



# SSE PLC **SUSTAINABILITY REPORT 2019**

For a better world of energy



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# PROVIDING THE ENERGY NEEDED TODAY WHILE BUILDING A BETTER WORLD OF ENERGY FOR TOMORROW

### About this report

The disclosure of SSE's most material sustainability impacts is integrated into its Annual Report 2019 and, given the demand from SSE's stakeholders for comprehensive transparency on the impact it has on the outside world, this Sustainability Report provides greater detailed information around SSE's key policies, management and performance in relation to its economic, social and environmental impacts. The Sustainability Report is therefore intended to be the sister document to the Annual Report. However, it also exists as a standalone report in its own right and it is not necessary to read it alongside the Annual Report.

The scope of this report is generally focused on performance data for the financial year ending 31 March 2019. On occasion the report

refers to activities of joint ventures and in these instances it is made clear this is the case. In 2019, SSE sought assurance on its carbon, water and Green Bond data from professional services firm PwC. PwC also undertook the economic analysis of SSE's contribution to the UK and Irish economies.

### About SSE

SSE is an energy company listed on the London Stock Exchange. Formed in 1998, it now has operations and investments across the UK and Ireland and is involved in: the generation, transmission, distribution and supply of electricity; the production, storage, distribution and supply of gas; and in the provision of energy-related services.

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| <b>STRATEGY 06</b>   | <b>CLIMATE ACTION 16</b>   | <b>AFFORDABLE AND CLEAN ENERGY 26</b>  |
|   |   |   |
| <p>SSE's business strategy, the influence of its stakeholders, materiality assessments, external trends and increased governance underpin SSE's approach to ensuring long-term sustainability.</p> | <p>Meeting the challenge of climate change requires action to adapt to more extreme weather at the same time as actions to mitigate the most dangerous climate outcomes.</p>                 | <p>The cost-effective development of new renewable generation combined with a focus on serving energy customers, particularly the most vulnerable support the goal of affordable and clean energy.</p> |
| <b>INDUSTRY, INNOVATION AND INFRASTRUCTURE 36</b>  | <b>DECENT WORK AND ECONOMIC GROWTH 44</b>  | <b>DO NO HARM 60</b>   |
|    |    |    |
| <p>With energy infrastructure at SSE's core, innovation that delivers increased electricity network flexibility and investment in transmission infrastructure is key to a low carbon world.</p>    | <p>The way in which a low-carbon energy system is delivered supports significant social value with good quality jobs, vibrant supply chains and tax receipts supporting public services.</p> | <p>SSE's approach to sustainability built on a firm foundation to 'do no harm' to people or places. Underpinning that is the reinforcement of an ethical business culture to 'do the right thing'.</p> |

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| <b>DATA TABLES 66</b>  |
|   |
| <p>Stakeholders and investors seek data and information on a wide variety of environmental, social and economic metrics. To aid transparency this data is produced in tabular form alongside a required green bond report and the subsidiary-level gender pay gap.</p> |

Disclaimer: The definitions SSE uses for adjusted financial measures are consistently applied and are explained and justified in the Annual Report 2019, page 143 to 147.

Chief Executive's Introduction

# EMBEDDING SUSTAINABILITY INTO SSE'S DNA



**Alistair Phillips-Davies**  
Chief Executive

Through its Sustainable Development Goals (SDGs), the United Nations has created a blueprint for a sustainable world and in early 2019, the SSE plc Board agreed to align our business strategy to them. Consequently, in March we adopted four fundamental business goals which are directly linked to the UN's SDGs.

Our first three goals – to cut in half the carbon intensity of the electricity we generate, to develop and build enough renewable energy capacity to treble renewable output and help accommodate 10 million electric vehicles on Britain's electricity networks – are in direct response to the low-carbon challenge. These three goals represent the most material contribution SSE can make to sustainable development and also represent a hugely progressive and exciting strategy for business growth.

And because we understand that enormous social value can be created – or destroyed – in the way that we deliver those goals, we have also committed for the long-term to the principles of Fair Tax and a real Living Wage.

**In a nutshell, sustainability for SSE means that we will tackle climate change, create a successful business and deliver significant social value to the communities we serve. And creating significant social value reinforces our ability to create value for shareholders as well.**

So, in our Sustainability Report 2019 – the sister document of SSE's Annual Report 2019 – we have structured our disclosures according to the four SDGs that have identified as being most material.

SSE has sought, for many years now, to constantly develop and improve the transparency and disclosure of our social, economic and environmental impacts.

In this report, we outline our carbon and wider environmental impacts, the initiatives we take

to deliver value for communities and we report, extensively, on our investment in people and our record in meeting the aspirations within our 'responsible employer ethos'.

This year we have also sought to develop our reporting of climate-related risks and opportunities and, for the first time, disclosed detail and quantification of those risks and opportunities. This is part of our plan to be fully compliant with the Task Force on Climate-related Financial Disclosures' recommendations by March 2021.

The case for a net zero carbon target for the UK has been overwhelming through 2018/19. At SSE, we've been enthusiastic champions of that case. We don't just believe it should be done, we believe it can be done. In every net zero carbon scenario, the critical role of renewable electricity is clear, particularly to decarbonise the transport and heat sectors. I am looking forward to working closely with policy makers on the practical actions that need to be taken and SSE hopes to play a highly significant role in that delivery.

Finally, I have been determined to ensure that the principles of sustainability are embedded into the DNA of SSE. I think we made important steps forward in 2018/19 with our new 2030 Goals and changes to sustainability governance, but I am very keen to hear exactly what our stakeholders think of our efforts to far. That means I actively encourage people with an interest in SSE to get in touch by emailing [sustainability@sse.com](mailto:sustainability@sse.com) if you have any comments on our sustainability strategy, performance and reporting.

"IN A NUTSHELL, SUSTAINABILITY FOR SSE MEANS THAT WE WILL TACKLE CLIMATE CHANGE, CREATE A SUCCESSFUL BUSINESS AND DELIVER SIGNIFICANT SOCIAL VALUE TO THE COMMUNITIES WE SERVE."

Carbon intensity of generated electricity

**284**  
gCO<sub>2</sub>e/kWh

Renewable output (inc. pumped storage)

**9,779**GWh

Economic contribution

UK: **£8.9bn**  
Ireland: **€689m**

Taxes paid

UK: **£404m**  
Ireland: **€14.6m**

Total recordable injury rate – employees and contractors combined

**0.16 per**  
100,000 hours worked

Jobs supported in UK and Ireland

**105,250**

SSE's business explained

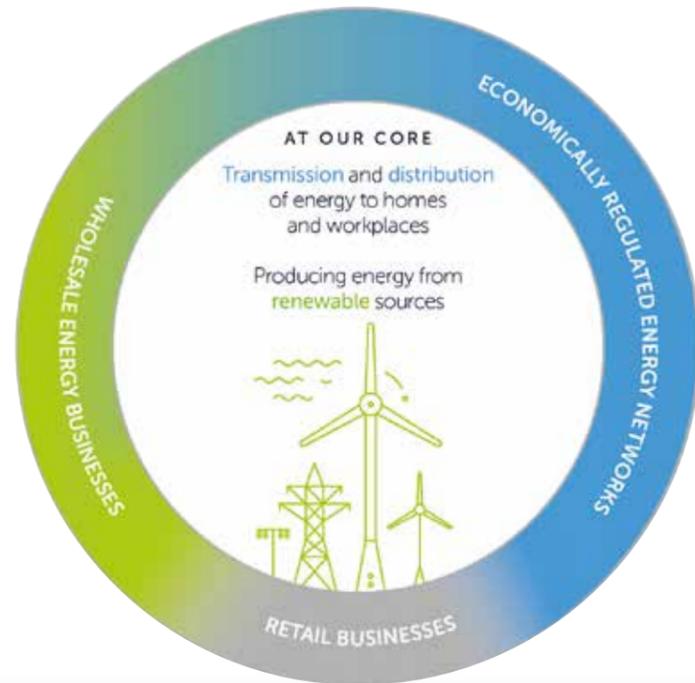
# FOCUSING ON THE LOW-CARBON TRANSITION

SSE brings together people with talent, skill and common values to create value for shareholders and society by developing, operating and owning energy-related infrastructure and businesses.

At the core of SSE's business are its economically-regulated electricity networks businesses, which operate under Scottish and Southern Electricity Networks (SSEN), and the development and operation, as well as ownership, of renewable generation assets.

These core businesses are complemented by flexible thermal electricity generation and a series of energy services businesses, all with a strategic focus to provide energy-related services in a low-carbon world. Furthermore, SSE Energy Services provides energy to around 6 million households in GB. SSE Energy Services continues to be held for disposal and in the meantime SSE remains focused on providing market-leading customer service and delivering efficiency savings to help keep the cost of energy as low as possible.

For more detail of SSE's business operations, see pages 4 and 5 of SSE's Annual Report 2019.



## NETWORKS BUSINESSES

SSE owns and operates electricity distribution networks in the north of Scotland and central southern England, and the electricity transmission network in the north of Scotland. SSE also has an ownership interest in gas distribution in Scotland and southern England.

## WHOLESALE BUSINESSES

SSE owns and operates renewable energy assets across the UK and Ireland, complemented by a portfolio of flexible thermal power stations. It owns and operates gas storage facilities in the UK, operates an energy portfolio management division and invests in gas production.

## RETAIL BUSINESSES

SSE supplies energy and provides infrastructure services to business and public sector customers through its Business Energy and Enterprise divisions. It also supplies energy and related services to household customers on the island of Ireland through SSE Airtricity.

## How SSE is changing for tomorrow

From 1 April 2019 internal changes were implemented designed to allow decision-making to be as effective and efficient as possible and to give added focus to the core and complementary businesses that drive delivery of SSE's strategy.

A new Group operating model reflects that the large majority of SSE's earnings are derived from regulated energy networks and renewable sources of energy.

The development and operation of all of its renewables assets have been consolidated under a single management team in a business known as SSE Renewables. The new model also takes greater account of the differences between SSEN's Distribution and Transmission networks businesses, while still recognising what they have in common.

Businesses that complement the low-

carbon transition are part of the mix too. Thermal generation provides flexibility; B2B (in the UK and Ireland) and B2C (in Ireland) customer businesses offer a valuable route to market; energy trading balances risk; E&P is an investment that continues to provide good returns; and SSE Enterprise is building opportunities in distributed energy, facilitating the growth of electric vehicles and creating value through its telecoms partnership.

SSE's business explained

# A SUSTAINABLE VISION, PURPOSE AND STRATEGY

SSE's vision is to be a leading energy company in a low-carbon world. Its purpose is to provide the energy needed today while building a better world of energy for tomorrow. And its strategy is to create value for shareholders and society from developing, operating and owning energy and related infrastructure in a sustainable way. This strategy, which is underpinned by a commitment to strong financial management, is built on four pillars.

### STRATEGIC PILLAR #1

#### Focusing on the core



SSE's core renewables and electricity network businesses are well placed to seize the opportunities presented by decarbonisation and electrification, and account for the large majority of Group earnings. It has the largest installed renewable capacity across the UK and Ireland, and the generation capacity connected to its electricity transmission network in the north of Scotland is almost entirely renewable.

### STRATEGIC PILLAR #2

#### Developing, operating, owning



At the very heart of SSE's strategy is a commitment to develop, operate and own the assets that create lasting value and are vital to the low-carbon transition. An increased investment appetite for low-carbon electricity assets presents opportunities to form new financial partnerships and create value from successful development and operation of assets.

### STRATEGIC PILLAR #3

#### Creating value



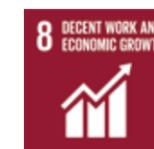
Decarbonisation offers SSE the opportunity to put its assets, skills and experience to work in creating lasting value. SSE continues to fairly remunerate shareholders at the same time as creating social, economic and environmental value for the societies it operates within. SSE believes creating value for society is the foundation from which value can be delivered for shareholders.

### STRATEGIC PILLAR #4

#### Being sustainable



A sustainable company is one that offers profitable solutions to the world's problems. In support of its vision, purpose and strategy, SSE has adopted four fundamental business goals for 2030 which are directly aligned to the United Nations' Sustainable Development Goals (SDGs). These Goals put addressing the challenge of climate change at the heart of SSE's strategy at the same time as addressing sustainable social development. The aim is to enable the Group to realise its vision of being a leading energy company in a low-carbon world.



## SSE's approach to sustainability

# ADVANCING A SUSTAINABLE BUSINESS

Four new 2030 Goals, aligned to the UN's Sustainable Development Goals (SDGs), underpin SSE's strategic focus on long-term, low-carbon and sustainable assets; and they commit SSE to delivering its strategy in a way that creates value for shareholders and for society.

## Four fundamental goals for 2030

SSE's strategic focus on core businesses that support and enable the transition to a low-carbon electricity system provided an important opportunity to ensure SSE's drive to be a sustainable business is not in addition to its core strategy, but central to it.

Following a year of consultation with employees and key external stakeholders, it was decided to align SSE's sustainability framework with the UN's SDGs. Employees considered it important that SSE places itself within the context of a greater global effort, particularly in the fight against climate change. External stakeholders were particularly keen to encourage visibility of progress against set targets and to ensure clear accountability for meeting them.

SSE identified four SDGs which are highly material to its business: SDG 13 Climate Action; SDG 7 Affordable and Clean Energy; SDG 9 Industry, Innovation and Infrastructure; and SDG 8 Decent Work and Economic Growth. In March 2019, it set ambitious business goals for 2030 that aligned to each of the most material SDGs and – most importantly – are central and core to SSE's business purpose and strategy.



### Cut our carbon intensity by 50%

Reduce the carbon intensity of electricity generated by 50% by 2030, compared to 2018 levels, to around 150gCO<sub>2</sub>/kWh.



### Treble renewable energy output

Develop and build by 2030 enough renewable energy to treble renewable output to 30TWh a year.



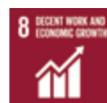
### Help accommodate 10m electric vehicles

Build electricity network flexibility and infrastructure that helps accommodate 10 million electric vehicles in GB by 2030.



### Champion Fair Tax and a real Living Wage

Be the leading company in the UK and Ireland championing Fair Tax and a real Living Wage.



## Accountability for the goals

SSE's Remuneration Committee agreed to align a significant proportion of executive remuneration to the achievement of those four goals (see page 55) and SSE will report comprehensively each year against its progress in meeting its 2030 Goals.

## Linking to the wider SDG framework

SSE recognises that while long-term sustainability is dependent on the achievement of its material long-term goals, there remains further ways in which SSE can enhance the sustainability of its business. The remaining 13 SDGs provide a lens from which SSE can assess these further social and environmental risks and opportunities. It therefore reports against additional SDGs material to its business (see page 15).

## Beyond the SDGs

As well as integrating the UN's SDGs into its business strategy and operations, SSE follows a number of other external best practice frameworks and benchmarks. It also actively seeks to improve its performance against environmental, social and governance (ESG) criteria commonly used by investors and other stakeholders. See page 15 for more detail.

## SSE's approach to sustainability

# SSE'S SUSTAINABILITY FRAMEWORK

SSE's Sustainability Framework is designed to ensure that in achieving its core business objectives, SSE conducts itself in a way that respects the social contract it has with society and creates long-term value. The framework features a core set of policies and procedures supported by a governance structure designed to ensure SSE addresses the most material issues to its key stakeholders and wider society.

## Governance

SSE's governance of sustainability issues within its business is built on the values of transparency, accountability and operating with integrity.

SSE's Chief Executive has overall lead responsibility for sustainability, including at Board-level. The Board is advised on matters of safety, health and environment (SHE) by the Safety, Health and Environment Advisory Committee (SHEAC). The SHEAC has an overarching role in supporting SSE's commitment to be a sustainable company that makes a positive contribution to the communities and societies of which it is part. In fulfilling this role, the SHEAC reviews and oversees the implementation of key sustainability-related Group policies, including the Safety and Health, Environment and Climate Change, and Sustainability policies.

The Group Executive Committee (GEC) is responsible for implementing Group strategy set by the Board. Sustainability is integrated and considered within the Group strategy. The GEC also monitors the operational and financial performance of sustainability related activities across the organisation. It is supported by the Group Safety, Health and Environment Committee in relation to sustainability matters.

More information on SSE's governance structure, and the roles and responsibilities of different committees, and the Remuneration Report can be found in the Corporate Governance section of the Directors' Report in SSE's Annual Report 2019, pages 116 to 139.

## Increasing accountability

To demonstrate its commitment to SSE's approach to sustainability, in March 2019, the Remuneration Committee agreed to align a significant proportion of executive remuneration to progress against the achievement of SSE's new 2030 Goals. These goals represent the most material contribution SSE can make to the SDGs and chime with feedback given by both SSE's shareholders and stakeholders. See page 55 for more information.

"THE CHALLENGE FOR GOOD SUSTAINABILITY GOVERNANCE IS NOT TO HAVE GREAT GOVERNANCE OF A SUSTAINABILITY STRATEGY. RATHER, IT IS TO HAVE SUSTAINABILITY GOVERNANCE OF A GREAT BUSINESS STRATEGY."

Helen Mahy, SSE plc Board Non-Executive Director and Chair of the SHEAC

## Reinforcing future governance of sustainability

On 1 April 2019, SSE created the new role of Chief Sustainability Officer (CSO), with the role reporting directly to the Chief Executive. SSE believes that it is one of only a small number of FTSE 100 companies in which the organisation's principal sustainability role has this reporting line.

The CSO is responsible for advising the Board, Group Executive Committee and business units on sustainability-related issues and strategy.

In addition to reporting directly to the Chief Executive, the CSO has been appointed to the SHEAC (see opposite) and is a member of two of the three SSE Group-wide sub-committees of the Group Executive Committee: Safety, Health and the Environment; and Risk.

The CSO is also a non-executive Director of the Board of SSEPD, the subsidiary company which is responsible for SSE's networks businesses.

# IDENTIFYING MATERIAL ISSUES

The combined challenge of maintaining a secure and affordable supply of energy, while mitigating the impact of producing it – also known as the ‘energy trilemma’ – remains the most material challenge to SSE’s business and the energy industry as a whole.

SSE has mechanisms that allow it to identify further impacts it may have on society, the economy or the environment. Through monitoring trends in the external environment and engaging with its key stakeholders, SSE is able to identify material issues to its business and those with an interest in SSE and the wider industry.

SSE is also guided by international frameworks for sustainable development and the increasing demand for environment, social and governance (ESG) disclosure to ensure it is addressing and reporting on the most material issues to shareholders and wider society, and therefore creating value in a sustainable way.

## EMERGING TRENDS (PAGE 11)

SSE tracks existing and developing trends in the external environment which may influence the way it seeks to meet its business objectives. These trends are not restricted to the energy sector alone, they extend to wider societal issues too. Tracking these trends can highlight challenges and opportunities for the business, its stakeholders and society as a whole, and allows SSE to prepare or respond appropriately.

## WORKING WITH SSE’S STAKEHOLDERS (PAGES 12 TO 13)

Engaging constructively with its key internal and external stakeholders is crucial to help SSE identify issues which are, or are likely to become, material to the company or its stakeholders. By identifying issues that are most material to its stakeholders, SSE is able to focus and prioritise decision-making within the organisation, allowing it to achieve more

positive environmental, social and economic impacts.

Details of how SSE engages with its six core groups of stakeholders and what issues are material to them can be found on pages 12 and 13, alongside examples of specific issues engaged on in 2018/19 and how this impacted decision-making.

## MATERIAL RISKS (PAGE 14)

SSE’s Risk Management Framework and System of Internal Control allow it to manage and respond to 10 Group Principal Risks identified for SSE, which outline the core uncertainties facing the company. Sustainability is considered to varying degrees throughout all of the Principal Risks, with specific sustainability-related issues, in particular climate change, being highlighted as influencing factors.

## GLOBAL FRAMEWORKS AND DISCLOSURE (PAGE 15)

SSE is conscious that it does not operate in isolation and considers the role its business plays in a national and international context. Global frameworks provide SSE with a lens from which the company can address the issue of climate change and other material sustainability-related issues that face the business. They guide SSE to consider issues material to its business in a much wider societal and global sense, allowing it to focus its activities

to ensure it plays a part in addressing global challenges, thereby enhancing the sustainability of its business and its capacity to create value over the long-term.

The most important of these frameworks is the UN’s SDGs which are designed to address some of the biggest challenges facing humanity. SSE has aligned its 2030 Goals directly to them.

### Identifying material issues

# EMERGING TRENDS

## A path to net zero

The first and most significant trend in 2018/19 was the acceleration of evidence that supports a net zero carbon target in the UK. The Intergovernmental Panel on Climate Change published their 1.5 degree report in November 2018, outlining the effect that 1.5 degrees of global warming will have on ecosystems and human lives. That report also described the relatively short window of opportunity that exists to prevent global temperature rises of more than 1.5 degrees. This prompted a business coalition, which included SSE, under the auspices of the Prince of Wales’s Corporate Leaders Group to urge the UK Government to pursue a net zero target for 2050.

At the same time public campaigners, from naturalist David Attenborough to school pupils across the world, helped bring climate change to unprecedented levels of international public concern. This was followed by the publication of the UK’s Committee on Climate Change Net Zero Report in May 2019.

The combination of strengthened public sentiment and increased scientific evidence provides a powerful impetus for accelerated policy action through the early 2020s. SSE firmly supports the adoption of a net zero carbon target by 2050 for the UK and seeks to play a practical role in delivering the renewable electricity and grid infrastructure that will be required to achieve it.

## The Future of the Corporation

In November 2018, the British Academy published its first tranche of research from its new international research and public engagement programme ‘The Future of the Corporation’. The aim of the programme is to develop an evidence base that will serve as a foundation to redefine business for the 21st century and build trust between business and society.

SSE believes this to be a hugely important piece of work and is supporting the programme as it progresses into a practical programme for action that places the creation of social value at the heart of business purpose.

## Ownership of electricity networks

The proposals by the Labour Party in the UK to bring electricity networks into state control have stimulated a debate about the way in which the private companies deliver in the public interest. SSE has sought to respond constructively by working with stakeholders to provide evidence of the public interest delivered. While there is overwhelming evidence that GB consumers have benefited from lower costs, higher reliability and better-quality service following privatisation 30 years ago, SSE is proposing progressive reform to the UK energy system. These reforms should focus firmly on delivering fairness to consumers, enable increased involvement of local communities and ensure network companies contribute to local economies, pay employees fairly and pay taxes on any profits earned.

## Flexibility first

With the transformation of local electricity grids proving to be the key enabler of a localised, low-carbon energy system, developments in 2018/19 have accelerated this transition. An important principle of the newly emerging ‘Distribution System Operator’ (DSO) role is the significance of flexibility to accommodate both new sources of electricity demand, like electric vehicles, and new sources of electricity generation, like small renewable generators. In 2018/19, the electricity network industry agreed to a principle of ‘flexibility first’. This means the industry will pursue ‘smart’ solutions to accommodate both enhanced electricity supply and demand before implementing costly network upgrades. This is an important milestone in the development of the smart grids the country will need in the future.

## Offshore wind for UK benefit

With the dramatic reduction in the cost of delivering offshore wind farms, the sector is expected to play a highly significant role in the UK’s decarbonisation, with an increase from 8GW today to at least 30GW in 2030. At the same time, communities across the country are, rightly, expecting to secure some benefit from investment in offshore wind farms. The UK Government’s mechanism for stimulating this large-scale private investment mechanism is the ‘Contract for Difference’ and in 2019 an important deal was struck between the offshore wind industry and the UK’s Department for Business, Energy and Industrial Strategy. The objective of this Sector Deal is to build the capability of the UK’s supply chain through an industry investment of up to £250m, supporting better, high-paying jobs right across the UK.

Identifying material issues

# WORKING WITH SSE'S STAKEHOLDERS

Successful delivery of SSE's strategy depends on constructive relationships with its stakeholders. By creating open, two-way channels of communication with stakeholders, SSE gains a deeper understanding of their perspectives to help inform decision-making and ensure it delivers the best outcomes for customers, shareholders and wider society.

SSE's stakeholders are people, communities and organisations with an interest in its purpose, strategy, operations and actions and who may be affected by them. SSE has six core groups of stakeholders – energy customers; employees; shareholders; government and regulators; suppliers and contractors; and civil society, communities and NGOs. Meaningful engagement with these stakeholder groups supports the ethos of Section 172 of the Companies Act 2006 which sets out that Directors should have regard to stakeholder interests when discharging their duty to promote the success of the company.

