be circulated to all members of the Working Group for review and agreement.

All documentation circulated to the Working Group shall be held digitally on an SP Energy Networks portal/online community with access provided to Members to facilitate online discussions between regular meetings.

The Terms of Reference shall be annually reviewed and interim updates shall also occur as and when new members join.

SPEN shall consult on our proposals in line with its Stakeholder Engagement Strategy (see Figure 1 'The feedback loop').

6. Sub-groups

Sub-groups shall be set up where it has been identified that it would be of benefit for a subset of representatives of the Working Group Member organisations to focus in detail on a particular issue or project.

Sub-groups shall present proposals or recommendations to the main Group for approval. All sub-group meetings shall be documented, with the minutes being communicated to the main Group via the same channels as above.

Glossary of Terms

Abbreviation	Definition
Business Carbon Footprint	A carbon footprint measures the total greenhouse gas emissions caused directly and indirectly by a person, organisation, event or product measured in Carbon Dioxide (CO ₂). This also contains other greenhouse gases (such as SF6 below) converted into CO ₂ equivalent
Carbon Neutral	The achievement of net zero carbon emissions includes other greenhouse gases converted into CO ₂ equivalent
Circular Economy	See Zero Waste (below)
DNO	Abbreviation for Distribution Network Operator, who is licenced by Ofgem to develop, operate and maintain local electricity distribution network. There are 14 licensed distribution network operators (DNOs) in Britain owned by six different groups. Each DNO is responsible for a regional distribution services area
ESSG	Abbreviation for the Executive Sustainability Steering Group, formed by SPEN in 2015 to develop and approve, and thereafter review and approve, the Sustainability Policy and Sustainable Business Strategy and Plan actions as part of the route to becoming a Sustainable Networks Business
Low Carbon Transition	The evolution from a fossil fuel powered economy to an economy based on renewable and low carbon energy use that therefore has a minimal output of greenhouse gas emissions
Natural Capital	Natural capital can be defined as the world's stocks of natural assets which include geology, soil, air, water and all living things. It is from this natural capital that humans derive a wide range of services, often called ecosystem services, which make human life possible
NGO	Abbreviation for non-governmental organization, an organization that tries to achieve social or political aims but is not controlled by a government
RIIO ED1	Abbreviation for Revenue = Incentives + Innovation + Outputs for Electricity Distribution 1. RIIO ED1 is the price control framework set by our Regulator, Ofgem, that sets the outputs that the 14 DNOs need to deliver for their customers and the associated revenues the DNOs are allowed to collect for the eight-year period from 1 April 2015 to 31 March 2023
RIIO T1	Abbreviation for Revenue = Incentives + Innovation + Outputs for Transmission 1. RIIO T1 is the price control framework set by our Regulator, Ofgem, that sets out what the three TOs are expected to deliver and details the regulatory framework that supports both effective and efficient delivery for energy consumers over the eight years from 1 April 2013 – 31 March 2021

Abbreviation	Definition
SF6	Abbreviation for Sulphur Hexafluoride, the most carbon intensive green house gas in the world, used extensively as an electrical insulator since the 1980s when the industry moved away from using oil in mass quantities for health and safety reasons. Use of SF6 prevents fire/explosion from catastrophic failure of plant and reduces the risk of oil pollution incidents on our network but has a global warming potential 22,800 times that of carbon dioxide
SPD	Abbreviation for ScottishPower Distribution, a wholly owned subsidiary of SP Energy Networks responsible for the distribution of electricity in central and southern Scotland (33kV and below)
SPEN	Abbreviation for SP Energy Networks, holder of the SPT, SPD and SPM licences awarded by Ofgem, the regulator of the gas and electricity sector
SPM	Abbreviation for ScottishPower Manweb, a wholly owned subsidiary of SP Energy Networks responsible for the distribution of electricity in North Wales and in Merseyside, Cheshire, and North Shropshire in England (132kV and below)
SPT	Abbreviation for ScottishPower Transmission, a wholly owned subsidiary of SP Energy Networks responsible for the transmission of electricity in central and southern Scotland (132kV and upwards)
SSWG	Abbreviation for the Stakeholder Sustainability Working Group, formed by SPEN in 2017 comprising invited SPEN stakeholders and SPEN representatives to guide SPEN
Sustainable Networks Business	SPEN has identified this as managing our triple bottom line – a process to manage our financial, social and environmental risks, obligations and opportunities. These three impacts are sometimes referred to as profits, people and planet
TO	Abbreviation for Transmission Operator, permitted to develop, operate and maintain a high voltage system within their own distinct onshore transmission areas. These are National Grid Electricity Transmission plc (NGET) for England and Wales, ScottishPower Transmission Limited for southern Scotland and Scottish Hydro Electric Transmission plc for northern Scotland and the Scottish Islands groups
Zero Waste	An alternative to the traditional linear economy (make, use, dispose), in which resources are kept in use for as long as possible, extract the maximum value from them whilst in use, then recover and regenerate products and materials at the end of each service life as opposed to sending to landfill. Also referred to as Circular Economy

Contact us

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We would be delighted to receive any comments, suggestions or questions on the content of this Sustainable Business Strategy.

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