More details of the key stakeholder engagement undertaken at different levels within SSE, through both day-to-day and strategic activities, to inform decision-making and enhance Board understanding are set out in SSE's Annual Report 2019, pages 22 to 23, and 93.

| ENERGY CUSTOMERS   | EMPLOYEES  | SHAREHOLDERS   |
|--|--|--|
| <p>SSE supplies and delivers energy and related services to millions of domestic and business customers across the UK and Ireland, who all expect a quality service they can rely on. Ensuring it provides an inclusive service and meets the needs of its most vulnerable customers is a priority for SSE.</p> <p><b>Material issues</b></p> <ul style="list-style-type: none"> <li>– Affordable and accessible energy</li> <li>– Responsiveness to need and vulnerability</li> <li>– Quality customer service</li> <li>– Using energy efficiently</li> <li>– Impact of industry change</li> </ul> <p><b>Engagement</b></p> <p>Proactive and continual engagement with customers assesses the quality of service provided and allows SSE to understand their current and future needs. Key engagement includes: daily, real-time communication through digital platforms, such as social media; targeted awareness-raising campaigns; and customer feedback forums.</p> | <p>SSE's 20,000 employees have a direct stake in the sustainability of its business. The effective engagement of employees is also a powerful tool for improved business performance. SSE seeks to be a responsible employer with the employee voice representing a core element of its people strategy.</p> <p><b>Material issues</b></p> <ul style="list-style-type: none"> <li>– Opportunities for development</li> <li>– Flexible and family-friendly working patterns</li> <li>– Inclusion and diversity</li> <li>– The opportunity to have a say and make a difference within SSE</li> <li>– Communications with employees in relation to issues such as Brexit</li> </ul> <p><b>Engagement</b></p> <p>SSE undertakes ongoing, two-way employee engagement to ensure it understands their opinions on the workplace. Key engagement includes: structured career conversations; working with trade union partners; all-employee engagement surveys; and communication through internal channels such as the SSE app and employee conferences.</p> | <p>SSE's large and diverse shareholder base is increasingly focused on environmental, social and governance (ESG) performance. As of 31 March 2019, more than one third of SSE's top shareholders were signatories to the International Investors Group on Climate Change and are particularly focused on the governance of climate-related issues.</p> <p><b>Material issues</b></p> <ul style="list-style-type: none"> <li>– Financial performance</li> <li>– Investment plans</li> <li>– Operational performance</li> <li>– Strategic direction of the company</li> <li>– Environmental, social and governance (ESG) performance</li> </ul> <p><b>Engagement</b></p> <p>SSE maintains constructive and regular dialogue with shareholders to ensure their perspectives are considered in decision-making. Key engagement includes: regular financial reporting; the AGM; investor roadshows; attendance at investor conferences; correspondence on specific matters on a reactive basis; and contributing to ESG analyst profiles of SSE.</p> |
| <p><b>Example of 2018/19 engagement</b></p> <p>SSEN launched its Supporting a Smarter Electricity System report, which set out the priorities and principles guiding the transition to DSO in 2017. In 2018, it published the results of its stakeholder consultation on the publication in its Your Response report.</p> <p><b>Outcome for decision-making</b></p> <p>The consultation process has provided valuable feedback to help SSEN ensure the transition to DSO works for all customers, including a desire for more transparency and removing barriers for community-level projects.</p>   | <p><b>Example of 2018/19 engagement</b></p> <p>Over the course of 2018, SSE Energy Services undertook extensive internal communications around the then planned merger with npower, to keep employees up-to-date with changes. The use of Yammer, a social network for employees, proved a particularly effective internal communication tool.</p> <p><b>Outcome for decision-making</b></p> <p>The Q&amp;A sessions with senior leaders on Yammer allowed the business to analyse employee comments and gather insight into the sentiment around particular topics so communications could be tailored appropriately.</p>   | <p><b>Example of 2018/19 engagement</b></p> <p>Over the course of the year, many key shareholders engaged with SSE around its management of climate-related risks and opportunities, to gain a better understanding of this area of uncertainty.</p> <p><b>Outcome for decision-making</b></p> <p>SSE has brought its key climate-related risks and opportunities from its annual CDP Climate Change submission into its Sustainability Report 2019, so the information is more accessible to its shareholders. It has also linked part of executive pay to progress in meeting its 2030 Goals, aimed at tackling climate change.</p>  |

## CASE STUDY

**Stakeholder impact on SSEN Transmission's Business Plan**

SSE's Transmission is business is currently developing its business plan for the RII0-2 price control between 2021 and 2026 that will be determined by energy regulator Ofgem. A key change in Ofgem's approach to RII0-2 is the introduction of enhanced stakeholder engagement to inform network business plans. SSEN has welcomed this positive and constructive process and its 'User Group' has provided significant influence on SSEN's *Emerging Thinking* document.

The User Group has given highly instructive advice to focus

on how the business plan improvements will impact the GB consumer and not just the customers connected to the north of Scotland network, which will be reflected in SSEN's business plan. Furthermore, the User Group have reinforced the critical nature of the north of Scotland in decarbonising the electricity system across the whole of GB.

With many months of activity remaining in the process, it is anticipated that the User Group will be key to SSEN's ability to implement a business plan with stakeholder and public legitimacy.

| GOVERNMENT AND REGULATORS  | SUPPLIERS AND CONTRACTORS   | CIVIL SOCIETY, COMMUNITIES AND NGOS  |
|--|---|--|
| <p>Governments and regulators play a central role in shaping the energy sector. SSE works closely with them to help deliver an energy system that supports achievement of long-term carbon targets and also works in the interest of all energy customers.</p> <p><b>Material issues</b></p> <ul style="list-style-type: none"> <li>– Cost-effective decarbonisation</li> <li>– Fair treatment of customers</li> <li>– Security of energy supplies</li> <li>– Economic impact of investments</li> <li>– Conduct of large businesses</li> <li>– Brexit and its impacts on industry</li> </ul> <p><b>Engagement</b></p> <p>SSE has dedicated teams who work to communicate its business strategy and investment decisions, and to assist the development of regulation and policies which impact on SSE and its customers. Key engagement includes: face-to-face meetings; responses to consultations; and participation in working groups. SSE has a published Political Engagement Statement that sets out the standards it adopts when engaging in advocacy with government and regulators.</p> | <p>Building strong relationship with its supply chain, which consists of around 8,000 suppliers and contractors, is crucial to SSE's successful operation and to maximise cost efficiencies.</p> <p><b>Material issues</b></p> <ul style="list-style-type: none"> <li>– Fair expectation in the delivery of projects</li> <li>– Management of health and safety risks on sites</li> <li>– Economic opportunities for local supply chains</li> <li>– Management of social and environmental impacts</li> </ul> <p><b>Engagement</b></p> <p>SSE works with suppliers to ensure its values on issues such as environmental protection, safety and modern slavery, are upheld throughout its supply chain. Key engagement includes: supplier relationship management with its strategic supply chain partners; quality and health and safety audits; and onsite training.</p> | <p>SSE works in partnership with third-party organisations that bring specialist perspectives on social, environmental and energy- and business-related issues on behalf of energy customers and wider society.</p> <p><b>Material issues</b></p> <ul style="list-style-type: none"> <li>– Environmental protection and decarbonisation</li> <li>– Customer vulnerability and fuel poverty</li> <li>– Employment standards including the real Living Wage and the gender pay gap</li> <li>– SSE's economic contribution and its approach to tax</li> </ul> <p><b>Engagement</b></p> <p>Mature relationships with communities and NGOs are key in supporting SSE's day-to-day operations. Key engagement includes: community consultations; seeking feedback on reports and initiatives; participation in public events; and responding to surveys and consultations.</p> |
| <p><b>Example of 2018/19 engagement</b></p> <p>Engagement in 2018/19 highlighted a need for network companies to do more to demonstrate they are delivering in the public interest, whilst being open to progressive reform to deliver the decentralised and democratised low carbon system of the future.</p> <p><b>Outcome for decision-making</b></p> <p>As a result SSE led number of consultations around RII0 reform, including around transparency and a position paper on fair tax, to explore where network companies can go further in meeting the public interest.</p>  | <p><b>Example of 2018/19 engagement</b></p> <p>In early 2019, SSE issued a modern slavery risk assessment questionnaire to its top strategic suppliers, of which the vast majority responded. SSE asked if appropriate policies are in place and if they undertake audits, training and risk assessments.</p> <p><b>Outcome for decision-making</b></p> <p>Modern slavery will now be added to the agenda at the quarterly meetings between SSE and these strategic suppliers, with a full annual update provided on progress.</p>  | <p><b>Example of 2018/19 engagement</b></p> <p>As a champion of the real Living Wage, SSE joined the Living Hours Steering Group and conducted a number of joint consultation sessions with the Living Wage Foundation on the issue of secure working hours.</p> <p><b>Outcome for decision-making</b></p> <p>SSE is taking part in the Living Hours pilot which sets the standard on responsible working hour practices. It has committed to becoming one of the first organisations to gain Living Hours accreditation in the UK.</p>  |

Identifying material issues

# MATERIAL RISKS

SSE's 10 Group Principal Risks outline the core uncertainties the company must manage and mitigate to meet its strategic objectives. Inadequate management of risk can result in significant social, environmental or economic harm.

SSE's Annual Report 2019 (pages 66 to 71) describes the Principal Risks in detail, along with its Risk Management Framework and System of Internal Control. This report, however, is concerned about the way in which social and environmental factors are considered within that process.

Whilst all the Group Principal Risks are relevant from a sustainability perspective, those with particular relevance are shown below within a green box.

- Increased in materiality for SSE during 2018/19
- No significant change in materiality for SSE during 2018/19

|   |  |
|---|--|
| <p><b>Commodity Prices:</b> The risk associated with the Group's exposure to fluctuations in both the physical volumes and price of key commodities, including electricity, gas, CO<sub>2</sub> permits, oil and related foreign exchange values.</p> | <p><b>Cyber Security and Resilience:</b> The risk that key infrastructure, networks or core systems are compromised or are otherwise rendered unavailable.</p>   |
| <p><b>Development and Change:</b> The risk of failing to recognise and react appropriately to competition, technological advancements and stakeholders' evolving expectations.</p>  | <p><b>Energy Affordability:</b> The risk that the combination of the cost of providing reliable and sustainable energy and the level of customers' incomes means that energy becomes unaffordable to a significant number of SSE's customers. This risk is directly connected to political interventions and commodity price exposure.</p> |
| <p><b>Energy Infrastructure Failure:</b> The risk of national energy infrastructure failure, whether in respect of assets owned by SSE or those owned by others which SSE relies on, that prevents the Group from meeting its obligations.</p>        | <p><b>Financial Liabilities:</b> The risk that funding is not available to meet SSE's financial liabilities, including those relating to its defined benefit pension schemes, as these fall due under both normal and stressed conditions without incurring unacceptable costs or risking damage to its reputation.</p>                    |
| <p><b>Large Capital Projects Quality:</b> The risk that major assets that SSE builds do not meet the quality standards required to support economic lives of typically 15 to 30 years.</p>  | <p><b>People and Culture:</b> The risk that SSE is unable to attract, develop and retain an appropriately skilled, diverse and responsible workforce and leadership team, and maintain a healthy business culture which encourages and supports ethical behaviours and decision-making.</p>  |
| <p><b>Politics, Regulation and Compliance:</b> The risk from changes in obligations arising from operating in markets which are subject to a high degree of regulatory, legislative and political intervention or uncertainty.</p>                    | <p><b>Safety and the Environment:</b> The risk of harm to people, property or the environment from SSE's operations.</p>   |

**Sustainability in the Group Principal Risk context**

Sustainability is considered throughout the Group Principal Risks, with specific sustainability-related influencing factors including: zero tolerance of unsafe behaviour; government interventions and requirements around corporate governance and ethics; human rights and labour standards; inclusion and diversity in the workforce; public policies relating to energy affordability and the low-carbon transition.

Climate change is a core thread that runs through SSE's business strategy. It therefore is a material influencing factor, to different degrees, on each of SSE's Group Principal Risks. Most materially, climate change and the resultant geopolitical response to this, as well as impacting the environment, may influence Commodity Prices, Politics, Regulation and Compliance, Energy Infrastructure Failure and the Energy Affordability Group Principal Risks. In response to both the influential role climate change has on the company and in line with the Task Force on Climate-related Financial Disclosures, climate-related risks and opportunities are outlined on pages 22 to 25 of this report. Finally, SSE's new 2030 Goals are expected to provide a future lens from which the company can address the issue of climate change and other material sustainability-related issues that face the business.

Identifying material issues

# GLOBAL FRAMEWORKS AND DISCLOSURE

SSE's commitment to disclosing and communicating sustainability information coincides with the global trend that investors and wider stakeholders increasingly recognise the value of companies' impacts beyond financial metrics. As well as allowing stakeholders to benchmark SSE's performance and strategy, these frameworks provide guidance to SSE on where it can create greater value for shareholders and society.

**Contributing to the UN's SDGs**

The UN's Sustainable Development Goals (SDGs) are the primary framework SSE uses to report and guide its meaningful contribution to sustainable development. While SSE contributes to many of the 17 SDGs, it believes it is more meaningful to report against the SDGs that are most material to its business. See page 8 for information on SSE's alignment of its business strategy to the four SDGs identified as highly material to the company and read more about SSE's contribution to these SDGs on pages 16 to 59.

As well, as the four highly material SDGs, SSE's materiality assessment identified four other SDGs that are material to the company.

|  |  |  |  |
|--|--|--|--|
|   |   |   |   |
| <p><b>Gender Equality</b></p> <p>The energy industry is a traditionally male-dominated sector. SSE must encourage more women IN, ON and UP in its business to ensure women are represented at all levels of the company.</p> <p><b>Pages 56 to 59.</b></p> | <p><b>Reduced Inequalities</b></p> <p>SSE operates across some of the most remote places in the UK and Ireland, and believes it should promote economic growth that creates and shares value with people, communities and supply chains.</p> <p><b>Pages 47 to 50.</b></p> | <p><b>Responsible Consumption and Production</b></p> <p>SSE relies on various natural resources during construction and operation of its assets. It must use these resources efficiently to minimise waste and adverse environmental impacts.</p> <p><b>Pages 18, 19, 62 and 63.</b></p> | <p><b>Life on Land</b></p> <p>The environment is essential in sustaining society and SSE must actively manage any positive or negative impacts it has on ecosystems and habitats through its activities.</p> <p><b>Pages 62 to 63.</b></p> |

**Becoming a signatory to the UNGC**

In 2018/19, SSE became a signatory to the United Nations Global Compact (UNGC), the world's largest corporate sustainability initiative, committing to take action that advances societal goals. By becoming a signatory SSE commits to conducting its business in line with universal principles on the environment, human rights, labour and anti-corruption.

**Investor demand for ESG disclosure**

There is growing demand from the investor community for increased disclosure from companies on environmental, social and governance (ESG) performance. SSE's disclosure of ESG performance allows it to communicate material issues to investors, and in turn allows these investors to assess the level of risk their investment may be at. SSE engages with the ESG investor community through:

- **Subject-specific investor questionnaires** – SSE responds annually to questionnaires including: CDP Climate Change, Water and Forest Programmes on how it manages these environmental issues; the Workforce Disclosure Initiative, on its management of workforce related issues; and the Bloomberg Gender-Equality Index which benchmarks the top companies globally which are committed to advancing women in the workplace.
- **ESG analyst surveys** – SSE actively engages with ESG analyst companies, including Vigeo Eiris, Sustainalytics and MSCI, to provide feedback and input into their ESG profiles of SSE.

**Following best practice reporting guidelines**

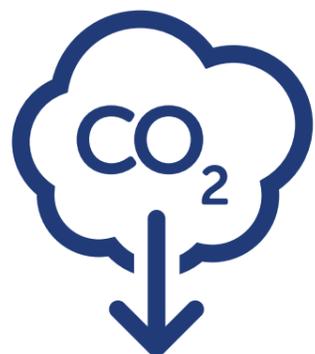
To clearly demonstrate SSE's sustainability performance to its stakeholders, SSE follows best practice reporting guidelines and requirements. This includes highlighting where its performance indicators meet Global Reporting Initiative (GRI) Standards for global sustainability reporting (see pages Pages 62 to 63) and also its performance in meeting the Non-Financial Reporting requirements of the Companies Act 2006, which necessitate additional disclosure of non-financial impacts (see page 25 of SSE's Annual Report 2019).



# CLIMATE ACTION

The call to take urgent action to combat climate change and its impacts has never been stronger, with increasing public pressure for governments and businesses to act.

SSE recognises the effects of climate change pose a serious risk to society and to SSE's operations. It also understands that decarbonisation represents a significant opportunity for its businesses. SSE's business strategy therefore has addressing the challenge of climate change at its core. Its core renewable generation assets and electricity networks provide the low-carbon infrastructure to support the transition to a low-carbon electricity system, complemented by flexible thermal generation, offsetting the variability of renewables output.



## Cut carbon intensity by 50%

SSE will reduce the carbon intensity of electricity generated by 50% by 2030, based on 2018 levels, to around 150gCO<sub>2</sub>e/kWh.



The UN's Sustainable Development Goal (SDG) 13, Climate Action, urges immediate global action to reduce carbon emissions and tackle climate change. SSE's performance against Climate Action's specific targets is summarised below, followed by an explanation of the targets, their relevance to SSE and a summary of SSE's contribution.

### Performance summary

| SDG target                            | KPI   | Unit                             | 2018/19              | 2017/18              |
|---------------------------------------|---|----------------------------------|----------------------|----------------------|
| <b>13.1 Climate adaptation</b>        | <b>Weather-related resilience expenditure by SSEN Distribution:</b> |                                  |                      |                      |
|                                       | Overhead line replacement and refurbishment                         | £m                               | 36.4 <sup>1</sup>    | 35.6                 |
|                                       | Tree cutting  | £m                               | 19.7 <sup>1</sup>    | 17.7                 |
|                                       | Flood protection  | £m                               | 0.8 <sup>1</sup>     | 1.5                  |
| <b>13.2 Integrate national policy</b> | Scope 1 carbon emissions <sup>2</sup>                               | Million tonnes CO <sub>2</sub> e | 8.81 <sup>(A)</sup>  | 10.16 <sup>(A)</sup> |
|                                       | Scope 2 carbon emissions <sup>3</sup>                               | Million tonnes CO <sub>2</sub> e | 0.72 <sup>(A)</sup>  | 0.91                 |
|                                       | Scope 3 carbon emissions <sup>4</sup>                               | Million tonnes CO <sub>2</sub> e | 9.29 <sup>(A)</sup>  | 10.63                |
|                                       | Total carbon emissions <sup>5</sup>                                 | Million tonnes CO <sub>2</sub> e | 18.83 <sup>(A)</sup> | 21.70                |
|                                       | Carbon intensity of SSE's generated electricity <sup>6</sup>        | gCO <sub>2</sub> e per kWh       | 284 <sup>(A)</sup>   | 305                  |
|                                       | SSE's CDP Climate Change Programme response score                   | Rating                           | A-                   | B                    |

1 2018/19 data may be subject to minor adjustment before final inclusion in the regulatory reporting pack published to Ofgem in July 2019.  
 2 Scope 1 comprises electricity generation (includes energy bought in under power purchase agreements), operational vehicles and fixed generation, sulphur hexafluoride emissions and gas consumption in buildings.  
 3 Scope 2 comprises electricity consumption in operations (generation, transmission and distribution) and non-operation buildings and distribution losses.  
 4 Scope 3 comprises upstream emissions associated with the extraction, refining and transport of raw fuels purchased, SSE transmission losses, gas sold and business travel.  
 5 GHG emissions from SSE's Joint Ventures are excluded. For more detail see SSE's GHG Reporting Criteria at [sse.com/sustainability](http://sse.com/sustainability).  
 6 SSE's 2030 carbon intensity target is based on generation emissions only.  
 (A) Where you see the (A) 'Assurance symbol' in this report, it indicates data has been subject to assurance. For the limited assurance opinion see [sse.com/sustainability/reporting-and-policy/](http://sse.com/sustainability/reporting-and-policy/).

| SDG target  | Why it is important to SSE  | How SSE contributed in 2018/19  |
|---|---|---|
| <b>Climate adaptation</b><br>13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries | SSE is concerned to ensure the reliability of electricity supplies to its customers. The physical impact of climate change, such as extreme weather, has the potential to interrupt this supply of energy. Extreme weather events pose a particular threat to the resilience of SSE's electricity networks. Other risks include flooding of assets, such as electrical sub-stations and generation plant.   | <ul style="list-style-type: none"> <li>SSEN invests in its distribution networks in storm resilience activities;</li> <li>SSEN provides a Resilient Communities Fund to support local communities equip themselves to respond to emergency incidents.</li> </ul>  |
| <b>Integrate national policy</b><br>13.2 Integrate climate change measures and policies into national policies, strategies and planning         | Climate change policy in the UK is underpinned by the Climate Change Act 2008 and in Ireland it is the Climate Act 2015. These laws provide the legislative context for business decisions taken by SSE, of which its target to reduce the carbon intensity of the electricity it generates by 50% by 2030 is the most important in aligning with these national policies. Furthermore, SSE works closely and constructively with governments to support the formation of policy in support of the Paris Agreement on Climate Change. | <ul style="list-style-type: none"> <li>SSE made the case for a net zero carbon target in the UK for 2050;</li> <li>SSE reduced the carbon intensity of the electricity it generated as well as its total carbon emissions;</li> <li>SSE continued its advocacy for a strong carbon price;</li> <li>SSE made progress in its 2018 CDP submission and in meeting the Task Force on Climate-related Financial Disclosures (TCFD) recommendations;</li> <li>SSE Disclosed, for the first time, the financial quantification of its most material climate-related risks and low-carbon opportunities.</li> </ul> |

## MEASURING CARBON PERFORMANCE

### Carbon intensity

In 2018, SSE set a new target to reduce the carbon intensity of its electricity production by 50% by 2030, based on 2018 levels. Meeting this ambition means the carbon intensity of SSE's generated electricity is targeted to be around 150gCO<sub>2</sub>e/kWh by 2030. If achieved, SSE will have cut its carbon intensity by 75% from 2006 levels.

SSE's Group-wide carbon intensity target supports carbon policies in both the UK and Ireland. In November 2018, SSE became a founding signatory of Business in the Community Ireland's Low Carbon Pledge, which commits to reduce scope 1 and scope 2 emissions intensity by 50% by 2030.

Between 2017/18 and 2018/19 the carbon intensity of SSE's generated electricity fell by 7%, from 305gCO<sub>2</sub>e/kWh to 284gCO<sub>2</sub>e/kWh. This reduction in carbon intensity was a result of a record year of renewable generation output following SSE's investment in additional capacity over a number of years, combined with a reduction in the coal-fired generation and gas- and oil-fired generation output.

SSE reduced the carbon intensity of the electricity it generated as well as its total carbon emissions.

# 284 gCO<sub>2</sub>e/kWh

SSE's 2018/19 carbon intensity of generated electricity

### Improving the quality of GHG data

Over the past few years SSE has been improving the quality and quantity of its environmental data indicators. This has been to ensure that data collected and reported is relevant, consistent and material, and has been through a rigorous process.

In terms of carbon emissions data, with guidance from PwC who provides limited assurance of its greenhouse gas (GHG) data on an annual basis, SSE has extended its scope 3 data points to include gas sold to customers and electricity losses from its electricity transmission network. It has also been working towards understanding its suppliers' GHG emissions, which will be reported in future years.

In 2018/19, SSE expanded its scope 2 emissions data to now include electricity consumption in operational sites, such as power stations. This has further improved the quality of SSE's GHG data and allows the company, and its stakeholders, to get a better understanding of SSE's environmental impacts.

SSE has a well-established strategy to contribute to the low-carbon transition: to reduce the carbon intensity of its own operations by shifting towards a less fossil fuel intensive generation portfolio; and to support the UK to decarbonise by enabling more renewable generation to connect to its electricity transmission network in the north of Scotland. Read about SSE's performance against this strategy on page 29 of SSE's Annual Report 2019.

Carbon intensity of SSE's electricity generation compared to 2020 and 2030 targets



### 2018/19 carbon performance explained

In 2018/19, SSE's total carbon emissions (scope 1, 2 and 3) fell by 13% compared to the previous year – from 21.7 million tCO<sub>2</sub>e to 18.8 million tCO<sub>2</sub>e. This was largely a result of a 13% reduction in scope 1 emissions which contributed 47% of SSE's total carbon emissions.

**Scope 1 emissions** are direct greenhouse gas emissions that occur from sources owned or controlled by a company. For SSE this includes emissions arising from the burning of fossil fuels in the generation of electricity, fuel consumed in operational vehicles and fixed generation, sulphur hexafluoride emissions and gas consumption in buildings.

SSE scope 1 emissions reduced by 13% as a result of a fall in thermal generation carbon emissions, which contribute 99% of SSE's total scope 1 emissions, by 13% (from 10.1 million tCO<sub>2</sub>e to 8.76 million tCO<sub>2</sub>e). This was due to a reduction in thermal generation output during 2018/19.

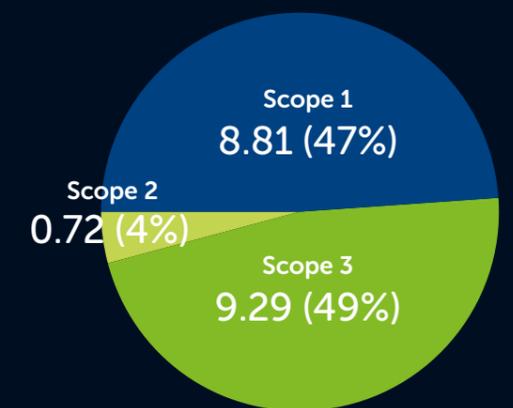
**Scope 2 emissions** are indirect greenhouse gas emissions arising from the generation of purchased electricity consumed by the company. SSE's scope 2 emissions include electricity distribution losses (electricity lost when electricity is transported through its distribution network) and electricity consumption in non-operational and operational buildings and substations (for the Transmission and Distribution businesses).

SSE's scope 2 emissions reduced by 21% between 2017/18 and 2018/19, from 0.91 million tCO<sub>2</sub>e to 0.72 million tCO<sub>2</sub>e, due to lower electricity losses on SSE's electricity distribution networks and changes in the carbon intensity of the UK electricity grid due to the decarbonisation of generation connected.

**Scope 3 emissions** Scope 3 emissions are indirect greenhouse gas emissions resulting from a company's activities, but which occur from sources not owned or controlled by the company. For SSE this includes upstream emissions associated with the extraction, refining and transport of raw fuels purchased for use in its electricity generation activities, electricity transmission losses (electricity lost when electricity is transported through its transmission network), emissions arising from customer consumption of gas that SSE sells to them, and emissions from business travel.

SSE's scope 3 emissions decreased by 13%, from 10.63 million tCO<sub>2</sub>e in 2017/18 to 9.29 million tCO<sub>2</sub>e in 2018/19. This reflects the reduction in the raw fuel purchased (and therefore the carbon emissions associated with its extraction, refining and transport) as thermal generation output decreased, as well as a reduction in the volume of gas sold due to a combination of lower numbers of gas customers, impacts of weather and energy efficiency measures. Changes in the carbon intensity of the UK electricity grid also contributed to the reduction in SSE's scope 3 emissions.

SSE's 2018/19 carbon emissions by scope (million tonnes CO<sub>2</sub>e (% of total emissions))



## Developments in climate action

### May 2018

SSE sets a target to halve the carbon intensity of its generated electricity by 2030, based on 2018 levels.

### Jun 2018

The Committee on Climate Change (CCC) publishes 2018 progress report to UK Parliament highlighting the power sector has contributed to a 75% reduction in UK carbon emissions since 2012.

### Oct 2018

The International Panel on Climate Change publish a report highlighting that much more urgent action than thought before is needed to avoid dangerous impacts of climate change.

### Nov 2018

SSE joins other businesses to call for the UK Govt. to set a net zero emissions target by 2050.

SSE's Chief Executive launches a new study demonstrating the European power sector can become fully carbon neutral by 2045.

### Jan 2019

SSE joins businesses and NGOs to call for the Scottish Govt. to set a net zero emissions target by 2050.

### Mar 2019

UK Govt. publishes its Offshore Wind Sector Deal as part of the UK's Industrial Strategy.

### May 2019

UK Parliament declares environment and climate emergency.

The CCC publishes a report setting out how the UK can achieve net zero greenhouse gas emissions by 2050.

The Scottish Govt. adopts the CCC's recommendation for the country to be a net zero greenhouse gas emissions economy by 2045.

UK Govt. confirms its commitment to a strong carbon price.

## ADVOCATING FOR CLIMATE ACTION

SSE advocates in an open and fair way on policies and issues that have a material impact on its business and its customers. Addressing the issue of climate change is at the heart of SSE's business strategy and over the course of 2018/19 it advocated on key issues relating to this topic, including:

- Promoting a strong carbon price**  
 SSE continued to promote a strong carbon price by advocating to the UK Chancellor, along with other power companies ahead of the Budget in November 2018, that the Government should keep the Total Carbon Price stable during the period of uncertainty around Brexit and continue the UK's future participation in the EU Emissions Trading Scheme (ETS). SSE welcomed the Government's commitment in May 2019 to a strong carbon price. SSE also supported carbon pricing through submissions to consultations on Ireland's National Energy and Climate Plan.
- Making the case for offshore wind**  
 SSE made the case for increased UK offshore wind ambitions setting out the proven ability of offshore wind to deliver clean power cost effectively at a time when new nuclear is facing challenges, and welcomed the agreement of the UK Government's Offshore Wind Sector Deal in March 2019. SSE has also been a vocal advocate for the development of offshore wind in Ireland, and particularly for support of this technology through Ireland's upcoming Renewable Electricity Support Scheme.
- Towards a net zero future**  
 SSE joined climate NGOs and leading businesses in calling for governments in the UK to legislate for tougher and quicker action, and the adoption of a net zero emissions target by 2050. In addition, in his role as Vice President of industry body Eurelectric, SSE's Chief Executive Alistair Phillips-Davies launched a new study that demonstrates how the European power sector can become fully carbon neutral by 2045 through investment in renewable energy and electricity networks.

## DILEMMA

### Net zero: the question is not if, the question is how

The publication by the Committee on Climate Change of its Net Zero Report is proving to be an important moment in the UK's efforts to combat climate change. The Report clearly recommends urgent action by Government to legislate for a net zero target based on both technical feasibility and cost improvements that have emerged. SSE firmly agrees with this assessment and believes an accelerated path to limit global warming to no more than 1.5 degree centigrade must be pursued.

The question now, therefore, is not whether there should be a net zero carbon target, the question now must be, 'how can we meet it?'

The rapid and ongoing decarbonisation of electricity proves to be an instructive illustration. However, it is known that carbon must be removed from both

the UK heat and transport sectors simultaneously.

The dilemma is the way in which the transport and heat sectors are incentivised sufficiently to bring about the pace of change that will be required through the 2020s.

To meet the additional energy demand for heat and transport, more renewables will mean raising ambitions in offshore wind, restarting onshore wind and pursuing an active pro-renewables policy framework. Tackling heat emissions quickly and urgently is needed, as well as driving forward policies for an orderly electrification of the UK's vehicle fleet.

That's why SSE is calling on the UK Government to take a bold, decisive, leadership position and implement an ambitious policy framework which can enable the scale of innovation and investment needed.

## ADAPTING TO A CHANGING CLIMATE

Global temperatures in 2018 were the fourth warmest on record and the impact of a warming climate may impact on SSE's assets, systems and people. SSE has identified the risk of storm and flooding damage to its electricity networks as a material risk to be both managed and mitigated (see page 22 for more detail).

As a result SSE invests in maintenance and emergency response solutions, resilience funds for local communities and emergency response procedures to ensure customers have a continuity of electricity supply. In the case where faults are unavoidable, SSE's Distribution business maintains an extensive register of vulnerable customers in order to provide additional support to ensure their welfare (see pages 30 to 31).

## CASE STUDY

### Improving the resilience of SSEN's assets to flood damage

As well as investing in emergency responses when its electricity distribution networks are damaged by adverse weather, SSEN also invests in precautionary measures in areas where it anticipates its assets could be impacted in the future.

In 2019, SSEN took the decision to invest £4.5m to elevate a substation near Osney Island, a riverside village in Oxfordshire, to safeguard it from the risk of flood damage. The investment will raise the substation above the flood risk level and ensure that the power supply to over 10,000 customers in the local area is protected.

Anticipated to be completed in October 2020, the works were prompted by concerns over potential flooding from the River Thames, and the smaller streams which surround the island, and will involve replacing outdoor equipment which is sensitive to flood levels by constructing an elevated building on part of the existing site.

Investments such as this are vital in improving the resilience of SSEN's network to adverse weather events, which are increasing in frequency with changes in climate.

## INCREASING CLIMATE-RELATED DISCLOSURES

For financial markets and the wider economy to properly recognise the cost of carbon emissions to future prosperity, the enhancement and disclosure of quality carbon data is of vital importance. That's why SSE fully supports the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD) and has committed to meet them in full by March 2021.

The TCFD framework requires a cross-functional approach, the internalisation of non-financial data by finance professionals, as well as the presentation of long-term trends to provide important information to investors on climate-related information with a focus on financial disclosure.

To move SSE on along its pathway to full TCFD disclosure, SSE has improved the quality of information in its Annual Report and in its annual disclosure to CDP's Climate Change Programme in 2018, which for the first time

addressed the TCFD recommendations. In 2018, SSE was awarded an 'A-' for its response to the CDP Climate Change Programme.

In addition, this year SSE has presented its overarching climate-related risks and opportunities in this Sustainability Report. These climate-related risks and opportunities are more comprehensive, describe the impact to SSE, along with information on the financial impact of the risk or opportunity to the business.

It is SSE's aim to present this information in its annual financial reports in the next reporting cycle as well as to continue to respond to the CDP Climate Change Programme and further improve its disclosures.

SSE will closely watch the developments of others and will listen views of stakeholders to develop its approach further.

## A-

SSE's 2018 CDP Climate Change Programme score

**TCFD** | TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

# CLIMATE-RELATED RISKS AND OPPORTUNITIES

## PHYSICAL RISKS related to the physical impact of climate change

| Physical risk factors that impact SSE and SSE's mitigating actions:  | Potential financial impact of the physical risk of climate change to SSE's business:   | Potential financial impact  |
|--|--|---|
| <p><b>Longer term changes in climate patterns cause sustained higher temperatures that may result in lower rainfall and reduced wind levels.</b></p> <p>These changes may impact SSE's renewables output and associated earnings.</p> <p>While the opportunity to mitigate against year-to-year weather variability is limited, there is an element of geographical and technological diversity amongst SSE's renewable portfolio providing a natural hedge to changing weather patterns within and between years. Furthermore, SSE has crisis management and business continuity plans in place to deal with severe weather events that can damage energy assets.</p> | <p>Based on SSE's long-term monitoring of weather changes and current forecasts, a plausible scenario has been established of significantly below-average rainfall and of low wind. The combination of both these weather impacts will result in reduced renewable generation output and associated earnings. This weather risk is a perennial feature of risk for SSE as the largest generator of renewable electricity in the UK and Ireland.</p> <p><b>Weather patterns affect renewable output and in any one year the potential adverse financial impact on renewable earnings is estimated to be around £100m.</b></p>   | <p><b>Around £100m potential adverse impact on one year of earnings</b></p>               |
| <p><b>Increased severity of extreme weather events, such as storms, floods and heat waves bring prolonged extreme temperatures, wind or rainfall.</b></p> <p>This may damage network assets resulting in loss of incentive revenue and increased maintenance for SSE's Distribution Networks business (SSEN).</p> <p>To mitigate these impacts SSE monitors short- and long-term weather conditions; has crisis management and business continuity plans; and has a continuous programme of investment in strengthening and improving the resilience of the electricity network.</p>   | <p>To estimate a potential financial impact, it is assumed that the next distribution price control (2023 to 2028) will be of similar value and size as the current RIIO-ED1 distribution price control (2015 to 2023). It is also assumed that for three years fault costs will increase by 10% and for two of these years we will see a decrease in annual incentive revenue by an additional 10%. It is also forecast that another two years of extreme weather will cause an additional 20% increase in fault related costs and a similar decrease in incentive income. This is consistent with the number of faults and current RIIO-ED1 incentive and penalty methodology.</p> <p><b>The estimated cost of faults and loss of incentive income over the next 10 years may result in a potential reduction of earnings of up to £145m cumulatively.</b></p> | <p><b>Up to £145m potential adverse impact on earnings cumulatively over 10 years</b></p> |

The tables below and on pages 24 and 25 outline the next step on SSE's journey to meet the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). The objective is to present analysis of the potential financial impact of climate-related effects on its business.

The analysis does not constitute forward looking guidance, rather it explores uncertain yet plausible outcomes to support the aim of providing consistent, comparable and clear climate-related financial information. They are presented as high-level estimates and are likely to change and evolve in the future as our thinking matures. They are in the spirit of the TCFD recommendations and SSE intends to meet all TCFD recommendations by 2021.

## TRANSITION RISKS related to the transition to a lower-carbon economy

| Transition factors that influence SSE:  | Key mitigation by SSE:  | Potential financial impact of the transition risk of climate change to SSE's business:   | Potential financial impact   |
|---|---|--|--|
| <p><b>Policy risk: Stretching climate change policy results in the closure of unabated gas assets from 2030 onwards.</b></p> <p>The low-carbon transition requires a significant increase in renewable generation. Flexible generation is required to provide electricity when renewable output is low. In the short-term (by the end of 2020s) gas generation is likely to provide that flexibility. However, to meet climate change commitments the UK and Irish governments may strengthen climate change policies and require thermal generation to be removed or abated in the medium- to long-term (beyond 2030).</p> | <ul style="list-style-type: none"> <li>SSE continues to invest in a diversified generation portfolio of renewable and thermal assets and engages with UK and Irish Governments, European Commission, Members of European Parliament and others on low-carbon policy.</li> <li>SSE has 10 years' experience of working towards commercial demonstration of Carbon Capture and Storage technology in the UK and experience of working on hydrogen storage projects in partnership with others and monitors developments in order to adapt to an unexpected change in environmental or carbon policy. The costs associated with decommissioning is factored into the end-of-life plans for ageing plant.</li> </ul>  | <p>SSE's existing 5.3GW fleet of installed gas- and oil-fired generation will be nearing the end of its expected life by the end of the 2020s. However, 570MW of Combined Cycle Gas Turbine capacity will still be in operation in 2030 and beyond. It is a plausible scenario that this capacity will not be able to generate beyond 2030. It is therefore assumed that the financial impact of this policy change is a loss of five years of forecast revenue for the remaining life of these assets offset against revenue from multifuel assets.</p> <p><b>The early closure of the remaining gas assets taking account of the cost to mitigate is estimated to have an adverse impact on earnings of up to £300m cumulatively over five years after 2030.</b></p> | <p><b>Up to £300m potential adverse impact on earnings cumulatively over five years after 2030</b></p> |
| <p><b>Technology risk: Electrification takes place at such speed it overwhelms the distribution network.</b></p> <p>National Grid's 'Two Degree' Future Energy Scenario 2018 expects electric vehicles (EVs) to grow in GB to around 10 million by 2030 and SSE's Distribution business is preparing for such a scenario. However, a disorderly and faster-than expected increase in the uptake of EVs has the potential to affect the reliability of the distribution network, resulting in significant costs to reinforce the network to take account of electrification.</p>   | <ul style="list-style-type: none"> <li>SSEN is taking a leadership role on electrification and has set itself a 2030 target to 'build network flexibility that helps accommodate 10 million electric vehicles in the UK'.</li> <li>SSEN is working with industry, policy-makers and the regulator to support a phased transition from a Distributed Network Operator (DNO) to a Distributed System Operator (DSO). SSEN's approach is detailed in its DSO strategy Supporting a Smarter Electricity System.</li> <li>SSEN continues to progress innovation through Ofgem funded structures, and in March 2019 secured £13.8m of funding for Project Local Energy Oxfordshire (LEO) to explore the growth in local renewables, EVs, battery storage, vehicle-to-grid (V2G) technology and demand side response.</li> </ul> | <p>An unexpected rapid and exponential uptake of EVs in GB will have the potential to disrupt the electricity network and impact the reliability of the network assets. Additionally, there would likely be significant additional expenditure incurred due to the distressed nature of delivering capital investment as a result of a GB wide rapid uptake of EVs including the impact on the supply chain.</p> <p><b>The financial impact of rapid electrification cumulatively over the next five years on earnings could be between £50m to £100m.</b></p>   | <p><b>Between £50m to £100m impact on earnings cumulatively over five years</b></p>                    |

# CLIMATE-RELATED RISKS AND OPPORTUNITIES

## Climate-related OPPORTUNITIES

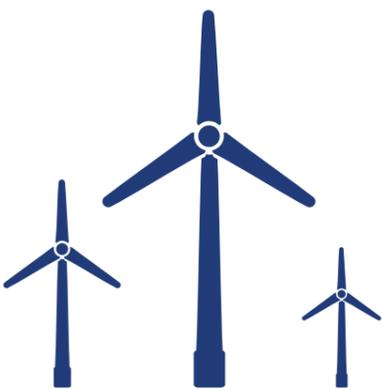
| Opportunity described:  | Potential financial impact of the opportunity:  | SSE's actions to realise the opportunity:   | Potential financial impact   |
|---|---|---|--|
| <p><b>Development and expansion of SSE's off- and on-shore wind pipeline to support a low-carbon electricity system.</b></p> <p>In a low-carbon world, new off- and on-shore wind has an important role to play. The UK Government's sector deal has committed to an additional 30GW of installed offshore wind capacity by end of 2030. The combination of strong carbon price, high energy price and continued access to Contracts for Difference (CfD) or other price stabilisation mechanism would continue to support an investment case for SSE in off- and on-shore wind projects.</p>   | <p>SSE has an off- and on-shore wind development pipeline at varying stages of development of over 8GW. The portfolio has the potential to generate significant additional earnings for SSE. However, SSE is not yet in a position to quantify the scale of this opportunity given the imminent competitive CfD auction being run by the UK Government. The 2019 CfD auction is designed to enable the development of up to 6GW of new renewable energy projects in the UK.</p> <p><b>The potential financial impact of this climate-related opportunity represents one of the most significant available to SSE both in the short- and long-term. Given the highly competitive – and current – nature of the CfD process, it is not appropriate to give estimates of the scale of opportunity at this time. SSE expects to give TCFD-style disclosure of the renewables pipeline opportunity in the future.</b></p>  | <ul style="list-style-type: none"> <li>SSE has a pipeline of over 8GW of potential new wind development opportunities. With over 1GW of potential new onshore wind projects and a further 7GW of potential offshore wind projects. SSE will develop these projects in partnership and will recycle some capital to support further development.</li> <li>SSE has interests in three UK wind projects which are expected to be eligible for the CfD in 2019: 50% of Dogger Bank (up to 3.6GW); Seagreen (Phase One up to 1,050MW) and Viking onshore wind farm on Shetland (around 450MW). SSE has further offshore wind project interests in Seagreen Phases 2 and 3, Greater Gabbard Extension and Arklow Bank Wind Park in Ireland.</li> <li>SSE engages with UK and Irish Governments, European Commission, Members of European Parliament and others on low-carbon policies.</li> </ul> | <p><b>Highly significant opportunity for additional growth.</b></p>  |
| <p><b>Investment in transmission infrastructure in the north of Scotland to support the delivery of an accelerated low-carbon electricity system.</b></p> <p>The UK Government's Climate Change Act 2008, its Clean Growth Strategy (published 2017), and its Industrial Strategy, describe the mechanisms for the UK to transition to a low-carbon economy. These policies have led to an increase in renewable generation contributing to the GB electricity network. With the Committee on Climate Change report on Net Zero, an accelerated path towards further decarbonisation is plausible. SSEN's transmission network plays a key role connecting the sources of renewable generation to the areas of high demand.</p> | <p>SSEN Transmission has a current pipeline of transmission projects with a total planned investment of over £600m up to 2021 as part of RIIO-T1. For the next price control period from 2021 to 2023 SSEN has drafted its Emerging Thinking 2019 paper that forms the basis of the RIIO-T2 business plan. This plan identifies potential investment in the transmission network in the range of £300 to £700 million per annum to support the potential connection of 7.5GW of new renewables in this period. In addition, there is potential for investment in three island links of around £1.5bn for SSEN over the next 10 years.</p> <p><b>Additional earnings of up to £100m per year over the period 2022 to 2030 as a result of capital investment*.</b><br/> <i>* this is reflective our Emerging Thinking 2019 paper and investment up to 2026 with steady state investment for the remaining period to 2030.</i></p>   | <ul style="list-style-type: none"> <li>SSEN operates the transmission network in the north of Scotland, where the vast majority of electricity transmitted is from renewable sources. This network enables the renewable energy generated in the north of Scotland to be transmitted down south to areas of higher demand.</li> <li>In 2018/19 SSEN increased the renewables capacity supported by its network by over 1GW, installed renewable electricity generation capacity connected to SSEN's transmission network grew from 3.3GW in April 2013 to over 6GW in April 2019.</li> <li>SSEN has a pipeline of transmission projects, with a total planned investment of over £600m up to 2021.</li> </ul>   | <p><b>Additional earnings of up to £100m per year over the period 2022 to 2030.</b></p>                                  |
| <p><b>Decarbonisation of the electricity system provides the opportunity to increase output and earnings from flexible and renewable hydro assets.</b></p> <p>As the energy system decarbonises, an increasing volume of wind energy is coming onto the GB system. Flexible generation and storage are required to provide electricity when wind output is low. SSE's hydro generation assets (inc. pumped storage) are in a good position to take advantage of an increase in value of flexible output.</p>  | <p>SSE has 1,450 MW of existing hydro capacity (inc. pumped storage) and has planning consent for an additional 600MW of pumped storage. SSE has invested in its hydro generation assets to increase flexibility to the UK grid. It is assumed that by providing more flexible hydro output from existing assets SSE could generate an additional £15m per annum through generating additional volumes and/or capturing high prices during system stress periods. Further, balancing market revenue could generate an additional income of up to around £8m a year. These values will vary depending on power prices which are uncertain.</p> <p>Furthermore, the successful development of the consented Coire Glas Pumped Hydro plant could potentially earn additional revenue between 2025 and 2030. This is based on the current revenue projections for the existing pump storage capacity that SSE owns.</p> <p><b>Up to £400m increase in revenue by providing flexible hydro output and investing in new pumped storage output over the next 10 years.</b></p> | <ul style="list-style-type: none"> <li>SSE is investing in a diversified generation portfolio of renewable and flexible generation assets (including hydro generation assets).</li> <li>SSE has 400MW of run-of-river hydro, 750MW of flexible hydro alongside 300MW of pumped storage.</li> <li>In 2017/18 and 2018/19, and despite challenging weather conditions SSE's hydro fleet delivered increased value from their increased flexibility, enabled by enhancements to SSE's commercial management of these assets.</li> </ul>  | <p><b>Up to £400m potential additional revenue cumulatively over 10 years.</b></p>                                       |
| <p><b>Decarbonisation of transport presents opportunities for SSE's Networks business.</b></p> <p>National Grid's 'Two Degree' Future Energy Scenario 2018 anticipated electric vehicles (EVs) to grow in GB to around 10 million by 2030.</p>  | <p>The uptake of EVs on SSE's networks is likely to provide a significant investment opportunity to support the low carbon transport transition. Studies forecast that EVs will contribute to between £400m to £1bn of capital investment by 2030 for SSE in its network areas. To calculate the revenue impact of rapid electrification of vehicles, SSE has profiled the investment predictions of a fast and average uptake over the period up to 2030.</p> <p><b>Between £200m and £400m potential increase in cumulative revenue from investment in networks to support electrification of transport up to 2030.</b></p>   | <ul style="list-style-type: none"> <li>SSEN is taking a leadership role on electrification and has a 2030 target to 'build network flexibility that helps accommodate 10 million electric vehicles in the UK', and during 2018/19, SSEN invested a total of £370.7m in electricity distribution networks.</li> <li>SSEN continues to progress innovation through Ofgem funded structures, and in March 2019 secured £13.8m of funding for Project Local Energy Oxfordshire (LEO) to explore the growth in local renewables, electric vehicles, battery storage, vehicle-to-grid (V2G) technology and demand side response.</li> </ul>   | <p><b>Between £200m to £400m cumulative revenue from investment to support electrification of transport to 2030.</b></p> |



# AFFORDABLE AND CLEAN ENERGY

With the vision of being a leading energy company in a low-carbon world, it is SSE's responsibility to help ensure energy is affordable, reliable and sustainable for all.

SSE's strategy is to create value through disciplined investment in developing and operating the low-carbon energy infrastructure and related services that society needs. SSE has the largest renewable capacity across the UK and Ireland, and its significant investment in renewable energy has an important role to play in providing the clean energy these countries need in the transition to low-carbon electricity systems. It works to ensure that the energy it supplies to customers is not only affordable but is accessible too, and it strives to offer services that are inclusive to all.



## Treble renewable energy output

SSE will develop and build by 2030 enough renewable energy to treble renewable output to 30TWh a year.



While the UN's Sustainable Development Goal (SDG) 7, Affordable and Clean Energy, is equally relevant in both the developing and developed world, SSE's focus is on the energy markets in the UK and Ireland. Its performance against Affordable and Clean Energy's specific targets is summarised below, followed by an explanation of the targets, their relevance to SSE and a summary of SSE's contribution.

### Performance summary

| SDG target                   | KPI  | Unit                 | 2018/19            | 2017/18  |
|------------------------------|--|----------------------|--------------------|----------|
| <b>7.1 Universal access</b>  | Customers who have received assistance from SSE through Warm Homes Discount (WHD) scheme   | Number               | 340,396            | 352,677  |
|                              | Networks customers on the Priority Services Register (PSR)   | Number               | 707,198            | 574,047  |
|                              | Customer minutes lost – SHEPD/SEPD   | Average per customer | 59/55              | 55/48    |
|                              | Customer interruptions – SHEPD/SEPD  | Per 100 customers    | 69/52              | 57/55    |
|                              | SSE customers on Standard Variable Tariffs (GB)  | %                    | c. 67 <sup>1</sup> | c. 68    |
| <b>7.2 Renewable energy</b>  | Total renewable generation output (inc. pumped storage)  | GWh                  | 9,779              | 9,428    |
|                              | Renewable generation output (inc. pumped storage) – proportion of SSE's total output   | %                    | 31.7               | 28.4     |
|                              | Total renewable generation capacity (inc. pumped storage)  | MW                   | 3,767              | 3,826    |
|                              | SSE renewable generation capacity potential pipeline   | GW                   | Over 8             | Over 2.5 |
| <b>7.3 Energy efficiency</b> | Accumulative total of homes fitted with energy efficiency measures as part of Energy Company Obligation (ECO), since the scheme started in 2013 <sup>2</sup> | Number               | 346,480            | 331,023  |
|                              | Smart meters on supply   | Number               | > 1,250,000        | >850,000 |

<sup>1</sup> Subject to Default Tariff Cap.

<sup>2</sup> Historic figures may vary from previously reported figures, due to Energy Efficiency savings being verified and determined by the scheme administrator throughout the scheme. Until such time as savings are determined, the number of measures or properties treated in a scheme can change while verification checks are completed by the administrator.

| SDG target   | Why it is important to SSE   | How SSE contributed in 2018/19   |
|--|--|--|
| <b>Universal access</b><br>7.1 By 2030, ensure universal access to affordable, reliable and modern energy services.    | SSE provides an essential service, which it must ensure it delivers in a way that meets the needs of all of its customers, particularly the most vulnerable.   | <ul style="list-style-type: none"> <li>The British Standard for inclusive service provision (BS18477) sets the service provision standards for both SSEN Distribution and SSE Energy Services;</li> <li>SSEN maintains a comprehensive register of priority service customers;</li> <li>SSE Energy Services delivers government schemes that help customers with the cost of their energy bills.</li> </ul>          |
| <b>Renewable energy</b><br>7.2 By 2030, increase substantially the share of renewable energy in the global energy mix. | Core to SSE's business strategy, is the growth in the development of additional renewable energy generation to support the low-carbon transition.  | <ul style="list-style-type: none"> <li>SSE completed significant new renewable energy projects, such as Stronelaig onshore wind farm and Beatrice Offshore Windfarm Limited;</li> <li>SSE established SSE Renewables as a stand alone business focussed on renewables growth;</li> <li>SSE delivers energy efficiency measures to domestic customers through the delivery of government mandated schemes.</li> </ul> |
| <b>Energy efficiency</b><br>7.3 By 2030, double the global rate of improvement in energy efficiency.                   | Both the UK and Ireland have national targets and ambitions around energy efficiency. As part of that effort, SSE Energy Service delivers energy efficiency schemes on behalf of the governments in the UK and Ireland. Further, it provides energy solutions to improve energy efficiency within the non-domestic sector. | <ul style="list-style-type: none"> <li>SSE provides business and public sector customers with green energy and energy saving solutions through its Business Energy and Enterprise divisions.</li> </ul>  |

## INCREASING RENEWABLE OUTPUT

### Increasing renewable output

With the delivery of the 588MW Beatrice offshore wind farm (SSE share: 40%) in May 2019, SSE currently has the largest renewable energy capacity across the UK and Ireland at around 4GW (inc. pumped storage). SSE believes its 8GW wind energy pipeline means it could double its renewable energy output to over 20TWh by 2025, which would be a significant step towards its 2030 Goal of trebling renewable output to 30TWh by 2030.

In 2018/19, SSE achieved its highest ever output from renewable sources (inc. pumped storage), increasing to 9.8TWh, from 9.4TWh the year before, and accounting for 32% of SSE's total generation output. This increase in output was driven mainly by an increase in average generation capacity during the year, with the completion of the 228MW Stronelairg onshore wind farm (SSE share: 50.1%) and Beatrice beginning to generate electricity.

To read more about SSE's investment in renewable energy, its delivery of projects over 2018/19 and details of its pipeline of new renewables, see page 42.

### Introducing SSE Renewables

Reflecting the scale of both its existing renewable energy portfolio and the pipeline of future projects, SSE is creating SSE Renewables. The new focused business with its own leadership team has a strategic mandate to deliver project growth and pursue opportunities in both alternative technologies and new geographies. It brings together SSE's existing operational assets and those in development or construction in onshore wind, offshore wind, hydro plant and pumped storage.

### Using green finance to support the low-carbon transition

In September 2018, SSE issued its second Green Bond of €650m. This, in addition to the company's inaugural €600m Green Bond issued in September 2017, means SSE is the largest issuer of Green Bonds in the UK corporate sector. The proceeds from both SSE's Green Bonds have been allocated to refinancing part of SSE's £1.1bn portfolio of eligible projects of onshore wind farms in the UK and Ireland and the 1.2GW Caithness Moray transmission project.

SSE also refinanced its £1.3bn Revolving Credit Facility (RCF) in March 2019 linked to sustainability criteria. The RCF now incorporates an innovative feature, which adjusts the interest rate and fees paid depending on SSE's performance against an ESG (environmental, social and governance) score to be provided by Vigeo Eiris, an independent global provider of ESG research. This form of sustainable financing has only recently been developed by the finance industry, as banks look to provide solutions to help promote action to prevent climate change. SSE is one of the first UK corporates to convert to an ESG-linked RCF.



SSE is the largest issuer of Green Bonds in the UK corporate sector and one of the first UK corporates to convert to an ESG-linked Revolving Credit Facility

## PROVIDING AN INCLUSIVE AND AFFORDABLE SERVICE

### SSE's customer-focused businesses

#### SSEN (Distribution)

SSEN's Distribution business is responsible for maintaining the electricity distribution networks supplying over 3.8 million homes and businesses across central southern England and the north of Scotland.

See pages 30 to 31.

#### SSE Airtricity

SSE Airtricity is the second largest energy supplier on the island of Ireland, providing greener electricity, natural gas and energy-related services to over 0.7 million home and business customer accounts.

See page 32.

#### SSE Business Energy

SSE's Business Energy division supplies energy to business and public sector customers throughout GB. It provides electricity and gas to over 0.5 million customer accounts.

See page 32.

#### SSE Enterprise

SSE Enterprise provides integrated energy-related services to industrial and commercial customers. It focuses on distributed energy, telecoms and also undertakes work through its Contracting and Rail businesses.

See page 33.

#### SSE Energy Services (held for sale)

SSE Energy Services, comprising SSE's domestic energy supply and energy-related services businesses in GB, is the third-largest supplier in the GB energy market with 5.78 million gas and electricity customer accounts and 0.47 million energy related services customer accounts.

See pages 34 to 35.



## SERVING DISTRIBUTION CUSTOMERS

Scottish and Southern Electricity Networks (SSEN) owns and operates the electricity distribution networks across the north of Scotland and central southern England, serving over 3.8 million homes and businesses. Its primary focus is to power its communities by investing in and maintaining these networks.

### Embedding inclusive service provision

SSEN's approach to consumer vulnerability is firmly embedded into its strategic and day-to-day operations. It continually refines this approach in line with stakeholder feedback, which has seen subjects such as inclusivity and accessibility of its services come to the fore, as well as recognising the impact of fuel poverty on customers and the role energy efficiency plays in helping vulnerable consumers.

In its effort to embed truly inclusive customer service into its operations, SSE has established independently chaired internal and external Inclusive Service Panels, which have been set up to help inform and influence the company's decision-making, with a specific focus on the provision of inclusive service. In February 2019, SSEN attained the British Standard for inclusive service provision (BS 18477) for the fourth year in a row. This recognition, from business standards company BSI, is achieved through rigorous assessments to ensure SSEN's policies, procedures and services are accessible and fair to all customers.

### Accessible and inclusive communications

SSEN strives to ensure communications are accessible to all customers and in 2018/19 it took steps to improve accessibility of its digital and printed communications. These have included:

- **EasyRead** – SSEN is the first Distribution Network Operator (DNO) to produce its digital and printed Priority Services Register (PSR) communications in EasyRead format. EasyRead helps people with learning disabilities, dementia, lower reading ages and when English is a second language, through the use of images to support the text, large print in a clear font and short sentences with easy to understand words.
- **Subtitles** - All video content on SSEN's website and social media channels now includes subtitles. In 2018/19, SSEN reviewed the accessibility of its video content on the leading video platform it uses and suggested accessibility improvements to their site as a result.
- **ReciteMe** – SSEN has introduced this tool which allows customers to adapt its website content in numerous ways to suit individual requirements. Filters include: over 100 languages (inc. 33 read aloud); change fonts and type size; change colours and magnify content; read aloud content.

### Keeping customers connected

SSEN works hard to avoid having any interruptions to power supply and recognises the impact this can have on customers, particularly those in vulnerable positions. While these interruptions can sometimes be unavoidable, SSE has been improving performance and over the last five years has seen a decrease of unplanned supply interruptions.

Over a three-year period, SSEN will be investing around £35m across the entire network and over 800 circuits will be fitted with the latest automation technology. The automation systems rapidly identify fault locations and operate switches on the network to restore as many customers as possible, without the need for human intervention.

In 2018/19, SSEN's automation schemes on its network in central southern England operated successfully 6,805 times, preventing customers from experiencing unplanned interruptions to their electricity supplies. Due to the success of this investment, SSEN is focusing on the installation of automation systems on its high voltage networks.



### Promoting and improving the Priority Services Register (PSR)

SSEN's PSR is a free service which provides adapted services and additional support during a power cut for customers who'd benefit from extra help. SSEN works to identify customers who are eligible for the PSR to ensure they get the help they need. SSEN uses its embedded Customer Mapping Tool to provide social and economic insights that help it to identify gaps in service provision, and leverage and target local partnerships in order to direct customers to its PSR. By March 2019, SSEN had 707,198 customers registered on its PSR – a 23.2% increase compared to the

previous year.

To ensure the PSR meets customer needs, since 2016 SSEN has engaged directly with over 1,800 PSR customers through annual surveys. Outputs from the surveys are used to improve the provision and promotion of its Priority Services.

In 2018/19, SSEN worked closely with its network of partners to enable it to support more people, many of whom are, or were, in vulnerable situations or classed as hard to reach and were previously unknown to SSEN. This work resulted in almost 3,800 referrals to SSEN's PSR from partners in 2018/19, an increase from the previous year.

## DILEMMA

### Managing growing PSR numbers

SSEN's PSR database has grown over 45% between March 2017 and March 2019, and this trend is expected to continue. With the number of people joining the PSR continuing to rise, SSEN is working harder and smarter to ensure it responds to this challenge and continues to meet the requirements of its priority customers.

Over the course of 2018/19, SSEN worked to address this issue and has engaged with over 80 stakeholders and its Inclusive Service Panels to determine a new

approach to how it manages its increasing PSR base. This resulted in an additional PSR category, PSR1+, created exclusively for customers who use electrical medical equipment including life support machines, ventilators, oxygen nebulisers and dialysis machines, giving them priority support during power cuts.

In 2018/19, over 27,000 of SSEN's customers were automatically escalated onto PSR 1+, and it continues to review how it can effectively manage a growing PSR customer base to ensure quickest levels of support for those most in need.

### Partnering to address fuel poverty

One of SSEN's core areas of focus in its Strategy for Customers in Vulnerable Positions is to widen its partnership network and collaborative activities. SSEN works with partners to deliver enhanced support to its customers and uses tools such as its Customer Mapping Tool to inform partnership and investment decisions, ensuring best value is delivered for customers. Partnerships in 2018/19 included:

- **WarmWorks** – This joint venture between the Energy Saving Trust, Changeworks and Everwarm helps deliver the Warmer Homes Scotland programme on behalf of the Scottish Government. In 2018/19, SSEN expanded the partnership to include grant as well as gap funding for households wanting to improve energy efficiency, supporting the installation of 231 measures as a result of fund interventions and delivering over £264,000 total lifetime savings for households.
- **Warm Hubs** – SSEN has partnered with Action Hampshire on this

award-winning fuel poverty initiative, to bring Warm Hubs in that area to help with fuel poverty, promotion of the PSR and the 105 power cut phone number, and provide safety advice. In 2018/19, it expanded this partnership to help more communities improve energy efficiency. Its first two Warm Hubs locations were chosen using mapping data and are in communities that will benefit the most.

- **LSx (Faith and Utilities project)** – this project is empowers community champions to reach out through faith networks to provide energy advice. Through its regions, SSEN has expanded the scope of this partnership to include local Hindu, Sikh and Muslim communities. In 2018/19 it delivered 279 energy efficiency measures, saving £4,530.

You can read more about the work SSEN is doing to support its customers in its 2018/19 Stakeholder engagement and consumer vulnerability submission to Ofgem, which will be available on [ssen.co.uk](http://ssen.co.uk) in July 2019.

## CASE STUDY

### Using mapping to help customers prepare for Planned Supply Interruptions

One way SSEN uses its Customer Mapping Tool is to inform its approach to Planned Supply Interruptions (PSI). The use of the Customer Mapping Tool for a recent PSI highlighted an area with a high concentration of fuel poor households, which otherwise would not have been identified. Further investigation identified a Park Homes site was in the area that would be impacted by this PSI, SSEN proactively contacted the Park Homes site to raise awareness of its PSR.

SSEN also took the opportunity to signpost those customers who expressed concerns regarding fuel poverty to Yes Energy Solutions. This example was further discussed at an Inclusive Service Panel meeting where SSEN was challenged to develop its thinking on the service it provides to residents of submetered properties, such as Park Homes. As a result, helping Park Homes customers will be a focus for 2019/20.

### Supporting SSEN's Distribution customers in 2018/19

**9.27/10**

SSEN's PSR customer satisfaction score

**1,133**

Households helped with energy efficiency

Over

**£200,000**

Annual savings for customers from energy efficiency projects

Over

**707,000**

Customers on SSEN's Priority Services Register

## HELPING HOUSEHOLDS BECOME 'GENERATION GREEN'

SSE Airtricity is Ireland's leading provider of 100% green energy. Launched in October 2018, its 'This is Generation Green' campaign combines SSE's leadership in renewable energy with its commitment to helping its customers decarbonise. The campaign aims to prompt people to start thinking seriously about where their energy comes from, and show them that the sum of many people using a green energy supplier can help make the world a greener, cleaner place.



SSE Airtricity also continues to focus on helping customers reduce their carbon output and save on energy costs. Through partnerships with local authorities, the Sustainable Energy Authority Of Ireland (SEAI) and others, SSE Airtricity Energy Services has been delivering large-scale energy-efficiency retrofit projects for homes across Ireland. The works include

external insulation, attic insulation, replacement of windows and doors, as well as the installation of condensing boilers and high-efficiency hot water cylinders.

One example is the project to upgrade the Watergate apartment complex in

Limerick City, which was completed in late 2018. Through a variety of energy-efficiency measures, SSE Airtricity Energy Services transformed the comfort of 100 residential units, resulting in annual energy savings of around 700,000kWh and a CO<sub>2</sub> saving of 305,900kg.

## SUPPORTING BUSINESSES' LOW-CARBON AMBITIONS

### Providing green solutions for businesses

SSE Business Energy provides energy and energy-related services that businesses need for their day-to-day activities. It serves a diverse range of customers from micro-businesses to large multi-national corporates. SSE Business Energy continues to focus on meeting the core energy needs of its customers in a reliable and sustainable way, and over the course of 2018/19 has been expanding its business solutions into energy optimisation and demand side response where there is an opportunity to use data and technology to improve outcomes for customers.

SSE Business Energy offers its customers a 100% renewable energy tariff – SSE Green. It supplies renewable electricity matched to Renewable Energy Guarantee of Origins (REGOs), certifying that the purchased electricity has been generated exclusively through a portfolio of wind and hydro assets. This allows organisations to report zero emissions for their purchased electricity. SSE Airtricity also supports business customers to reduce their carbon footprint through the provision of 100% green energy to Irish businesses.

## CASE STUDY

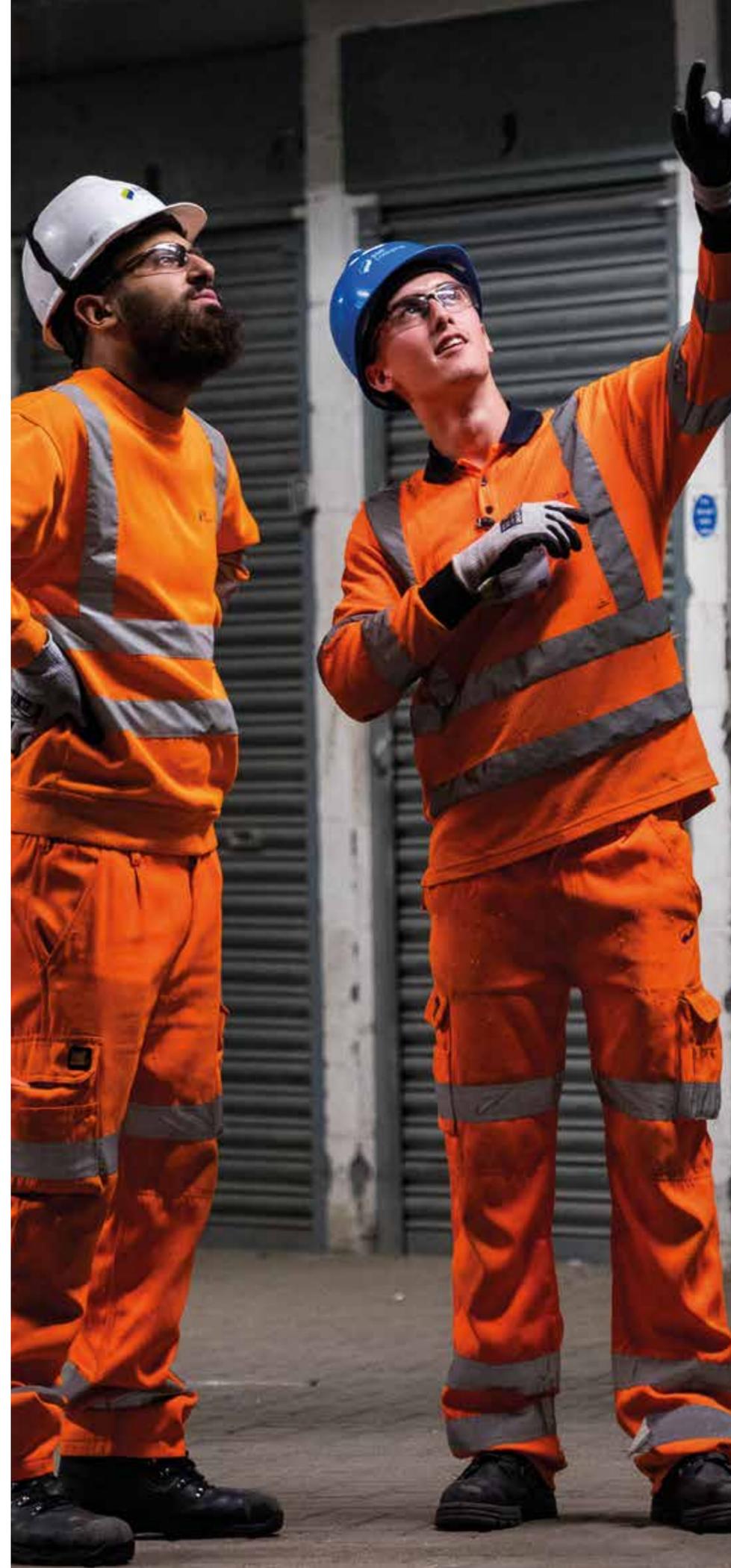
### Partnering to deliver energy efficiency

SSE Airtricity and Microsoft, with support of government grants, worked together over 2018/19 on an innovative low-carbon community engagement project which aims to deliver energy savings each year to Collinstown Park Community College in Dublin.

Through combining the expertise, capabilities and resources of SSE Airtricity's Business Energy Solutions division with the Microsoft Datacentre Team, the project has upgraded the school's energy efficiency capabilities. This has included: an LED lighting upgrade of the full campus; the installation of roof-mounted solar PV panels that will generate up to 8,000kWh of green energy per annum to be consumed on-site; and associated battery

storage units that allow the energy generated by the solar panels to be stored when not required for later use.

In addition to annual energy cost savings, estimated at €16,000, further energy innovation research will be enabled through planned analysis by Microsoft and SSE Airtricity of energy generation data collected remotely from the installed solar PV and battery installations. Live, real-time monitoring of solar PV and battery interaction, as well as the school's energy use, will help improve industry insight into how the generation and storage technologies interface, as well as inform improvements to solar forecasting accuracy.



### Creating a 'Distributed Energy' business

SSE Enterprise operates in a fast changing environment and technological advances in flexible energy generation and storage, energy consumption, digital platforms and energy management are creating a growing need for local and flexible energy services. To meet that need, in 2019 SSE Enterprise brought together its existing multi-utility and energy management capabilities into one 'Distributed Energy' business division. This new division is designed to provide further capabilities for services such as electric vehicle infrastructure, intelligent energy and information monitoring, as well as district heating schemes, which will all play an important role in the low-carbon future.

### Helping cities become 'smarter'

As local authorities throughout the UK increasingly embrace the challenge of decarbonising their services to meet 2050 targets, SSE Distributed Energy is seeking to play a major role in helping them on this journey, a key example being in supporting them move towards 'smarter' cities.

The Local Authority low-carbon transition leans heavily on the transition to a smart city which encompasses the rollout of: core technologies (e.g. EV, distributed generation and storage, heat networks), sensors to better understand the scale of the problem (e.g. energy demand and efficiency, air quality and traffic flow); and the integrated control schemes sitting above all of this that bring in the 'smart' and manage the transition.

SSE Enterprise is a pioneer and leader in this field. It has fully electrified Go Ahead London's Waterloo depot, it has converted its Mayflower smart lighting platform into an integrated smart city platform, it is a leader on heat networks, it is trialling world leading solar technology, and is about to launch an innovative overarching energy management system to support deployment and management of distributed energy resources.

## SSE ENERGY SERVICES (HELD FOR SALE)

SSE Energy Services is held for sale and has its own leadership team. However while it remains part of the SSE Group, its sustainability impacts are disclosed alongside the impacts for each of the SSE businesses.

### Energy prices

SSE Energy Services seeks to keep prices for customers as low as possible and for as long as possible. There are, however, a number of factors that influence the price a customer pays for their energy, not least the cost of wholesale energy on world markets, the cost of transporting energy to homes and the cost of transforming the UK's energy industry into a low-carbon system.

The most significant change to the UK's competitive energy supply market has been the introduction of an 'energy price cap' for energy customers on a Standard Variable Tariff. Introduced by Ofgem in January 2019, the initial rate set was reviewed in February and increased by 10%. This increase reflected the wholesale cost of energy which had increased by 17% in the preceding six months. On April 1 2019, SSE Energy Services responded to these increased underlying costs and adjusted the prices for customers on some of its tariffs.

SSE Energy Services does not believe a price cap is ultimately in customers' best interests, rather the most sustainable way to keep energy bills low is to promote competition in the market, help customers take control of their energy usage through the smart meter roll-out, and invest in making the UK's housing stock more efficient. However, with Ofgem setting the cap based on an objective and transparent formula, it gives energy suppliers the opportunity to have a more informed conversation about energy prices, what is causing them to increase and what can really be done about it.



### The future of SSE Energy Services

Since it stepped away from a planned merger with npower in December 2018, SSE still believes the best long-term future for SSE Energy Services lies outside of the SSE Group and has been actively progressing a range of options, including a possible sale, alternative transaction or standalone listing. In these considerations, the interests of customers, employees and shareholders have been paramount.

In May 2019, SSE appointed an Executive Chair of the SSE Energy Services business. She will take up the new role in June 2019, with a mandate to deliver a new future for the company outside the SSE Group and continue progress towards a listing or new, alternative ownership by the second half of 2020.

### Helping customers reduce their bills

As well as seeking to keep energy prices low, SSE Energy Services supported customers to reduce the cost of their energy bills in a number of ways over 2018/19, including:

- Warm Homes Discount (WHD) scheme**  
 This government mandated scheme offers a £140 rebate to eligible vulnerable groups, as well as a Priority Assistance Fund which provides debt relief and a holistic package of help including free energy efficient appliances and bespoke payment arrangements. During 2018/19, approximately 340,000 customers received assistance from SSE worth around £53m. A further £5m was invested through partnership projects to reduce fuel poverty.
- Energy Company Obligation (ECO) scheme**  
 SSE Energy Services promotes energy efficiency measures such as loft, cavity and solid wall insulation, and boiler replacements in customers' homes through this government mandated scheme. In 2018/19, SSE funded projects that helped improve the efficiency of around 15,500 homes, and since 2013 measures that have been installed will provide estimated notional lifetime bill savings for customers of over £1.7bn.
- Smart meter installation**  
 As at 31 March 2019, SSE Energy Services had over 1.25 million smart meters on supply in customers' homes and over 2018/19 made good progress in successfully transitioning to the new SMETS2 generation of smart meters, which bring fuller functionality to customers. Smart meters are designed to save customers time, by sending accurate and up-to-date meter readings automatically to energy suppliers. They also help customers save energy and money, by allowing them to see real-time energy use and costs and empowering them to make decisions to lower their consumption.

### Inclusive service provision for retail customers

SSE Energy Services prides itself in delivering excellent customer service, and in 2018/19 was recognised for its efforts through various independent consumer bodies, including being named best major supplier by Citizens Advice and named Supplier of the Year – Large Supplier winner in the 2019 uSwitch Awards.

At the core of SSE's commitment to quality customer service is to ensure it considers its duty of care towards its customers and to strive to make its service accessible to all.

SSE understands that the needs of its customers differ and, as such, it must offer a personal customer service experience.

Early in 2018/19, SSE completed an 18-month review to make its complaints, credit management and sales functions more flexible for its customers. Consequently, in May 2018 SSE became one of the first energy suppliers to achieve verification to the British Standard for Inclusive Service Provision, the gold standard for companies putting in place flexible

customer service practices that are designed, marketed and available to all customers, including all of those experiencing some form of vulnerability. SSE has a long history of leading the industry in service innovation, for example by becoming the first energy supplier to offer British Sign Language users a SignVideo service, by offering bills and communications in adapted formats such as large print, Braille and audio, and providing additional services for customers where English is not their primary language, so they can communicate directly with SSE.



## DILEMMA

### Everyone pays when suppliers fail

Competition in the energy market is proven to be good for customers – it drives innovation, lower prices and better service. The GB energy market has seen a significant rise in new entrants to the supply market over recent years, and switching energy supplier is now easier than ever – with record switching levels recorded in April 2019 according to Energy UK data.

Running a sustainable energy supply business means earning enough to cover costs, invest in the future, support quality jobs and provide good customer service with additional support and care

for vulnerable customers. Over 2018/19, many cases of under-charging and suppliers running up significant debts took its toll on the market, with almost a million energy customers seeing their supplier fail. In March 2019, Brilliant Energy became the third energy supplier to collapse in 2019, and the 13th to collapse since January 2018.

Ofgem rightly has safeguards in place that ensure no customer is left without gas and electricity at any point. However, when these suppliers go out of business, it's the customers of other suppliers who pick up this

debt, estimated to be tens of millions of pounds. As well as higher bills for customers, this additional cost could result in more small energy suppliers being pushed to collapse and reduce both consumer confidence and overall competition in the industry.

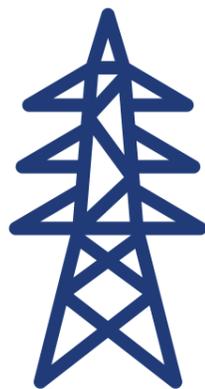
Responding to Ofgem's consultation on Supplier Licencing Reform, SSE Energy Services has backed Ofgem's proposals and called for more stringent checks on new and existing energy suppliers, mirroring those used by the Financial Conduct Authority to ensure financial services firms are fit for purpose.



# INDUSTRY, INNOVATION AND INFRASTRUCTURE

SSE creates value from developing, operating and owning energy and related infrastructure and services in a sustainable way. This includes developing infrastructure that is consistent with the transition to a low-carbon economy.

With renewable generation and regulated networks at the core of its businesses, SSE has a significant role to play in building a better world of energy. SSE has a considerable wind development pipeline at over 8GW – over 7GW of which is in offshore wind. SSE’s renewable assets are supported by its efficient, flexible thermal generation portfolio. SSE’s electricity networks play an essential role in supporting national low-carbon ambitions, through the connection of renewable energy to its Transmission network and also by providing the network flexibility required at the distribution level to support the increasing demand for decarbonised heat and transport.



## Help accommodate 10m electric vehicles

SSE will build electricity network flexibility and infrastructure that helps accommodate 10 million electric vehicles in Great Britain by 2030.



The UN’s Sustainable Development Goal (SDG) 9, Industry, Innovation and Infrastructure, calls for the building of resilient infrastructure in an inclusive and sustainable way which fosters innovation. SSE’s performance against Industry, Innovation and Infrastructure’s specific targets is summarised below, followed by an explanation of the targets, their relevance to SSE and a summary of SSE’s contribution.

### Performance summary

| SDG target   | KPI  | Unit | 2018/19 | 2017/18 |
|--|--|------|---------|---------|
| <b>9.1 Sustainable infrastructure: economic well-being</b> | Renewable generation investment (adjusted)   | £m   | 326.1   | 301.7   |
|  | Networks investment (adjusted)   | £m   | 684.7   | 760.3   |
|  | Accumulative total of renewable generation capacity connected to SSE’s electricity transmission network in the north of Scotland | GW   | c. 6    | c. 5    |
| <b>9.4 Sustainable infrastructure: resource efficiency</b> | Environmental metrics are disclosed within the ‘Do no harm’ section on page 60.  |      |         |         |

SSE’s investment and capital expenditure totalled

**£1.4bn**

the majority of which was in renewables and networks.

In 2018/19, the first electricity was generated by the

**£2.6bn**

Beatrice Offshore Windfarm Limited

In 2018/19, SSEN joined with key local and industry partners to launch the

**£40m**

Project LEO (Local Energy Oxfordshire)

| SDG target   | Why it is important to SSE  | How SSE contributed in 2018/19   |
|--|---|--|
| <b>Sustainable infrastructure: economic well-being</b><br>9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.   | Decarbonising the electricity system in the UK and Ireland requires significant investment in new energy infrastructure in both new renewable generation and the electrical systems to transport re-newable power to the centres of electricity demand. This provides opportunities for SSE and the company is well placed to realise these. SSE also seeks to establishing that new infrastructure in a way that delivers social value, as this is the basis from which public consent for new development is secured.   | <ul style="list-style-type: none"> <li>In 2018/19, SSE’s investment and capital expenditure totalled £1.4bn in 2018/19, the majority of which was in renewables and networks;</li> <li>The Caithness-Moray subsea electricity cable was successfully completed in early 2019;</li> <li>First electricity was generated by the £2.6bn Beatrice Offshore Windfarm in July 2018.</li> </ul> |
| <b>Sustainable infrastructure: resource efficiency</b><br>9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities. | <p>While the adoption of clean and green technologies through industry is key to sustainable development, the electricity industry has specific challenges it must meet to become resource efficient – including its key role in enabling a smarter, more flexible energy system in the transition to a Distribution System Operator (DSO) model.</p> <p>The transitional role of lower-carbon gas generation is important, particularly in the context of a system with increasing intermittent renewable output. In its activities, SSE seeks to use as efficient technologies as possible to limit its impact on the environment it operates in.</p> | <ul style="list-style-type: none"> <li>Project LEO (Local Energy Oxfordshire), is a large-scale DSO demonstration project enabling better efficiency of local electricity networks;</li> <li>Construction of a best-in-class new CCGT called Keady 2 began in 2018;</li> <li>SSEN Transmission, as part of the next price control has a new ‘Optimising Resources’ plan.</li> </ul>      |

## A FIVE-YEAR INVESTMENT PLAN

Central to SSE's strategy is the efficient and disciplined investment in developing and building the infrastructure needed to decarbonise electricity systems. SSE is now one year into its five-year plan for total investment and capital expenditure of around £6bn to March 2023, of which 70% is expected to be invested in regulated electricity networks and renewables. SSE aims to turn this investment into world-class assets which will support the low-carbon transition and create value for its

stakeholders for many years to come.

In 2018/19, SSE's investment and capital expenditure was around £1.4bn. Over £1bn of this, around 70% was on regulated networks and renewables, with a further 13% on flexible thermal generation, including multi-fuel. Over 2019/20, SSE expects to invest around £1.5bn, again concentrated predominantly in its core networks and renewables businesses.

## A GROWING TRANSMISSION NETWORK

Since energy regulator Ofgem introduced the current price control in 2013, capital investment in SSEN's Transmission business has totalled around £2.7bn, with this investment playing a pivotal role in providing the critical national infrastructure required to facilitate the transition to a decarbonised energy system.

### Connecting renewables

The north of Scotland has an enviable renewable energy resource, with plentiful supplies of wind and rain. That means that SSE's transmission network is playing a key role in decarbonising the GB energy system by transporting new renewable energy from the north to the places of demand in the south. That network has grown significantly since 2008 and the energy it transmits is now almost entirely from renewable sources.

The installed renewable electricity generation capacity connected to SSEN's transmission network has grown from 3.3GW in 2013 to over 6GW. Over 1GW of this was connected in 2018/19 alone, which represented a record year for renewable connections to SSEN's network. Despite the current period of rapid growth in transmission development, SSEN continues to maintain a reliability of over 99.9%.

### Environmental Discretionary Reward

SSEN's Transmission business was also awarded 'leadership' status for the first time in November 2018 by the energy regulator, Ofgem, for its environmental work to support the transition to a low-carbon economy. Read the case study about this on page 62.



### Progress on major projects

In late 2018, SSEN successfully completed and energised the £1bn Caithness-Moray subsea electricity transmission link on time and under budget. This remains the largest single investment ever undertaken by SSE. This major infrastructure project enables renewable energy generated in the north of Scotland to be transported across the GB electricity system to homes and businesses.

SSEN has also been working with stakeholders across the three Scottish island groups – Orkney, Shetland and the Western Isles – to take forward proposals to provide transmission connections to enable the connection of renewable electricity generation. All three island link Needs Cases are with Ofgem for consideration and the project development for each island link is at an advanced stage.

### Preparing for the next price control

SSEN has an ongoing programme of maintenance, refurbishment and construction to ensure its critical, national infrastructure assets continue to deliver

for electricity customers, generators and wider society during the low-carbon transition. Over 2018/19, SSEN's Transmission business began work on its business plan for RIIO-2 – the next price control set by Ofgem for the network companies running the gas and electricity networks, which begins in 2021.

In February 2019, informed by extensive stakeholder engagement over the previous 18 months, SSEN published its *Emerging Thinking* paper which sets out its understanding of what electricity customers, local communities and wider stakeholders require from the electricity transmission network in the first half of the next decade. The *Emerging Thinking* paper and subsequent stakeholder feedback will form the basis of SSEN's first draft of its business plan for the next price control.

SSEN believes its business plan will make a powerful case for an additional £1.5 to £3.5bn of potential investment in new electricity transmission infrastructure, with the north-east of Scotland a key focus for future development.

## CASE STUDY



### Turning SSEN's Sustainability Ambitions into action

Over 2018/19, SSEN developed a new Sustainability Strategy for its Transmission business, based on six sustainability ambitions which support its purpose of 'Enabling the transition to a low-carbon economy'.

Following a process of stakeholder consultation which allowed it to refine its ambitions, SSEN published its sustainability strategy in May 2018, setting out its six broad and bold Sustainability ambitions and targets.

SSEN reported its progress against this strategy in its inaugural Sustainability Statement, which also acted as an Executive Level Annual Statement on its submission to

the Environmental Discretionary Reward (EDR) scheme. The report also sets out the eight UN Sustainable Development Goals that SSEN Transmission actively contributes to.

At the end of 2018/19, SSE held a consultation on its draft sustainability delivery plan which sets out how SSEN will implement its Sustainability Strategy commitments. The forward plan details time-bound milestones against which performance will be measured, enabling its stakeholders to hold the business to account. Feedback from this consultation will be used to set a clearer path to turn SSEN's Sustainability Ambitions into action and will act as a basis for the RIIO-T2 business plan.

## DILEMMA

### Adopting a science-based target for Transmission's greenhouse gas emissions

Stakeholders strongly and consistently emphasize their desire for SSEN Transmission to show ambition and leadership in sustainability. In May 2018, SSEN Transmission committed to setting a science-based target (SBT) for its greenhouse gas emissions by the summer 2020 as part of its stakeholder-led Sustainability Strategy. The SBT will be approved by the

Science Based Targets initiative (SBTi).

The Transmission business wants to be ambitious and drive business activities that reduce its carbon footprint throughout RIIO-T2 price control at the trajectory to achieve net-zero emissions. This is challenging and has not previously been achieved. In addition, there is uncertainty as to all of the action that will

be required to achieve this so a range of solutions will need to be developed that are efficient and cost-effective.

As part of the process of setting the science-based target, the Transmission business is undertaking scenario analysis and technical feasibility assessments to develop carbon emission reduction plans for each of its emissions areas.

## DISTRIBUTION NETWORK TRANSFORMATION

With electrification key for decarbonising heat and transport, a flexible electricity distribution network is central to delivering an electrified, low-carbon economy.

### Delivering major capital investment

SSEN has continued to invest significantly across both of its distribution licensed networks in the north of Scotland and central southern England, which will deliver significant improvements for the electricity system and its customers. During 2018/19, SSEN invested a total of £341m in its electricity distribution networks, bringing the total invested since the beginning of the current price control, RIIO-1, in 2015 to over £1.2bn. By the end of RIIO-1 in 2023, SSEN expects to have invested a total of £2.4bn in its electricity distribution networks over the price control period.

### Understanding the impact of more EVs

SSEN strongly supports the desire to decarbonise the UK transport fleet. The electrification of transport will have significant consequences for electricity distribution networks. As a responsible DNO, it is SSEN's job to ensure the transition to EVs is as smooth as possible: developing cost-effective, smart technology interventions to manage this demand without unnecessary upgrades to GB networks and disruption to consumers.

In August 2018, SSEN published the

response to its consultation on Managed Electric Vehicle Charging, highlighting proposed solutions to help ensure a smooth transition to EVs which avoids potential overloads on local electricity networks caused by sharp increases in associated demand.

SSEN's proposed interim solution would see the installation of a monitoring device at the local electricity substation and, with customer consent, in domestic properties. This would allow DNOs to temporarily adjust EV charging when required. The solution is designed to address emergency situations where local networks have faulted, or are likely to fault, based on a rapid increase in electricity demand caused by clusters, or groups, of EVs. SSEN believes this is an important step to ensure the UK realises its low-carbon transport ambitions with no adverse impact to both EV users and electricity networks.

A wide range of responses were received from various stakeholder groups including DNOs, local government and NGOs, consumer bodies, consultants, energy suppliers, charge point supply chain representatives and representatives from the automotive industry. The majority of responses to the consultation determined managing charging to prevent overload

of local electricity networks to be in the best interest of customers. Respondents to the consultation agreed that more work is required on the governance of a solution to ensure it meets the needs of consumers, and SSEN will now look to progress the solution.

### Leading the way in the flexibility transition

SSEN is playing a leading role in the transition from a Distribution Network Operator (DNO) to a Distribution Systems Operator (DSO). In December 2018, SSEN adopted a 'Flexibility First Commitment', setting out that SSEN Distribution will consider flexible solutions in all scenarios where traditional network reinforcement may have been required.

This commitment, which is now hard-coded into SSEN's connection process, has been supported by a partnering with Piclo, a flexibility platform provider, to seek to register and procure flexibility across its distribution areas, ahead of potential network constraints. SSEN has joined together with key local and industry partners to launch Project LEO (Local Energy Oxfordshire) in Oxfordshire, which will replicate and trial one of the elements of one of the proposed DSO models.

### Accommodating electric vehicles: measuring progress

One of SSE's 2030 business goals is to build electricity network flexibility and infrastructure that helps accommodate 10million electric vehicles (EVs) in GB by 2030. Unlike its other 2030 Goals, this goal is more challenging to determine quantitative measures for because of the relative immaturity of the EV marketplace. SSE has therefore set five milestones below to measure performance which will be reviewed from 2019/20 onwards on an annual basis:

1. Pilot mechanisms that encourage and enable demand side response in order to smooth the impact of EV charging on the distribution network.
2. Facilitate demand side flexibility markets through the increased transparency of network data.
3. Work with policy makers and the regulator to ensure that the costs of network investment for EVs are attributed fairly across users.
4. Actively engage with EV users to help predict demand patterns.
5. Work closely with stakeholders to tackle the barriers to increased EV demand, for example distance anxiety, in support of a growing and dynamic market for electric vehicles.

In terms of SSE's 2018/19 contribution to this goal, SSEN have drafted a technical specification that will support demand-side response to be carried out using EVs, and engaged providers of flexibility services to understand how it can also use the services they are developing. SSEN also helped secure multi-million pound funding for Project LEO (see case study on page 41) – a highly significant project for SSEN, the electricity industry and the UK as a whole – that will test how EVs can support networks as the transition to decarbonised transport gathers pace.



## CASE STUDY

### Innovating in electricity distribution: Project LEO

The transition to a low-carbon future will require a significant increase in the number of electric vehicles, bringing challenges and opportunities for the electricity network. Significant innovation is underway to deliver a cleaner, smarter, more local electricity system, with the rapid transition to a more flexible electricity network.

In 2018/19, SSEN joined together with key local and industry partners to launch Project LEO, and is now the lead partner in a collaboration of 10 public, private and voluntary sector participants. The £40m project, supported by £13.8 million of funding from the UK

Government's Industrial Strategy Fund, is one of the most wide-ranging and holistic smart grid trials ever conducted in the UK. An industry-first, Project LEO will explore how the growth in local renewables, electric vehicles, battery storage, vehicle-to-grid technology and demand side response can be supported by a local, flexible, and responsive electricity grid to ensure value for consumers and opportunities for communities and market providers.

Project LEO is a glimpse of the future and places SSEN firmly at the forefront of the UK's preparations for a decentralised energy system capable

of accommodating a dramatic increase in EVs. The deployment of low voltage monitoring equipment marked the start of delivering improved network visibility, and SSEN is supporting several initiatives led by policy makers and regulators looking at reforming charging and access rights for customers.



## CASE STUDY

### Celebrating 75 years of hydro power

SSE is very proud of its hydro heritage and, in June 2018, published the fourth edition of the *Power from the Glens* book to celebrate 75 years of hydro power in the north of Scotland, demonstrating its historic and ongoing commitment to careful custodianship of renewable assets, both new and old.

*Power from the Glens* tells the story of how electricity was brought to the Highlands of Scotland and showcases the engineering revolution which brought power to the glens for the first time. This is a key chapter in Scotland's social and engineering history, and SSE felt it had a duty to tell that story and provide a lasting tribute to those who built its network of tunnels, dams and hydro stations.

SSE hopes this book can provide inspiration for remarkable engineering feats. When Pitlochry Dam and Power Station was first given the go-ahead, there were fears it would lead to the 'ruination of tourism'. The Pitlochry Dam Visitor Centre, where the *Power from the Glens* book was launched and can be purchased, welcomed more than 133,659 visitors throughout 2018/19.



The *Power from the Glens* book is priced at £14 and is on sale from SSE's Pitlochry Dam Visitor Centre and via an online portal – [www.pitlochrydam.com/power-from-the-glens-the-book](http://www.pitlochrydam.com/power-from-the-glens-the-book)

## DEVELOPING NEW RENEWABLE GENERATION

Renewable energy is one of the primary routes for achieving decarbonisation in the UK, Ireland and further afield. SSE has a strong heritage and track record in developing, owning and operating renewable energy infrastructure. Since 2010, SSE has invested over £3.9bn in renewable energy, of which more than £320m was in 2018/19.

### Delivering new renewable assets

Stronelairg (228MW), SSE's last wind farm to be accredited under the Renewables Obligation scheme, was completed in December 2018 six months early and on budget. In March 2019, stakes in Stronelairg, Dunmaglass and Cloosh Valley onshore wind farms, totalling 188MW, were sold by SSE, bringing its total renewable capacity at the end of 2018/19 to 3.7GW. With the delivery of Beatrice offshore wind farm (588MW – SSE share 40%) in May 2019, on time and under budget, SSE's total renewable energy capacity increased to around 4GW (inc. pumped storage), meaning it currently owns the largest renewable energy capacity across the UK and Ireland.

### Future pipelines of onshore and offshore wind

Renewables are a key part of SSE's future growth plans. It has a wind development pipeline of over 8GW, including an onshore wind pipeline of over 1GW of potential new-build projects and an offshore wind development pipeline of over 7GW. SSE believes this pipeline of new assets will play a critical role in helping the UK and Ireland achieve their decarbonisation goals, and contribute to the ultimate goal of zero carbon electricity.

SSE's onshore wind farm pipeline includes around 475MW of capacity with consent for development, some

of which SSE is seeking to optimise through more advanced turbine technology. Its current focus is on Viking Wind Farm on Shetland (up to 457MW – SSE share 100% as at 30 May when SSE Renewables and Viking Energy Shetland announced SSE will provide all the future financing required by their partnership, Viking Energy Wind Farm), Strathy South (133MW), Gordonbush Extension (38MW), Tanga re-power (up to 49MW), and on others requiring consent, such as Doraville (139MW) in Northern Ireland.

SSE has the biggest pipeline of offshore wind farm developments in the UK, which is currently the biggest offshore wind market in the world. This includes Seagreen Phase 1 (up to 1,050MW), Dogger Bank (up to 3.6GW – SSE share 50%) as well as further options for Seagreen Phases 2 & 3 (up to 3,200MW) and Greater Gabbard Extension (up to 504MW – SSE share 50%). And on top of this, SSE is encouraged by the improving prospects for offshore wind in Ireland, with its Arklow Bank Wind Park (800MW) development receiving encouraging endorsement from a wide range of stakeholders.

SSE believes that the further decarbonisation of electricity, heat and transport on the scale envisaged by the UK Committee on Climate Change's May 2019 report, will all lead to further opportunities for building new renewable infrastructure.

## £3.9bn

Investment in renewable energy since 2010

## 8GW

Onshore and offshore wind development pipeline



SSE's Keady Power Station and Keady Wind Farm, North Lincolnshire

## FLEXIBLE THERMAL GENERATION

Alongside renewable generation, high-efficiency thermal generation will play a crucial role in providing the flexibility needed to support the transition to a low-carbon electricity system. It provides reliable capacity at scale and responds to market changes and events, such as unplanned nuclear outages and periods of low rain or wind.

### Highly efficient gas-fired generation

SSE's Combined Cycle Gas Turbine (CCGT) plants are among the most flexible on the GB and Irish electricity systems. Construction of SSE's 840MW CCGT at Keadby 2 in Lincolnshire continued over 2018/19 and is expected to be delivered by early 2022. The project, which is adjacent to SSE's existing 755MW Keadby CCGT, will introduce Siemens' first-of-a-kind, high efficiency, gas-fired generation technology to the UK.

### A role for multifuel

Multifuel power stations produce low-carbon electricity and heat by burning waste derived fuel from various sources

of processed municipal solid waste, commercial and industrial waste and waste wood, which may otherwise have been sent to landfill. Construction of Ferrybridge Multifuel 2 (69MW – SSE share 50%) continued over 2018/19, with completion expected by the end of 2019. SSE is also carrying out site preparation work for a potential new multifuel plant (up to 50MW) at in Slough.

### Phasing out coal

In March 2019, SSE announced the closure of Unit 1 (495MW) at what is now its only coal-fired power station at Fiddler's Ferry (now 1,510MW). The remaining three units have capacity obligations until September 2019 and

continue to operate, however SSE will make decisions in line with the UK Government commitment to phase out coal-fired power stations by 2025. Over 2018/19, SSE also continued with preparations for the safe demolition of the Ferrybridge 'C' coal-fired power station.

### Gas production

SSE currently has a share in a number of gas-producing fields. In November 2018, SSE stated that gas production is ultimately inconsistent with its focus on decarbonisation and it is taking active steps to prepare for its disposal of investments in this activity in a way that meets the needs and expectations of its stakeholders.



# DECENT WORK AND ECONOMIC GROWTH

The way in which the transition to a low-carbon economy is delivered matters. It provides an opportunity to deliver sustainable economic growth, create good jobs directly and through supply chains, and support the cohesion and development of communities. All of these things create conditions in which sustainable value can be delivered to shareholders.

It is for this reason that the UN's SDG relating to decent work and economic growth is material to SSE. It goes to the heart of SSE's social contract with the societies in which it operates. In return for the right to earn returns for shareholders, the human capital it borrows from society and the public services and infrastructure on which it depends to do business, SSE invests in climate action, clean energy and infrastructure, creates and maintains decent jobs directly and in its supply chain and pays a fair share of tax. It because of this social contract that decent work and economic growth is material to SSE.



## Champion Fair Tax and a real Living Wage

SSE will be the leading company in the UK and Ireland championing fair tax and a real Living Wage.



The UN's Sustainable Development Goal (SDG) 8, Decent Work and Economic Growth, calls for sustained, inclusive and sustainable economic growth with full, productive and decent work for all. SSE's performance against Decent Work and Economic Growth's specific targets is summarised below, followed by an explanation of the targets, their relevance to SSE and a summary of SSE's contribution.

### Performance summary

| SDG target   | KPI   | Unit                    | 2018/19       | 2017/18      |
|--|---|-------------------------|---------------|--------------|
| <b>8.1 Economic growth</b>                           | Contribution to GDP (UK/Ireland) <sup>1</sup>                                 | £bn/€m                  | 8.9/689       | 8.6/806      |
|  | Jobs supported (UK/Ireland) <sup>1</sup>                                      | Head-count              | 101,170/4,080 | 99,000/4,520 |
|  | Investment and capital expenditure (adjusted)                                 | £bn                     | 1.4           | 1.5          |
|  | Taxes paid (UK/Ireland)   | £m/€m                   | 403.7/14.6    | 484.1/22.6   |
| <b>8.2 Increased productivity</b>                    | Employee productivity compared to national averages (UK/Ireland) <sup>2</sup> | Number:1                | 2.4:1/2.5:1   | 2.6:1/2.3:1  |
|  | Investment in learning and development <sup>2</sup>                           | £m                      | 11.1          | 12.4         |
|  | Investment in pipeline programmes <sup>3</sup>                                | £m                      | 17.2          | 15.4         |
|  | Average training hours per FTE  | Hours                   | 22            | 22           |
|  | Lost days due to sickness   | Days                    | 217,049       | 215,738      |
| <b>8.3 Promote development</b>                       | Total procurement expenditure   | £bn                     | c.3.2         | c.2.9        |
|  | Average time taken to pay suppliers   | Days                    | 36            | 35           |
|  | Community Investment <sup>4</sup>   | £m                      | 8.5           | 6.5          |
| <b>8.5 Full, productive and inclusive employment</b> | Total employees <sup>5</sup>  | Headcount               | 20,370        | 20,785       |
|  | Contingent labour force size <sup>6</sup>                                     | Headcount               | 4,533         | 4,851        |
|  | Average employee earnings <sup>7</sup>  | £                       | 45,230        | 43,144       |
|  | Total SSE plc (UK) median gender pay gap                                      | %                       | 21.0          | 19.6         |
|  | Ratio of CEO earnings to average employee earnings <sup>7</sup>               | Number:1                | 36.1          | 62.1         |
|  | Employee retention/turnover rate <sup>8</sup>                                 | % retention/ % turnover | 86.8/13.2     | 86.3/13.7    |
|  | Employee engagement survey score  | %                       | 68            | 73           |
| <b>8.7 Eradicate modern slavery</b>                  | Disclosed within the 'Do no harm' section on page 65.                         |                         |               |              |
| <b>8.8 Labour rights</b>                             | Disclosed within the 'Do no harm' section on page 65.                         |                         |               |              |

1 From PwC analysis.  
 2 Total internal and external learning and development expenditure excluding pipeline programmes. 2017/18 figures have been restated to include relevant investment data not previously captured.  
 3 Total cost of apprentice, engineering graduate and Technical Skills Trainee programmes, including salary costs.  
 4 Total across UK and Ireland, including: charitable donations through matched funding, Community Investment Funds, Resilient Communities Fund and financial value of employee volunteering.  
 5 Headcount as at 31 March in each financial year – figure includes all SSE UK and ROI employees, excludes contingent/agency staff.  
 6 A contingent worker describes external personnel where the business determines that it cannot fulfil the requirement internally. A contingent worker can be a Consultant, Contractor or Temporary Agency Worker.  
 7 See page 136 of SSE's Annual Report 2018 for more detail and explanation.  
 8 Excludes end of fixed term contracts and internal transfers.

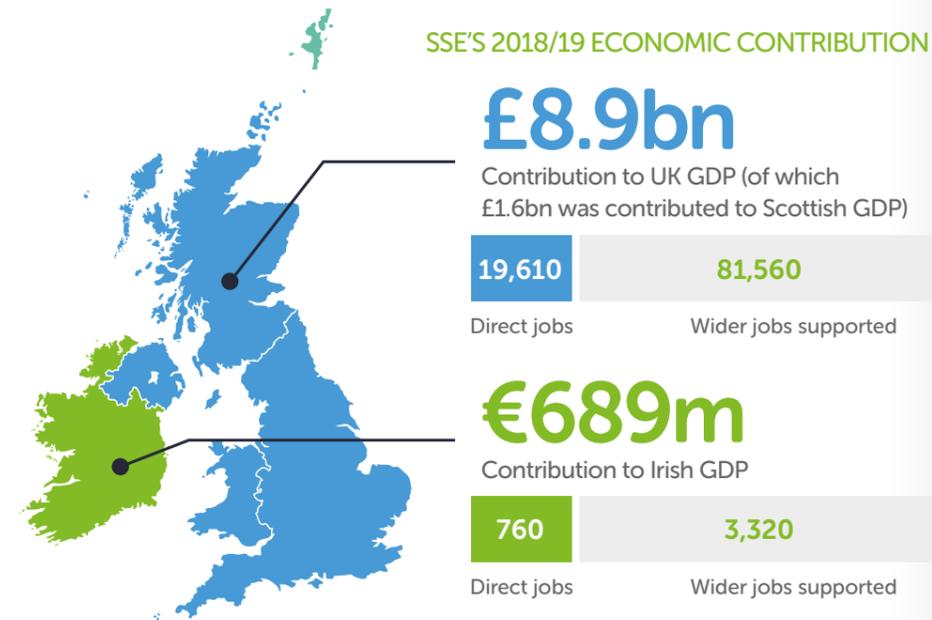
| SDG target   | Why it is important to SSE   | How SSE contributed in 2018/19  |
|--|--|---|
| <b>Economic growth</b><br>8.1 Sustain per capita economic growth in accordance with national circumstances.  | Vibrant economies support a strong public sector and high-quality labour markets, which in turn support SSE's business activities. Likewise, the scale of SSE's activities means it has a direct impact on the vibrancy of those economies. It is important to SSE's long-term sustainability that it makes a positive contribution to the economies in which it operates. | <ul style="list-style-type: none"> <li>SSE calculates and publishes the economic contribution it makes to each of the countries it operates within each year;</li> <li>SSE is a Fair Tax company, seeking to contribute to the public purse in line with the spirit, not just the letter of the law.</li> </ul>   |
| <b>Increased productivity</b><br>8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.   | Good work-design and investment in human capital stimulates labour productivity, eliminating waste and driving efficiency. The skills, knowledge and experience of the SSE's workforce is key to delivering improved productivity.   | <ul style="list-style-type: none"> <li>SSE makes significant investment in the training and development of its workforce;</li> <li>To ensure consistency of qualified employees, SSE has a significant programme of trainee and apprentice programmes.</li> </ul>   |
| <b>Promote development</b><br>8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises. | Sharing economic value with people, communities and a local supply chain supports SSE's long-term sustainability. It ensures SSE has high quality relationships with its stakeholders which, in turn, supports the implementation of its business objectives.  | <ul style="list-style-type: none"> <li>SSE promotes supply chain opportunities in areas of significant investment;</li> <li>Community Investment Funds from SSE's renewable energy developments supports community development.</li> </ul>  |
| <b>Full employment and decent work</b><br>8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.                                    | SSE believes that its responsible employer ethos, underpinned by fairness and respect, is a differentiating factor within its core business strengths. It believes it can gain further business advantage by becoming a more inclusive and diverse employer.   | <ul style="list-style-type: none"> <li>SSE's strategy of 'in, on and up' targets greater inclusion and diversity within its workforce and at its most senior levels;</li> <li>SSE has made a commitment to support improved social mobility in the UK;</li> <li>A long-standing commitment to the real Living Wage is now complemented by a commitment to 'Living Hours';</li> <li>High quality employee engagement and constructive industrial relations are key to a good workplace.</li> </ul> |
| <b>Eradicate modern slavery</b><br>8.7 Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour.   | With a migrant crisis from the middle east impacting on the scale of human trafficking and modern slavery across Europe, SSE is concerned to ensure that no form of forced, bonded or child labour forms any part of its business or supply chain.   | <ul style="list-style-type: none"> <li>Doing no harm to fundamental human rights is outlined in the 'Do No Harm' section on page 65.</li> </ul>   |
| <b>Promote labour rights</b><br>8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.   | SSE's safety culture forms the very core of the company culture and a safety licence empowers every employee to act where 'if it's not safe, we don't do it'.  | <ul style="list-style-type: none"> <li>SSE's approach to safety is core to its values and underpins its responsible approach. It is outlined in full within the 'Do no harm' section on page 61;</li> <li>SSE recognises four trade unions and a Joint Negotiating and Consultative Committee (JNCC) covers 65.2% of all SSE employees. Read more about SSE's approach to industrial relations on page 35 of the Annual Report 2019.</li> </ul>   |

## SHARING ECONOMIC VALUE

### Contributing to GDP and jobs

Investment in low-carbon infrastructure contributes to the value SSE creates for the UK and Irish economies. SSE has worked with PwC to estimate this value for every year since 2011/12. It remains one of the few companies to publish its contribution to GDP alongside its financial results, understanding that the wider economic contribution it makes goes beyond profits.

Since 2011/12, SSE has contributed a total of £75.2bn and €6.8bn (in 2018/19 prices) to UK and Irish GDP respectively. Of this contribution to UK GDP, £8.6bn was in Scotland.



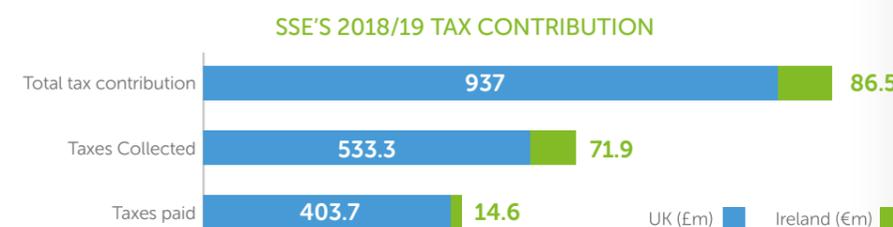
### Tax and the public interest

A healthy economy depends on good public services which everyone relies on. SSE strongly supports the view that it is in the public interest for companies to pay their fair share of tax and report on their approach in an open and transparent way. It sees tax as one of the key ways in which businesses contribute to the societies that enable their business success, through the provision of services and infrastructure.

fifth consecutive year. While SSE has an obligation to its customers and shareholders to efficiently manage its total tax liability, its tax policy is to always operate within both the letter and spirit of the law. SSE does not use "tax havens" to reduce its tax liabilities.

In 2018/19, SSE retained the independent Fair Tax Mark accreditation for the

In October 2018, SSE published its third *Talking Tax* booklet to provide detailed and accessible information around its tax contribution. Further information on SSE's payment of tax in 2018/19 can be found in its Annual Report 2019 on page 27.



## CASE STUDY

### Advocating a 'Fair Tax' criterion for regulated networks

SSE believes that tax conduct is linked to trust in big businesses, and that openness about tax affairs is therefore vital to the public legitimacy of regulated businesses. Over 2018/19, SSE actively promoted the principles of Fair Tax to the energy regulator Ofgem, who determine the returns companies can make from investing in electricity networks.

SSE's networks business, SSEN, proposed to Ofgem that there should be greater transparency of the corporation tax that regulated networks pay on profits. Specifically, they recommended that using the criteria of the Fair Tax Mark would provide a powerful signal to consumers that networks companies are conducting themselves fairly and legitimately with regards to the tax they pay. These standards include clear tax policies that would rule out the use of so-called tax havens or the artificial use of financial structures designed deliberately to avoid paying profit tax. There is also an expectation of transparency about the scale of the economic activity within the UK alongside the taxes paid.

SSEN is continuing to engage with Ofgem, stakeholders and peers across the industry on this issue, and hopes that a commitment to the principles of fair tax is something that Ofgem and the industry will support.



## Commitment to sustainable supply chains

### SSE's Responsible Procurement Charter

With an annual procurement spend of around £3bn per year, the way SSE spends its money can have important social, economic and environmental consequences. SSE's Responsible Procurement Charter and Procurement Policy both highlight the importance of sustainable supply chains with the former outlining the standards SSE holds itself to and expects of its suppliers on a number of issues. This includes health and safety, human rights, ethics, fairness at work, local supply chains, payment practices, information security and environmental impacts.

All potential new suppliers for SSE must register on SSE's Supplier Registration System which includes sign-on to SSE's Responsible Procurement Charter. Approximately 6,000 prospective companies have now signed on to the principles and expectations of SSE's Responsible Procurement Charter. For those suppliers who progress onto the Utilities Vendor Database (UVDB), a portal for suppliers in the utilities industry, questions relating to their approach to corporate social responsibility within their organisation and supply chain must be completed with documentation uploaded as appropriate. UVDB is operated by Achilles Information Limited, who also conduct independent audits of certain suppliers registered on the system against the information they have provided in the questionnaire.

### Building relationships with key suppliers

SSE has a structured approach to engaging with its strategic suppliers, with the aim of enhancing performance and strengthening relationships to deliver mutual value. SSE's strategic supplier relationship management (SRM) programme involves monitoring the performance of, and working with, suppliers who represent a critical influence to the success and growth of

SSE. Over 2018/19, SSE increased the number of SRM suppliers from seven to 16. In 2019/20, the SRM programme will see further expansion with the intention to on-board up to 30 suppliers that are of critical importance to the wider SSE group.

The SRM programme also provides a channel for dialogue on important topics including safety, innovation, external markets and business overviews. In 2019/20, modern slavery will also be added as an agenda item at the quarterly meetings between SSE and its SRM suppliers.

### Supporting local supply chains

SSE operates in many rural areas across the UK and Ireland. Core to SSE's responsible approach to procurement is the sharing of economic opportunities with the businesses close to SSE's operations – healthy economies in these rural areas are good for local people and are good for SSE too.

In 2012, SSE also created Open4Business (O4B) as a way of providing local businesses with a simple and free way to express an interest in contractual opportunities on SSE sites. By the end of the last financial year, 2017/18, over £174m had been awarded to local contractors through the portal. In an effort to sustain the portal and promote its growth, measures were taken to transition O4B from SSE to Highlands and Islands Enterprise. This move enables other large companies and SMEs, including those not in the energy sector, to use the platform to advertise contract opportunities across the north of Scotland. In total, there will be around 1,000 suppliers registered on the portal. SSE has stated its commitment to continue supporting O4B and using it to post and award contracts for its projects across this area.

### Workforce Disclosure Initiative

The Workforce Disclosure Initiative (WDI) aims to improve the quality of data from listed companies on

workforce management in their direct operations and supply chains. The investor-backed survey asks for information in recognition of the increasing importance of transparency and greater standardisation around workforce management to global investors.

SSE was one of 45 companies that participated in the pilot year of the WDI in 2017/18, and it again participated in the first full year of the WDI in 2018/19. In 2018/19, double the number of companies participated in the WDI, including 21 of the world's 100 largest firms. SSE's disclosure score was 74% in the WDI, compared to an average of 53% across all participating companies (sector average = 60%). SSE was also one of very few firms that made 100% of its submission publicly available, with the average public disclosure of all participating companies just 36% (sector average = 58%).

As in the pilot year, SSE scored very well for information provided on its direct workforce but could only provide limited information on its supply chain workforce. The number of people working for SSE within its supply chain is difficult to track, with numbers changing significantly from week to week as the result of the status of its many different projects. In an effort to better understand this segment of its workforce, in 2018/19 SSE asked its strategic suppliers for workforce information relating to their global and UK workforce, and contribution to SSE's supply chain. While the majority of suppliers responded, the information they provided was very limited. This further demonstrates the complexity and difficulty of recording information on SSE's supply chain workforce.

SSE continues to believe that better understanding its supply chain workforce will be beneficial for its business, and welcomes advice from other companies with similar supply chain workforce disclosure challenges.



## CASE STUDY

### A lasting legacy in Wick

Once one of the busiest harbours in Europe, Wick on the far north east coast of Scotland was originally conceived as a self-contained fishing community by renowned civil engineer and architect Thomas Telford. However, as the herring industry went in to decline many local buildings fell into disrepair.

Wick now hosts the operations and maintenance (O&M) base for the 588MW Beatrice Offshore Windfarm Limited (BOWL, SSE share 40%) project. Over £20m was invested in redeveloping Wick's harbour front, bringing direct and indirect economic benefit to the local area with over 75% of the workforce involved in the O&M construction from the local community and local businesses also

benefitted from the increased employment and economic activities in the area. The project chose to sympathetically redevelop two largely derelict 200-year-old Thomas Telford designed buildings, rather than construct new properties, to house the O&M base, demonstrating nationally important infrastructure projects can be developed sustainably with significant long-lasting positive impacts for the communities in which they operate.

BOWL's O&M base in Wick will be home to around 90 employees for the operational lifetime of the wind farm, with opportunities from offshore technicians to office administrators, with majority of the workforce coming from the local area.

## DILEMMA

### Increasing UK content in offshore wind supply chains

The offshore wind sector in the UK is one of the fastest growing offshore markets in the world. From 8GW of capacity in 2018, it is expected to be 30GW in 2030. With the calls for a new net zero carbon target, the scale of offshore wind could be even bigger, with SSE proposing a target of potentially 40GW to 50GW.

This scale of investment will undoubtedly create economic opportunities throughout the UK. People with skills are required at every stage from design, ecological assessment and survey work through

to construction and maintenance. While the UK supply chain content of these wind farms is currently around 50%, the ability to procure particular components from UK manufacturers is limited.

SSE believes that the greater the local economic benefit from its investments, the more likely there is to be local support for the developments in the first place. SSE seeks to remain in the communities it which develops its assets for the long run. So it is in its interest that it can source high quality, competitively priced components from home markets. The challenge is to do so within a global supply chain and

in the context of a highly competitive auction process for securing the government contracts needed to support offshore projects.

SSE supports the aims of the Offshore Wind Sector Deal to increase UK content to 60% and is involved in activities to facilitate meeting this target. SSE will seek to work even more closely in the year ahead with its supply chain, the offshore sector and governments to create the conditions for a growing domestic supply chain capable of providing the goods and services the offshore sector requires in this period of high growth.

## PAYMENT PRACTICES AND PERFORMANCE

In SSE's Sustainability Report 2018, detailed disclosure was provided around the company's payment practices and performance ahead of new UK Government requirements to publish this information. Within that disclosure, SSE committed to reporting this information annually within its Sustainability Report.

SSE has a large and complex supply chain, in 2018/19 spending approximately £3.2bn with around 8,000 tier 1 suppliers, resulting in 195,024 purchase orders raised and 477,253 invoices paid over the year. The length of time taken to pay suppliers has important social and economic consequences, with late payment times a key reason why some businesses suffer cash flow problems and ultimately leave them unable to deliver goods and services. SSE therefore continues to fully support the UK Government regulation which puts pressure on organisations to openly disclose their payment practices twice a year in order to drive better performance.

### The Prompt Payment Code

In early 2019, SSE was disappointed to be notified that it had been suspended from

the UK Government Prompt Payment Code (PPC) which it had been a signatory to since 2014. The PPC is a voluntary set of commitments set up by the UK Government to promote a responsible approach to paying suppliers. While SSE is committed to meeting the principles of the PPC, and encouraging its suppliers to follow these principles too through its Responsible Procurement Charter, its payment performance over recent years has been less than the standard it expects of itself and is expected under the PPC.

In June 2019, the suspension was lifted in respect of SSE's legal entities paying 90% of suppliers within 60 days which equates to two-thirds of all qualifying companies under the UK Government regulation.

SSE has been open about the need to improve its payment practices, which is why in 2017/18 it set a target to reduce average payment time to 30 days by the end of 2020/21. Within its Sustainability Report 2018, SSE provided detailed disclosure around the wide-scale changes it is taking to improve its payment performance. This includes significant investment in technology, simplifying

processes and introducing steps for quick resolution when any issues do arise. In late 2018, SSE began the phased implementation of electronic invoicing with and increasing number of suppliers signing up and experiencing a quick and efficient end to end solution. 2018/19 also saw improvements to channels for suppliers to raise issues with SSE.

### PAYMENTS MADE BY SSE IN 2018/19

**c. 8,000**  
active suppliers

**195,024**  
purchase orders raised

**477,253**  
invoices paid

**c. £3.2bn**  
paid to suppliers

### Reporting SSE's performance

SSE's payment performance for 2018/19 is shown in the table, broken down into the first and second half of each financial year in line with UK Government requirements.

The data shows that, while there is still more to do, between the first and second half of 2018/19, SSE's payment performance improved. The Prompt Payment Code outlines two main expectations for best practice: an average payment time of 30 days or less, and at least 95% of invoices paid within 60 days.

Between the first and second half of the financial year, SSE's average payment time reduced from 38 days to 34 days, and the proportion of suppliers paid within 60 days increased from 91% to 93%. SSE therefore believes it is on track for meeting its target of an average payment time of 30 days by 31 March 2021.

SSE will continue with its strategy to Standardise, Simplify and Embed improved payment practices and will openly report on its performance each year.

|  | 1 Apr 2018 – 30 Sep 2018 | 1 Oct 2018 – 31 Mar 2019 |
|--|--------------------------|--------------------------|
| Average time taken to make payment             | 38 days                  | 34 days                  |
| Invoices paid within 30 days                   | 70%                      | 58%                      |
| Invoices paid in 31-60 days                    | 21%                      | 35%                      |
| Invoices paid in more than 60 days             | 9%                       | 7%                       |
| Invoices not paid within agreed payment period | 73%                      | 45%                      |

<sup>1</sup> SSE has a standard payment term of net 30 days for the payment of invoices. The figures for the invoices not paid within the agreed payment period do not match the proportion of invoices paid within 30 days because the latter is measured as the time taken for SSE's Accounts Payable department to make payments from the date they receive the invoice, while the former is measured from the date on the invoice as issued by the supplier. In some cases, SSE's Accounts Payable department will not receive the invoice until after the end of the agreed payment period date as a result of time taken for the invoice to arrive in the required format outlined by SSE to its suppliers.

### Investing in communities

As well as by providing local job and business opportunities, SSE works with and supports communities close to its activities through many different channels. The table provides a breakdown of SSE's main ways of sharing the value it creates with communities and charitable organisations.

|   | Unit          | 2018/19    | 2017/18    |
|---|---------------|------------|------------|
| Community benefit funds (UK)                            | £m            | 7.0        | 5.1        |
| Community benefit funds (Ireland)                       | €'000 (€'000) | 915 (795)  | 667 (587)  |
| Resilient Communities fund                              | £'000         | 377.00     | 490.00     |
| Employee Match funding granted                          | £'000         | 40         | 45         |
| Employee volunteering                                   | Days          | 2,188      | 2,387      |
| Value of employee volunteering                          | £'000         | 252        | 274        |
| Other   | £'000         | 32         | 0          |
| <b>Total value of community funds/charitable giving</b> | <b>£m</b>     | <b>8.5</b> | <b>6.5</b> |

Over the past five years, SSE has provided more than £30m in community and charitable giving or benefits-in-kind, such as the value of employee time. The vast majority of this total was granted through SSE's community benefit funds which deliver financial support to a diverse range of community projects near to SSE's renewable developments in the UK and Ireland.

Over the lifetime of its current assets, SSE Renewables will invest around £80m in the Scottish Highlands alone

through its community benefit funds.

2018/19 was a record year of investment for SSE's community benefit funds, with £7m and €915,000 granted to support hundreds of community projects across the UK and Ireland. During the year, SSE successfully launched new funds in South Lanarkshire and the Great Glen in Scotland, for Galway Wind Park and Leanamore in Ireland, and for Slieve Divena II in Northern Ireland.

## CASE STUDY

### Supporting vital community services

Through SSE Renewables' projects in the Great Glen region in Scotland, including Bhlaraidh onshore wind farm and Glendoe hydro-electric power station, £600,000 was awarded in 2018/19 to help build the state-of-the-art Cill Chuimein Medical Centre.

The new centre secures a much-needed local medical service to the rural area, saving locals up to a 64-mile round trip for standard medical care. The two-year project has doubled the size of the previous medical centre, meaning more people can be seen and allowing the centre to expand beyond just GP services and into other services like podiatry and optometry. The centre is also designed to be accessible to all. It is expected to secure up to 10 long-term jobs for the local community.

While SSE provided more than half of the funds needed for the project, the development and construction of the new centre was driven by Fort Augustus and Glenmoriston Community Company. The



"By allowing the community to draw down additional funding we could bridge the final funding gap and get the project delivered quickly, demonstrating the real value our flexible funds can have for communities."

**Jim Smith, Managing Director of SSE Renewables**

medical centre is an excellent example of how communities can use SSE Renewables funding to help deliver sustainable, long-term benefits for their local community.

## BEING A RESPONSIBLE EMPLOYER

### A changing workforce strategy retaining fairness at its core

SSE has a well-established responsible employer ethos, based on a number of basic principles which help ensure value is created and retained for employees and the organisation:



Underpinning these principles is the fundamental belief that all SSE employees and those in its supply chain must be treated – and treat each other – with fairness and respect. Key to this is SSE’s commitment to paying the real Living Wage.

SSE is using the evolving world of work as an opportunity to influence and develop its workforce strategy. Under SSE’s operating model adopted in 2019, greater decentralisation of corporate functions will lead to the core business areas having a more bespoke approach to their human capital strategies. Whilst this will allow greater flexibility and more accountability within individual business, a common culture, including agreed standards around SSE’s commitment to responsible employment practices, and its approach to employee engagement, will be set at Group-level and remain core. SSE believes that more business-specific people strategies, engagement and consultation forums, will enable a more agile, better engaged and productive workforce overall.

#### Developing skills for the future

Investing in a pipeline of skilled individuals in preparation for the 2020s and to deliver SSE’s business strategy is essential. Over 2018/19, SSE invested £11.1m in internal and external learning and development. In addition, SSE’s investment in its technical pipeline programmes increased again between 2017/18 and 2018/19, from £15.4m to £17.2m. The number of people on one of SSE’s pipeline programmes also increased to 1,239, around 6% of SSE’s total workforce. Including pipeline programmes, SSE invested a total of £28.2m in training and skills over 2018/19 and delivered an average of 22 hours of training per full-time equivalent employee. Over the past five years SSE has delivered over 600,000 learning interventions. More information on SSE’s commitment to investing in the development of its workforce can be found on pages 33 to 34 of its Annual Report 2019.

#### Employee benefits and well-being

Recognising there are many ways to reward people beyond remuneration, SSE has an extensive range of benefits available for its employees. Back in 2017, SSE launched new and improved employee benefits aimed at enhancing employee well-being, including enhanced parental benefits, Emergency Day Passes, Technology Loans and SSE Advantage which offers savings and cashback deals. Other benefits range from employees being given the opportunity to volunteer a working day each year to good causes, to financial education and advice services, free counselling support sessions, energy discounts, a cycle-to-work scheme and the opportunity to buy up to 10 extra holiday days each year.

#### Commitment to the Living Wage

In September 2018, SSE celebrated its fifth anniversary of being an accredited

Living Wage employer. SSE has been a vocal advocate and champion for the Living Wage since its accreditation in 2013 and has been a member of the Living Wage Scotland Leadership Group since it was created in 2014. SSE remains committed for the long-term to paying its direct workforce and supply chain workers a wage they can live on.



### SSE becomes a Social Mobility Employer

In 2018/19, SSE became a Social Mobility Employer through its signing of the Social Mobility Pledge, a cross-party campaign to improve social mobility in the UK. SSE is very supportive of the aims of the Pledge which align closely to its company values and commitment to being a responsible employer. SSE knows there is a strong business case for social mobility and that it is in everyone’s interest to make sure progress is made in this area. Details of some of SSE’s existing initiatives and future work focused on improving social mobility are detailed below.



#### Partnering with experts

SSE’s partnerships with key organisations in this space have proved hugely important. SSE’s Barnardo’s Works employability programme for young unemployed people has operated for more than a decade, and led to the creation of a new employability programme for its Irish business with partners Business in the Community Ireland; SSE has worked with Career Ready since 2013 to provide mentors and paid work placements to secondary school students, often from low-income families; and SSE’s partnership with Teach First enables the company to promote careers in the STEM industry to students from all backgrounds.

#### Changing recruitment processes

In 2018/19, SSE adopted a new approach to apprenticeship recruitment, with qualifications asked for as a preference rather than as mandatory. This aimed to help SSE broaden its applications and give those who are perhaps from more challenging backgrounds, and therefore have had less of a chance at a good education, a better opportunity to join SSE.

#### Opening access at senior levels

At a senior management level, SSE is focusing on making changes at a much earlier stage, before recruitment, to build inclusive role profiles that focus on experience and transferable skills, rather than simply qualifications, degrees and technical expertise. This work is in the early stages, but it is hoped that it will help SSE attract people from other sectors as well as those who have had a more diverse career journey.

### Beyond the Living Wage: Introducing Living Hours



The real Living Wage sets a minimum standard for pay that meet the real costs of living. However, a salary people can live on is also dependent on the number and security of hours they work – in other words, people need Living Hours to provide security alongside a real Living Wage.

As a champion for the Living Wage since 2013, SSE was

keen to support the Living Wage Foundation’s efforts to take action against insecure working arrangements such as exploitative use of zero-hour contracts which have become entrenched in some parts of the economy. Therefore, in 2017, SSE joined the Living Hours Steering Group and, over 2018/19, contributed to the Steering Group meetings and also conducted a number of joint consultation sessions with the Foundation on this issue.

Living Hours is a new accreditation which sets the standard on responsible working hour practices. It comprises two key commitments from employers for both their direct employees and sub-contracted workers:

- 1 A right to a contract with ‘living hours’:** a guaranteed minimum of 16 hours a week (unless the worker opts out), with a right to switch to a contract that reflects accurate working hours for those regularly working above their contracted hours; and
- 2 Decent notice periods for shifts:** of at least 4 weeks’ notice, with guaranteed pay for cancelled or changed shifts.

At the launch of Living Hours in June 2019, SSE announced its commitment to becoming one of the first five organisations to gain Living Hours accreditation in the UK.

**Acting on employee feedback**

In 2018, SSE invited all employees to take part in a short “pulse” style employee survey to provide senior leaders with a snapshot of how they were feeling during a period of significant organisational change. Just over 16,000 employees took the opportunity to be heard, providing an overall engagement score of 68%. The feedback in 2018 echoed that provided in the full 2017 ‘Great Place to Work’ survey, indicating that employees wanted action and improvements to be driven off the back of their views. The results of the employee survey are traditionally used to support action planning activities, however this year’s results were also used to contribute to many strategic conversations, ensuring that the employee voice was being considered during key decision making.

Key actions resulting from the 2018 survey included: locational results were used to support the business case to broaden the rollout of Skype for Business and O365 support to additional sites; demographic and “working differently” insights continue to influence and support SSE’s Inclusion Strategy; employee views were utilised to support the upgrade to SSE’s intranet and to re-energise the engagement plan for working differently, agile working and O365.

In November 2018, the SSE plc Board approved the appointment of Sue Bruce as the non-Executive Director for Employee Engagement. This newly-created role has been designed to enhance existing Board oversight of employee views. Read more in SSE’s Annual Report 2019 on page 95.



**CASE STUDY**

**Linking “working differently” to employee engagement**

Assisted by a significant investment in improved technology applications, SSE is working to create a new workplace norm of “working differently”. This encourages employees to take advantage of options like job sharing, working compressed and flexible hours, and regular home working, as well as benefits like SSE’s gradual return to work scheme. Working differently allows SSE to optimise workspace, increase business flexibility and improve productivity.

An apparent consequence of working differently at SSE has been its link to employee engagement, which is a good indicator of how connected employees

are to an organisation and achieving company goals. SSE’s 2018 employee engagement survey found that employees able to work differently scored on average 16 percentage points higher on the engagement index than those who could not.

For every question in the survey, those who could work differently gave significantly higher positive responses. Questions covered topics like: believing your views and opinions count; understanding the company vision; feeling motivated to do your best; expecting to work for SSE in a year; and thinking of SSE as a great place to work.

**Executive pay**

SSE is committed to providing open disclosure about the way in which its senior executives are rewarded for their responsibilities and performance. It also seeks to be transparent about the role of its Remuneration Committee in reviewing, analysing and exerting their judgement on issues related to pay at SSE. See pages 116 to 139 of the Annual Report 2019 for extensive remuneration disclosure.

**Linking incentives to the SDGs**

Throughout 2018/19, SSE received direct feedback from shareholders and other stakeholders that they would welcome incentives for senior leaders that are linked to climate change and sustainability more broadly. In response, in March 2019 the Remuneration Committee agreed to align an element of the Annual Incentive Plan (AIP) element of executive remuneration to the achievement of SSE’s 2030 Goals. Those four goals represent the most material contribution SSE can make to the UN’s SDGs, setting a framework for how sustainability should be regarded

by SSE’s leadership team.

The Remuneration Committee agreed that 20% of the total AIP would be focused on the performance against meeting SSE’s 2030 Goals. The AIP is determined against a broad range of financial, non-financial and personal performance targets collectively designed to reflect business performance each year, and can equal a maximum of 150% of base salary for the Chief Executive and 130% for the Finance and Energy Directors. The method for assessing that performance will be a combination of quantitative measures, with

independent external assurance of that assessment where appropriate,

and qualitative assessment of decisions and actions taken during the year and their impact on the achievement of the 2030 Goals. This new approach will be implemented from 2019/20 onwards.



**Reporting pay ratios**

Since 2015/16, SSE has voluntarily disclosed the ratio of CEO pay to average employee earnings based on staffing costs and has again published this information for 2018/19. The ratio has varied over the past four years and 2018/19 was significantly lower than in 2017/18, a result of average earnings across SSE increasing by 5% while CEO pay reduced by 39% due to the reduction in variable pay.

|                          | Unit     | 2018/19 | 2017/18 | 2016/17 | 215/16 |
|--------------------------|----------|---------|---------|---------|--------|
| Chief Executive earnings | £'000    | 1,656   | 2,719   | 2,917   | 1,696  |
| Average SSE earnings     | £'000    | 45.2    | 43.1    | 40.7    | 40.0   |
| Pay ratio                | Number:1 | 36.1    | 62.1    | 72.1    | 42.1   |

SSE is committed to providing open and transparent disclosure around executive remuneration. Therefore, in addition to providing its pay ratio following the same methodology used in previous years, SSE has voluntarily published a year early its 2018/19 pay ratios in line with new reporting requirements for annual reports. With the clarity of calculation methodology now provided, SSE has provided pay ratios for 2018/18 at the 25th percentile (75:1), median (55:1) and 75th percentile (40:1), in line with requirements. See page 136 of SSE’s Annual Report 2019 for more detail.

The change in methodology means the median employee salary using the new methodology is £30,346 compared to average employee earning of £45,230. This gives a ratio of 55:1 using the new methodology compared to 36:1 using its previous methodology. SSE will continue to report both ratios for 2019/20 to provide transparency and comparison.

**Understanding stakeholders’ perspectives in executive pay**

As a UK-listed company, SSE has a Remuneration Committee made up entirely of non-Executive Board members who determine the salary and performance-related pay awarded to the company’s Executive Directors. The Committee recognises that stakeholders are concerned that the performance-related elements of remuneration should clearly reflect performance in relation to objectively set targets and that failure to achieve such targets should be reflected in decisions by the Remuneration Committee.

For 2018/19, the Committee concluded that the Executive Directors should not receive any performance-related pay in respect of the Annual Incentive Plan. Although the performance criteria for the AIP pointed to a payout of 39% of the maximum opportunity, and the Committee expressly stated that it values greatly the leadership, capability and insight of the Executive Directors, it concluded it could not overlook the fact that SSE’s financial results for 2018/19 fell well short of what was expected at the start of the financial year.

This demonstrates that SSE’s remuneration policy is not only strong on paper but robust in practice.



**Inclusion and diversity**

It's well evidenced that when companies commit to inclusive leadership and to harnessing diversity of thought, they are more successful. With decarbonisation, electrification and building sustainable infrastructure at the core of SSE's business strategy, innovative and new ways of thinking are needed. These business challenges, combined with a changing and dynamic labour force, further strengthens the case for organisations to be far more inclusive and diverse.

**Calculating SSE's 'Return on Inclusion'**

Back in 2017, SSE worked with inclusion specialists Equal Approach to conduct a 'Return on Inclusion' (ROI) study which delivered two key outcomes: the financial return from every pound spent on diversity initiatives; and clarity on the specific actions SSE needs to take to increase the diversity across the whole organisation.

By changing its focus to building and supporting a truly inclusive culture and new ways of working, rather than one-off initiatives around specific types of diversity such as gender, BAME or LGBTQ+, the analysis showed that SSE

could achieve a £15 return for every £1 invested and create a significantly more diverse business as a result. It is the multiplicity of differences – at all levels and in all these different ways – that has been proven to make organisations more successful.

Over 2018/19, SSE and Equal Approach reran its ROI as at 31 March 2018 to evaluate progress made against its £15 per £1 invested target, which it aims to achieve by 31 March 2021. The ROI tool showed that SSE had generated a £7.51

for every pound invested, a significant increase from £4.52 one year before. This was a result of the initiatives and action SSE is taking to encourage fairness, transparency and openness for all at every stage of the employee lifecycle.



**DILEMMA**

**Self-disclosure rates for ethnicity pay gap reporting**

In January 2019, SSE responded to the UK Government's consultation on ethnicity pay gap reporting. SSE fully supports enhanced reporting and greater levels of transparent disclosure from organisations, and believes that shining a spotlight on ethnicity pay information could generate accelerated progress in this area. SSE's full response can be found on [sse.com/sustainability/reporting-and-policy](http://sse.com/sustainability/reporting-and-policy).

A key concern highlighted by SSE however is ensuring there is an appropriate ethnicity self-reporting rate by employees, and that this rate is clearly communicated by organisations. If organisations report their ethnicity pay gap using a low self-reporting rate, the reported figures may

not be representative and meaningful. This has the potential to undermine how impactful ethnicity pay gap reporting will be. While all SSE employees have the option to provide self-disclose their ethnicity information voluntarily, only around 11% of employees choose to do so.

With a date for ethnicity pay gap reporting likely to be set over the year, these low rates of self-reporting will be an issue for SSE. Over 2019/20, SSE therefore plans to launch a drive for more employees to provide this information, should they wish to do so. Key to this will be establishing trust with employees and providing transparency around why the information is being collected.

**CASE STUDY**

**Inclusion review of roles in SSEN**

Figures published by the ONS for January to March 2019 show that 18% of the UK working age population reported they have a disability. However, only 51.7% of these people were in work, compared to 81.7% for people without disabilities – a 'disability employment gap' of 29.9 percentage points. The underemployment of disabled people represents a huge untapped pool of skills, talent, experience and economic value.

Like many employers, while SSE takes steps to meet additional needs of individuals if required, this has not been a specific area of business focus previously. Over 2018 however, SSE worked with Equal Approach to undertake a 'proof of concept' project to increase the proportion of talent with both visible and non-visible disabilities within the recruitment process for SSE's Networks business, SSEN. Ten roles were selected, with a full 'inclusion review' carried out by experts Equal Approach to assess their attractiveness and suitability for people with disabilities.

Equal Approach shadowed these roles on site and created a "What good looks like" competence and skills template for each role, with new job descriptions using inclusive language created. A focus group was then held with individuals with different disabilities to review the changes. SSEN is building this insight into its business-as-usual recruitment processes, with the aim of sharing the practical adaptations made with the wider SSE Group as well as its industry networks to share learnings and ignite positive change.

**SSE's Inclusion Strategy**

SSE is now two years into a targeted three-year programme of work with Equal Approach based on an Inclusion Strategy of encouraging difference 'IN, ON and UP' at SSE. This initial phase is a review of SSE's foundations to bring sustained change, as opposed to investing in one off interventions.

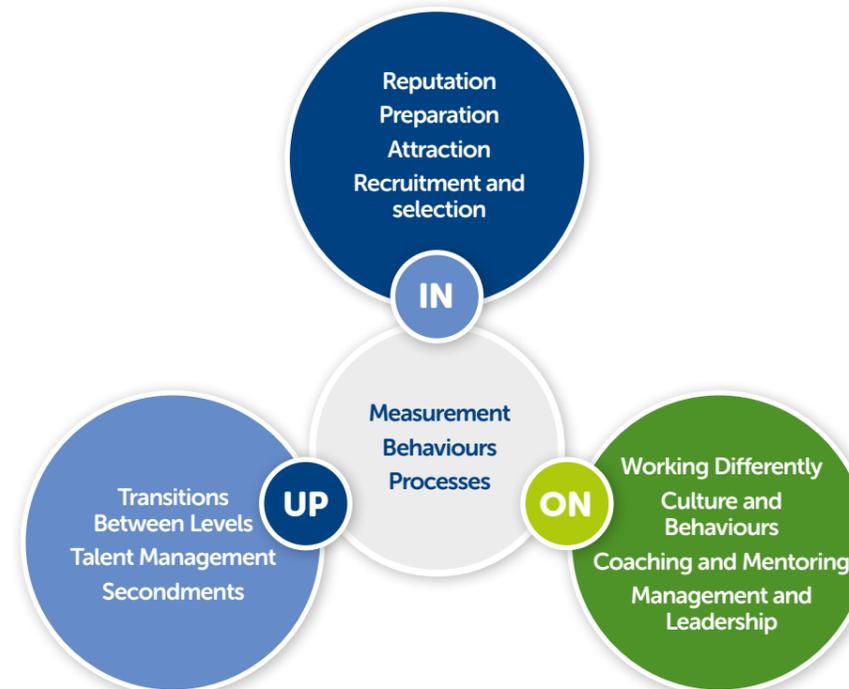
This has involved an almost forensic review of processes, from before people join to when they leave, to ensure everything SSE does is fair, transparent and open to all. SSE's Group Executive Committee have a standing Inclusion and Diversity monthly agenda item and the SSE Board receive an update and actively feed into the business goals around Inclusion and Diversity at least quarterly.

To truly embed an inclusive culture, SSE believes there are three key drivers for change at this stage: get the job description right and widen thinking around what kind of skills and experience are really required for the role; ensure all vacancies are openly advertised and open to all to apply; and

challenge traditional thinking around an ability to work differently and flexibly – not offering agile working arrangements should be the exception rather than the rule.

SSE has made significant progress over 2018/19 in these areas. As well as gender bias language review of all adverts and 'inclusive prompts' are being built into SSE's role profile template as standard, inclusive hiring manager training and inclusion and diversity awareness training is now mandatory.

SSE has also increased governance around all roles being advertised openly, with 80% of roles advertised openly in the last four months of 2018/19, and has updated its AAA-rated accessible career site with a broader range of diverse case studies. In December 2018, SSE also began monitoring the proportion of job adverts that offer agile working arrangements, finding that 79% did. An employee survey in June 2018 found that 44% of SSE employees felt they could work differently, an increase from 37% the year before.



## SSE'S UK GENDER PAY GAP

Back in 2016, SSE was the first FTSE100 company to publish its UK gender pay gap. 2019 is therefore the fourth year of SSE openly reporting these figures within its Sustainability Report.

SSE is committed to providing detailed disclosure around gender pay each year – even if findings are uncomfortable. This is because SSE strongly believes its focus on inclusion and diversity over the past three years is resulting in a real shift in culture which is key to closing its gender pay gap. SSE's four years of gender pay data however reflects what is widely known: the gender pay gap exists, it's complex and there is no quick fix. Over 2019/20, SSE will undertake data modelling with external experts to better understand the likely time horizon for an improvement in the overall pay gap number. To demonstrate SSE's commitment to progress, from 2019/20 inclusion and diversity measures will be explicitly included within its executive remuneration calculations (see page 139 of SSE's Annual Report 2019).

The full breakdown of gender pay information for all SSE's eligible legal entities (14 separate companies) as well as for the overall SSE plc (UK) can be found on page 72.

### Gender pay gap

The trend over the last three years of SSE's median and mean gender pay gap growing closer together through the increase of the median gap and the slight decrease of the mean pay gap continued again for the fourth year. As at 5 April 2019, SSE's median gender pay gap for its UK business was 21% and its mean gap was 21.4%.

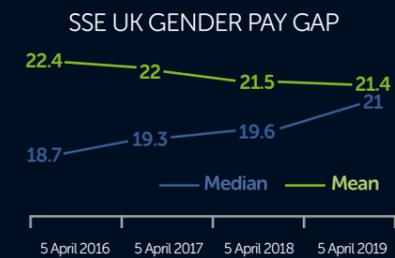
This trend is not reflective of a lack of action to bring greater gender equality to SSE. On the contrary, SSE knows that some positive actions it takes means the gap will worsen in the short-term – but focus on establishing genuine long-term change and parity at every level is the most important action that organisations can take.

### Gender bonus gap

A lower proportion of men received a bonus in 2019 compared to in 2018 (30.6% compared to 35.4%) while a slightly higher proportion of women received a bonus (15.7% compared to 14.7%). The mean difference between male and female employee bonus payments increased from 28.3% in 2018 to 33.8% in 2019, and the median difference increased from 0.1% to 9.3%.

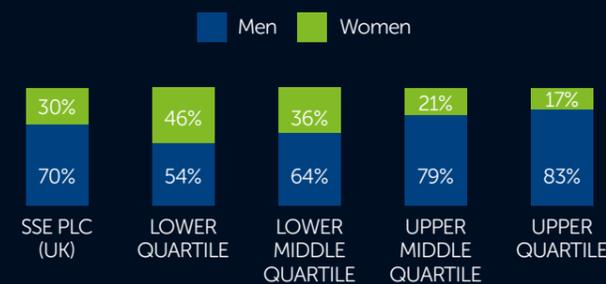
As detailed within SSE's Sustainability Report 2018, SSE believes that apparent progress made in closing these bonus gaps last year was due to a data anomaly resulting from a one-off bonus payment of £150 in 2018 within its SSE Contracting Ltd business, which disproportionately impacted men and resulted in a mean bonus pay gap of -62.2% and a

staggering median bonus pay gap of -78.4% within that company. Excluding SSE Contracting Ltd employees from the 2018 calculations resulted in mean and median bonus pay gaps for SSE plc (UK) of 36.9% and 12.2% respectively. It is therefore difficult to assess whether SSE made progress in closing its bonus pay gaps between 2018 and 2019.



### Gender split by quartile

Having no gender pay gap does not necessarily reflect true gender parity within an organisation. Rather, focus should be on gender balance within and across every pay quartile. This equal distribution of male and female employees in turn is a key driver for the rate at which gender pay gaps will close.



The SSE median hourly rate for 2019 was £15.54, compared to £14.77 last year. The percentage of male employees in the upper-middle and upper quartiles (ie above the median pay rate) in SSE in 2019 was 79% and 83% respectively, both unchanged from 2018.

Initiatives to increase the proportion of female employees in these quartiles are therefore key. As well as recruiting and retaining more women at these levels, increasing gender balance in the lower and lower-middle quartiles (46% and 36% respectively) and ensuring these women stay on and progress to higher levels in the organisation is critical too.

This is particularly true for entry-level technical roles like apprenticeships which have a very low proportion of women. As these roles are paid below the median hourly rate, this will have a detrimental impact on SSE's gender pay gap number in the short-term. However, over time as they progress onwards and upwards in the company, this should translate to more women in the higher quartiles and result in a smaller gender pay gap.

### IN, ON and UP: A strategy for equality

SSE has a well-established strategy to encourage greater equality of pay, opportunity and leadership. It calls this 'IN, ON and UP': bring more women IN, encourage women to stay ON, and support women to move UP to the highest levels.

Sharing learning and influencing the wider environment is also key to SSE's approach. SSE is actively involved in sector-specific forums such as Energy & Utility Skills, PowerfulWomen, the Energy Leaders Coalition, National Skills Academy for Power and EU Skills, as well as cross-sector forums such as the UNGC's Diversity and Inclusion Working Group and the Scotland Leadership and Diversity Network. SSE is also one of only 230 companies globally on the Bloomberg Gender-Equality Index 2019.

### IN: Inclusive hiring practices

All job adverts are reviewed for gendered language and 'inclusive prompts' are being built into SSE's role profile template as standard. Inclusive hiring manager training and inclusion and diversity awareness training are also both mandatory.

### IN: Women on pipeline programmes

Significantly more women on SSE's pipeline programmes is key to its long-term strategy to close its gender pay gap. In 2018/19, just 2.6% of SSE's approximate 800 technical apprentices and Technical Skills Trainees were women, however this compared to only 1.9% in 2017/18. To specifically target more female applications for these programmes in 2018/19 SSE: held an Inclusive Recruitment Workshop for employees involved in apprenticeship recruitment; worked with schools to educate pupils, teachers and parents on the benefits of a career in STEM for women; created a Parent Hub on its career website; used more female images and case studies on internal and external recruitment sites; and sponsored National Inclusion Week on graduate recruitment platform Gradcracker. All graduates within SSEN's Transmission directorate appointed in 2018 were women.

### IN: Tracking the gender split of hires

The gender split of all hires, from the application stage to the hiring stage are tracked and reviewed quarterly. Over 2018/19, 36% of all external hires were women, an increase from 30% the year before.

### ON: Enhanced parental benefits

In 2017, SSE's paid maternity leave increased from six weeks full-pay and 12 weeks half-pay, to 21 weeks full-pay, and a gradual return to work scheme offers 100% pay for 80% hours for six months. Analysis at the end of 2018 found that number of women who didn't return from maternity leave or left within 12

months of coming back had fallen to zero in every area of the business other than Retail. Within Retail, this fell from 18% to 3%. SSE estimates the new benefits have led to around 50 women staying in the company.

### ON: Agile working

Assisted by a significant investment in improved technology, SSE is encouraging employees to take advantage of job sharing, compressed and flexible hours, and regular home working. Between 2017/18 and 2018/19, the proportion of employees who thought they could work differently increased from 37% to 44%. Around 80% of new roles advertised since December 2018 explicitly stated flexible working options were available.

### ON: Wider benefits

SSE has a range of employee benefits including buying extra holiday days and a childcare salary sacrifice scheme. 2018/19 analysis showed that 40% of extra holiday days were used for caring responsibilities and spending time with family. In line with women typically undertaking significantly more caring and family responsibilities than men, the uptake of these benefits in SSE is proportionally higher for female employees. This means they have an impact on the gender pay gap – excluding them reduces SSE's 2019 UK median gender pay gap from 21% to 19.7%. However, SSE believes these options benefit employees and will continue to offer them and hopes that gender norms will shift both in work and the home.

### UP: Internal opportunities

A key element of SSE's responsible employer ethos is progressing employees from within, and empowering them to move up in the organisation. With a greater emphasis on the merits of diversity within SSE, there was a significant increase in female internally recruited employees, from 32% in 2017/18 to 41% in 2018/19.

### UP: Ambitions for senior leadership

Last year, in response to the Hampton-Alexander review, SSE committed to three new gender balance for senior leadership in SSE post-demergence of SSE Energy Services, with the aim of achieving them by March 2021. In 2018/19, SSE also set a further ambition around female membership on the Board. Significant restructuring of SSE's senior leadership teams came into force on 1 April 2019. Progress against these targets is therefore shown at this date.

|               | 30%<br>Women within SSE's Group Executive Committee and its direct reports, excluding administrative employees. | 25%<br>Women in the Group Executive Committee, its sub-committees and Business Unit Executive Committees.* | 20%<br>Women in roles at £70,000 (indexed from 31 December 2017) or above. |
|---------------|---|--|--|
| 31 March 2018 | 20%   | 16%  | 14%  |
| 1 April 2019  | 25%   | 21%  | 16%  |

\*Note this ambition has been changed to reflect the reduction in SSE's sub-committees and the creation of Business Unit Executive Committees. This restructuring will continue over early 2019/20.

## 2018/19 in numbers

- 50 estimated number of women who stayed with SSE because of gradual return to work scheme
- 79% advertised roles offering flexible working
- 44% employees that can "work differently" (2017/18: 37%)
- 2.6% women on a technical apprenticeship or Technical Skills Trainee (2017/18: 1.9%)
- 35% proportion of women on SSE's Career Development Programme (December 2018, 28% in June 2018)
- 12,773 employees that completed Inclusion and Diversity learning course (2017/18: 202)
- 36% female proportion of external recruitment (2017/18: 30%)
- 41% female proportion of internal recruitment (2017/18: 32%)

### UP: Developing talent

SSE has a number of programmes designed to develop future leaders within its workforce. The proportion of women on SSE's Career Development Programme increased from 27.5% in Wave 1 in June 2018 to 35.1% in Wave 2 in December 2018, and around 38% of all training interventions in 2018/19 were completed by women. In 2018/19, 15 women (out of a total of 53) participated in SSE's accredited mentor training programme for leaders.

# DO NO HARM



SSE believes that the very basic requirement of any business is to do no harm to people or places – decent companies go further than that. ‘Do no harm’ underpins SSE’s business activities and provides an uncompromising commitment to keeping people safe and healthy, and respecting the environment it operates in.

While issues covered within this section may contribute to SSE’s four highly material SDGs, the areas detailed – safety and health, environment, business culture, and human rights and modern slavery – are the foundation of SSE’s responsible business practice. SSE therefore believes this special status must be acknowledged.

|  | Unit                            | 2018/19            | 2017/18            |
|--|---------------------------------|--------------------|--------------------|
| <b>Safety and health</b>   |                                 |                    |                    |
| Total Recordable Injury Rate – employees and contractors combined              | Per 100,000 hours worked        | 0.16               | 0.20               |
| Accident Frequency Rate – employees/contractors                                | Per 100,000 hours worked        | 0.05/0.16          | 0.07/0.21          |
| Lost days due to sickness  | Number                          | 214,053            | 215,738            |
| <b>Environment</b>   |                                 |                    |                    |
| Environmental prosecutions and civil penalties                                 | Number                          | 0                  | 0                  |
| Total water consumed   | Million m <sup>3</sup>          | 5.6 <sup>(A)</sup> | 7.6 <sup>(A)</sup> |
| SO <sub>2</sub> - thermal generation <sup>1</sup>                              | Tonnes                          | 1,345              | 1,916              |
| NO <sub>x</sub> - thermal generation <sup>1</sup>                              | Tonnes                          | 6,124              | 6,305              |
| SF <sub>6</sub> - thermal generation, transmission and distribution activities | kg                              | 577                | 519                |
| <b>Business culture</b>  |                                 |                    |                    |
| Speak up contacts made <sup>2</sup>  | Number                          | 112                | 105                |
| Formal grievances raised   | Number (rate per 100 employees) | 164 (0.81)         | 143 (0.69)         |
| Formal disciplinary procedures instigated                                      | Number (rate per 100 employees) | 334 (1.64)         | 243 (1.13)         |
| <b>Human rights and modern slavery</b>   |                                 |                    |                    |
| Human rights grievances filed through formal mechanisms                        | Number                          | 0                  | 0                  |

<sup>1</sup> Figures for emissions to air include Irish thermal generation air emissions data for the periods between 1 January and 31 December and GB thermal generation air emissions data for the periods between 1 April and 31 March. Previous years’ figures have been restated to include Irish as well as GB data.

<sup>2</sup> Number of contacts made through both internal mechanisms and through SSE’s externally hosted whistleblowing channel. Figures are for calendar year.

(A) ‘Assurance symbol’ indicates data has been subject to assurance. For the limited assurance opinion see [sse.com/sustainability/reporting-and-policy/](http://sse.com/sustainability/reporting-and-policy/).

## SAFETY AND HEALTH

### Creating a positive safety culture

Safety is SSE’s first priority, and it seeks to create a safety culture where all colleagues are genuinely engaged and make a real effort to ensure everyone gets home safe.

To support this, all employees are guided by its mantra ‘if it’s not safe, we don’t do it’ which empowers all of them to do the right thing when it comes to keeping themselves and others safe. With this safety licence now firmly embedded across the business, SSE continued to build on this momentum throughout 2018/19, in particular through the launch of the Safety Family principles in May 2018:

- We take care of ourselves and each other.
- We take pride in our work and work place.
- We plan, scan, and adapt.
- We see, sort it, report it.

SSE is promoting this new simplified language through various tools, including: bespoke business Safety Family Guides; support material and films; and a newly internal safety website.

Integral to the Safety Family refresh has been the roll out of Influencing Behaviours training, which has helped employees understand how normal human behaviours can influence their work and has reinforced positive discussions around safety. To date, over 9,000 employees have taken part in one of these training sessions.

### Getting people home safe

Two years ago, SSE set its ambitious ‘50 by 20’ targets for 2020/21: to reduce its safety incident rate by 50%; to have no life changing injuries; to have 50% of people active on health; and to get everyone home safe. In 2018/19, SSE had a record year for safety.

Performance improved across all key measures compared to the previous year. SSE’s rolling Total Recordable Injury Rate (TRIR) for employees and contractors combined fell to 0.16 per 100,000 hours worked, from 0.20 the previous year. There were also considerably fewer potentially life changing injuries, falling to three from 13 the previous year. In addition, the number of Road Traffic Collisions (1 and 2 Accountable) fell from 95 to 47 and the rate per million miles driven more than halved in 2018/19, falling from 1.14 to 0.53.

While SSE is proud of these improvements, it remains mindful that incidents and

accidents still occur and must build on the hard work already achieved.

### Getting employees active on health

A physically healthy workforce helps ensure a good quality of life for employees and results in fewer accidents at work. In 2018/19, SSE continued with its ‘know your numbers’ campaign which encourages colleagues to regularly check key lifestyle measurements such as cholesterol and blood pressure to help them make better choices towards a healthier lifestyle. SSE has health check kiosks installed at eight of its biggest sites and body analysis scales and blood pressure monitors for its smaller locations. By 31 March 2019, over 29,500 voluntary health checks had been undertaken by employees.

SSE, also runs annual activity challenges, has a well embedded employee-led health initiative (NINO) which encourages colleagues to be active, and offers a GymFlex scheme providing employees with corporate discounts at over 3,000 gyms, health clubs and leisure centres nationwide.

### Opening up about mental health

Back in 2017, to mark World Mental Health Day, SSE’s Chief Executive and Finance Director pledged their support to the Time to Change initiative, making SSE an official signatory and pledging to change the way SSE thinks and acts about mental health at work, giving it the same profile that it has traditionally given to physical safety and wellbeing.

During 2018/19, strong progress has been made in supporting colleagues affected by mental health issues, and towards opening up the conversation around mental health in the workplace. SSE has firmly embedded its network of Mental Health First Aiders across the business, with around 550 colleagues now trained in this supportive role. In addition to this, 2,850 managers had been trained in mental health awareness and support, and more than 16,000 employees had completed online mental health training as at 31 March 2019.

In addition, SSE offers colleagues support from specialist providers, including through its Employee Assistance Programme (EAP) which allows employees 24/7 access to free professional, independent and impartial information, support and counselling in confidence at the end of a phone, as well as online resources about health and wellbeing. SSE has received more than 1,500 calls to its EAP to date.

## CASE STUDY

### Helping employees back to health

In early 2018, SSE launched a six-month pilot in partnership with Nuffield Health called ‘Back to Health’. The initiative offered employees at a couple of key sites in Scotland and Wales support with anxiety, depression and stress (ADS) and employees in Networks and Enterprise businesses help with musculoskeletal problems (MSK). These conditions have been identified as some of the most common reasons for long-term sickness at SSE and which also tended to have long waiting times via the NHS.

Employees whose first period of absence was five days or more with either an ADS or MSK related condition, were offered a referral to Nuffield Health. Initial telephone appointments with either a senior physiotherapist or an emotional wellbeing professional, allowed employees to discuss any difficulties they were facing with an expert who could provide access to appropriate support.

Support included appointments with local physiotherapists for MSK related conditions and onsite or local support with a mental health therapist for ADS related conditions. All treatment provided is confidential and is not shared with SSE.

SSE was encouraged to see employees being referred before absences had occurred, showing managers valued the service. Employees were also able to self-refer.

Due to the success of the pilot in reducing the average lost working days as well as being positively received by employees, the scheme is now being extended to all employees in GB. The range of help available in the extended programme will include on-site support at SSE’s main offices across GB.

### Mental health training in 2018/19

**16,000** employees completed online mental health training

**550** employees trained as Mental Health First Aiders

## CASE STUDY

### Demonstrating SSEN's environmental leadership

SSEN's strategic priority for the current transmission price control is to enable the transition to a low-carbon economy through building the transmission infrastructure necessary to connect and transport renewable energy. In delivering this, it recognises the need to do so in a responsible way that protects, and where possible enhances, the local environment in which it operates.

In 2018, SSEN Transmission was awarded 'leadership' status by the energy regulator, Ofgem, for its environmental work to support the transition to a low-carbon economy. As part of the current transmission price control, Ofgem incentivises transmission owners to demonstrate a strategic environmental focus in helping facilitate growth in low-carbon energy through the Environmental Discretionary Reward (EDR).

SSEN achieved a leadership score in five of the seven categories in the EDR: whole system planning; connections; innovation; network development approach; and business greenhouse gases. This resulted in SSEN receiving a financial award of £4m.

As a business that operates in some of Scotland's most precious rural landscapes, SSEN is equally proud that the EDR award recognises its commitment to support the local environment, including its award-winning work in habitats and biodiversity.

## £4m

SSEN's financial award for its performance in the EDR

## ENVIRONMENT

### Protecting and enhancing the environment

As a developer, owner and operator of energy and related infrastructure, SSE's activities inevitably interact with the environment in a variety of ways. SSE's primary focus in relation to environmental issues is to ensure its business units mitigate the risk of environmental damage occurring as a result of their operations. To actively managing these environmental challenges, SSE has strong governance, strategy and policies in place, outlined in its Biodiversity Report 2018 which can be found at [sse.com/sustainability](http://sse.com/sustainability).

SSE recognises there are also opportunities that arise from working with the natural environment. From the opportunity to enhance or create new habitats to harnessing natural resources such as water and wind for renewable energy generation, SSE seeks to realise these benefits in a sustainable way.

As a result of strong environmental management in 2018/19, SSE's environmental permit breaches fell by over two thirds compared to the previous year, to four from 15. The number of major and serious environmental incidents also fell slightly from 11 in 2017/18 to 10 in 2018/19.

### Improving environmental management

To ensure effective environmental management, SSE implements an environmental management system (EMS) across key areas of its business that interact with the environment. An EMS is designed to ensure that appropriate policies, processes and outputs are in place to ensure a business recognises and effectively manages the most significant environmental issues and impacts it faces.

In August 2018, SSE's renewables and thermal generation businesses, SSE Enterprise Contracting, and SSE's gas storage business successfully completed the transition to the most recent version of the international EMS Standard, ISO14001:2015.

The move to the new standard means SSE now has a single corporate certification for ISO14001:2015 where it used to have 20 local certificates. This means the company is now positioned to set objectives and action plans in a cohesive manner and has a system that can be extended to other SSE businesses.

### Managing water use

SSE depends on water in a number of ways across its operations, from use in electricity generation to an amenity in its buildings. While none of SSE's core operations have an impact on water-stressed areas, SSE still seeks to use water in a sustainable way and provide transparency to its stakeholders around its approach to water use. As part of this, SSE responds annually to CDP Water Programme and in 2018, it was awarded a B- for its performance.

During 2018/19, SSE abstracted 25,130 million m<sup>3</sup> of water and consumed 5.6 million m<sup>3</sup>. This compares to 24,044 million m<sup>3</sup> and 7.6 million m<sup>3</sup> respectively in 2017/18. Over 97%, 24,238 million m<sup>3</sup>, of water abstracted was used in SSE's hydro generation operations and was therefore returned to the environment almost immediately. The decrease in water consumed was a result of reduced running of thermal generation plant in 2018/19; whilst the overall increase in water abstracted and returned in this period was a result of increased generation from SSE's hydro generation assets.

SSE's has a water efficiency and savings programme in its non-operational offices, data centres and depots, and also runs a behavioural change campaign in its non-operational buildings to encourage water savings at work and at home. SSE monitors the average water use per person per day in these non-operational buildings, and last year a target was launched as part of the programme – to reduce the water consumption every year by 2.5%. In 2018/19, water use per person averaged 16.9 litres/employee/day in 2018/19, compared to 20.33 litres in 2017/18, meaning SSE was 15.7% ahead of its target for the year.

### 2018/19 water performance

## 5.6 million m<sup>3</sup>

Total water consumed by SSE in 2018/19

## B-

SSE's 2018 CDP Water Programme score



### Reducing energy consumption

SSE's runs its Better Off behavioural change programme to engage employees on energy efficiency activities and has invested £12.3m since 2011/12 on energy efficiency and renewable technologies in its buildings and depots. During 2018/19, investments included a £200,000 in solar photovoltaic installations at SSE's Perth Campus and various depot sites throughout its estate, resulting in an emission reductions of almost 200tCO<sub>2</sub>. As part of SSE's new agile working arrangements, SSE has invested significantly in its property portfolio, consolidating multiple non-operational sites into modern buildings which use energy more efficiently. Electricity consumption reduced by 13% between 2017/18 and 2018/19 and gas usage for the same period dropped by 5% as a result of improved building operation and utilisation.

### Managing air emissions

SSE continues to invest in operating practices and technologies that reduce or remove air pollutants from its generation processes. In 2018/19, SSE's thermal generation sites emitted 1,345 tonnes of sulphur dioxide and 6,124 tonnes of oxides of nitrogen, compared to 1,916 and 6,305 tonnes respectively in 2017/18. The decrease in air emissions was due to reduced running of thermal generation plant in 2018/19.

### Environment strategy

Over the course of 2018/19, considerable progress was made in the development of a Group Environment Strategy which introduces a simple but powerful framework to support Group-wide improvements in environmental performance through a balance of high level targets and plans. SSE's new Group Environment Strategy supports the Group approach and contributes to the UN's Sustainable Development Goals, focusing on three key areas:

- **Climate action:** Providing solutions to the climate challenge by owning, developing and managing renewable energy infrastructure and related services; reducing carbon emissions; whilst adapting to the impact of climate change.
- **Responsible consumption and production:** Promoting resource efficiency; environmental quality and managing waste in a sustainable way.
- **Natural environment:** Supporting the conservation, restoration and sustainable use of the world's land and water resources; and promoting the integration of amenity, ecosystem and biodiversity improvement into business activities.

Next steps are underway in implementing the strategy, which involves a series of Group-wide goals underpinned by business unit specific plans, including work to set a science-based carbon target approved by external body, the Science Based Target Initiative.

## BUSINESS CULTURE

### Reinforcing a healthy and ethical business culture

A healthy, ethical business culture supports value creation within organisations. Conversely, an unhealthy culture which promotes wrongdoing presents a significant business risk. SSE has a robust governance structure in place to support and promote the rules and values needed to assist its employees in the decisions they make and the actions they take. SSE has several policies which outline SSE's expectations around employee conduct and the procedures and processes for when and how to speak up about wrongdoing. This includes SSE's Speak Up (Whistleblowing) Policy, Anti-Bribery and Corruption Policy and Human Rights Policy.

To ensure the values outlined in these policies are embedded into SSE's culture, regular ethics and compliance training is mandatory for all SSE employees, and colleagues are guided in their everyday decision-making through SSE's *Doing the right thing: A guide to ethical business conduct for SSE employees*. The guide sets out the behaviours and principles of behaviour expected of all employees at SSE, focusing on topics such as bribery and corruption, fraud, human rights and inclusion.

### Supporting employees to Speak Up

While embedding a healthy business culture is important, even more so is creating an environment where all employees feel safe to speak up

about wrongdoing, without risking any reprisals for doing so. Since introducing an externally hosted whistleblowing channel in 2015, SSE has been actively encouraging employees to Speak Up against any wrongdoing within the company.

As a result of its efforts, the number of Speak Up contacts made through internal and external channels has continued to increase each year, increasing from 105 in 2017 to 112 in 2018. SSE believes that open and transparent disclosure around this issue is important in demonstrating its commitment to fully investigating and dealing with concerns raised in a serious and confidential manner.

## LISTEN, ACT, PROTECT

### LISTEN

### CREATING A CULTURE FOR EMPLOYEES TO SPEAK UP

SSE's employees can report incidents of wrongdoing through both internal and external mechanisms, including phone, email, web reporting, face-to-face and letter. SSE has an externally-hosted 'Speak Up' channel, hosted by SafeCall, through which incidents can be reported. Whether speaking up through internal or external mechanisms, SSE's employees can remain anonymous if they choose. SSE put the SafeCall service in place to ensure that employees can be confident there will be no recriminations if they report incidents of suspected wrongdoing. In 2018, 24% of reports related to dishonest behaviour, 39% related to HR related issues, 23% related to health well-being, safety and environment, and 14% related to other issues such as corporate governance, data protection and reputation.

### ACT

### RESPONDING WHEN WRONGDOING IS REPORTED

When incidents are reported, whether through internal or external mechanisms, they are referred to SSE's Group Security and Investigations team for investigation. All reports are treated in good faith and fully investigated. Investigations are undertaken sensitively and discretely, to understand whether the reports can be substantiated or not. During these investigations, interviews are undertaken and evidence is collated. Final reports of the investigations are submitted either internally for consideration of disciplinary action, or externally to law enforcement. 112 speak up contacts were made in calendar year 2018. By the end of that year, 75 either could not be proven or no further action was taken, 10 resulted in dismissals or resignations, 3 resulted in warnings issued, and 24 resulted in other business recommendations or HR processes.

### PROTECT

### SUPPORTING EMPLOYEES WHO DO THE RIGHT THING

When SSE's employees do the right thing by speaking up, it is crucial that the company also does the right thing and ensures that there are no repercussions for their actions. SSE's priority is to build trust with employees who speak up and ensure they are treated fairly and with respect, which is why it runs an After Care Survey to seek feedback from employees who Speak Up and ask whether they want to discuss their experience further with management. The questionnaire asks if individuals were satisfied with how their complaint was dealt with and how they were treated, as well as questions around what areas of the process SSE can improve. Doing this helps SSE ensure its employees are treated fairly throughout the Speak Up process and provides feedback which is used to improve how it responds to reports of wrongdoing.

DO NO HARM



## HUMAN RIGHTS AND MODERN SLAVERY

SSE applies zero tolerance of modern slavery in all its forms. It supports and is fully committed to upholding the UN Guiding Principles on Business and Human Rights, the aims of the UN Sustainable Development Goals, the principles underpinning the UN Global Compact, of which it is a signatory, the International Bill of Human Rights and the fundamental rights set out by the International Labour Organisation's Declaration on Fundamental Principles and Rights at Work.

SSE has published its Modern Slavery Statement 2019, its fourth Statement published to date. The longer 2019 Statement reflects a number of important actions taken to improve SSE's response to the risk of modern slavery and human rights abuses:

- Expansion of SSE's Human Rights Steering Group's membership to include Safety, as well as representatives from Sustainability, Procurement, Quality, HR, with the Group now directly accountable to SSE's Group Executive Committee;

- A detailed risk assessment carried out of SSE's top strategic suppliers, responsible for approximately 35% of SSE's total procurement spend for 2018/19, as well as desk-based risk assessment of all tier 1 expenditure;
- An assessment undertaken of subsidiary compliance, with greater oversight and governance over SSE's joint ventures' approach to modern slavery;
- Inclusion of a modern slavery checklist for on-site Large Capital Project audits, with two audits completed in the year and inclusion of the checklist as standard going forward; and
- An externally-led training session held for procurement, quality, safety, HR, audit, corporate services and project management employees.

SSE will continue to advance its response to modern slavery over 2019/20, taking further actions as outlined within its Modern Slavery Statement 2019.

## DILEMMA

### Compliance with the Modern Slavery Act 2015

The UK's Modern Slavery Act 2015 requires companies of a certain size to publish an annual Modern Slavery Statement which sets out the steps taken to ensure that modern slavery is not occurring in the company's own organisation or supply chains. According to the UK Home Office, in 2018 just 60% of companies in scope of the Act had published a statement, with some of these statements failing to meet the basic legal requirements. Consequently, in August 2018, the Home Office announced an independent review of compliance would be carried out and subsequently it wrote to the CEOs of around 17,000 non-compliant businesses stating they were at risk of being

publicly named as in breach of the law if a compliant statement was not published by 31 March 2019.

SSE plc has produced a fully compliant Modern Slavery Statement each year since it was legally obliged to do so, which means its statement for 1 April 2018 to 31 March 2019 is its fourth statement published to date. However, the letters received from the Home Office to several of SSE's legal entities prompted a review across all SSE's operations and subsidiaries. While all SSE's wholly-owned subsidiaries are covered by the SSE plc statement, a small number of Joint Venture companies were identified as

not being covered by the SSE plc Statement.

In early 2019, SSE's Finance Director wrote to the Boards of SSE's Joint Ventures companies to highlight the requirements of the Modern Slavery Act and seek reassurance of compliance. By 31 March 2019, SSE had received confirmation that all joint ventures were either already compliant with the Act or that appropriate action had been taken in response to the letter to ensure compliance. SSE now has a new annual process in place to ensure there is appropriate governance of compliance with the Act across its business.

# DISCLOSING SSE'S PERFORMANCE

The following section reports SSE's social, environmental and economic KPIs. For transparency, three years' worth of data is provided against each KPI where possible.



\*Arrows denote a change of 5% or more between 2017/18 and 2018/19

(A) SSE's Greenhouse gas (GHG), carbon intensity, energy consumption, business travel and water data has been independently assured by PwC LLP. The assurance statement and the criteria used for reporting, along with SSE's submission to the CDP Climate Change Programme, can be found at [sse.com/sustainability](http://sse.com/sustainability). SSE's GHG data has been assured since 2015/16. Improvements in data reporting over this time has led to the restatement of some of the previous year's data points.

[1] Scope 1 comprises electricity generation, operational vehicles and fixed generation, sulphur hexafluoride emissions and gas consumption in buildings.

[2] Scope 2 comprises electricity distribution losses and electricity consumption in non-operational buildings and substations – transmission and distribution. In 2018/19 there was a change in the approach used for Scope 2 data collection and as a result 2016/17 and 2017/18 figures have been restated.

[3] Scope 3 comprises upstream emissions associated with the extraction, refining and transport of raw fuels purchased, SHE transmission losses, gas sold and business travel.

[4] Figures for emissions to air include Irish thermal generation air emissions data for the periods between 1 January and 31 December and GB thermal generation air emissions data for the periods between 1 April and 31 March. Previous years' figures have been restated to include Irish as well as GB data.

[5] A new baseline year was set for SSE's carbon emissions reduction target for the non-operational estate of 5% CO<sub>2</sub> reduction per three-year period (up until 2030) on 2017/18 levels. This was done to align the target timeline with SSE's 2030 Goals.

[6] Figures for 2018/19 water data cover SSE's operations in GB and Ireland. Previous years' data only covered GB and this has not been restated as the impact was immaterial to the overall totals. Data for Ireland covers the periods between 1 January and 31 December and GB covers the periods between 1 April and 31 March.

Contributing to the United Nations Sustainable Development Goals:



## ENVIRONMENTAL

|   | GRI Standard | Unit                             | Change* | 2018/19                    | 2017/18                 | 2016/17                 |
|---|--------------|----------------------------------|---------|----------------------------|-------------------------|-------------------------|
| <b>ENVIRONMENTAL MANAGEMENT</b>   |              |                                  |         |                            |                         |                         |
| Number of major incidents   | 307-1        | Number                           | ↑       | 1                          | 0                       | 0                       |
| Number of serious incidents   | 307-1        | Number                           | ↓       | 9                          | 11                      | 8                       |
| Number of minor incidents   | 307-1        | Number                           | ↓       | 22                         | 44                      | 57                      |
| Environmental prosecutions and civil penalties  | 307-1        | Number                           | =       | 0                          | 0                       | 0                       |
| <b>CARBON EMISSIONS</b>   |              |                                  |         |                            |                         |                         |
| Scope 1 emissions (emissions from operations owned or controlled by the organisation) <sup>[1]</sup>  | 305-1        | Million tonnes CO <sub>2</sub> e | ↓       | 8.81 <sup>(A)</sup>        | 10.16 <sup>(A)</sup>    | 8.00 <sup>(A)</sup>     |
| Scope 2 emissions (emissions from the generation of purchased electricity, heating and cooling consumed by the organisation) <sup>[2]</sup> | 305-2        | Million tonnes CO <sub>2</sub> e | ↓       | 0.72 <sup>(A)</sup>        | 0.91                    | 1.12                    |
| Scope 3 emissions (emissions that occur outside of the organisation in support of its activities) <sup>[3]</sup>                            | 305-3        | Million tonnes CO <sub>2</sub> e | ↓       | 9.29 <sup>(A)</sup>        | 10.63                   | 10.39                   |
| Total carbon emissions  |              | Million tonnes CO <sub>2</sub> e | ↓       | 18.83 <sup>(A)</sup>       | 21.70                   | 19.51                   |
| Carbon intensity of electricity generation  | 305-4        | gCO <sub>2</sub> e per kWh       | ↓       | 284 <sup>(A)</sup>         | 305                     | 302                     |
| <b>EMISSIONS TO AIR</b>   |              |                                  |         |                            |                         |                         |
| SO <sub>2</sub> - thermal generation <sup>[4]</sup>   | 305-7        | Tonnes                           | ↓       | 1,345                      | 1,916                   | 1,822                   |
| NO <sub>x</sub> - thermal generation <sup>[4]</sup>   | 305-7        | Tonnes                           | =       | 6,124                      | 6,305                   | 6,143                   |
| SF <sub>6</sub> - thermal generation, transmission and distribution activities  | 305-7        | kg                               | ↑       | 577                        | 519                     | 389                     |
| <b>ENERGY CONSUMPTION</b>   |              |                                  |         |                            |                         |                         |
| Carbon Reduction Commitment (CRC) performance (absolute)  |              | Tonnes CO <sub>2</sub> e         | ↑       | 13,895                     | 17,675                  | 19,923                  |
| CRC target achieved compared to base <sup>[5]</sup>   | 302-4        | % reduction                      | n/a     | 21.4                       | n/a                     | n/a                     |
| Total electricity consumption in non-operation buildings  | 302-1        | kWh                              | ↓       | 111,490,109 <sup>(A)</sup> | 128,741,306             | 120,960,005             |
| Total gas consumption in non-operation buildings  | 302-1        | kWh                              | =       | 7,468,250 <sup>(A)</sup>   | 7,856,736               | 7,101,157               |
| Total energy consumption in non-operation buildings   | 302-1        | kWh                              | ↓       | 118,958,359                | 136,598,042             | 128,061,162             |
| Total energy consumption in operational buildings   | 302-1        | kWh                              | ↑       | 241,224,395                | 224,489,260             | 211,938,757             |
| <b>WATER CONSUMPTION</b>  |              |                                  |         |                            |                         |                         |
| Total water abstracted <sup>[6]</sup>   | 303-1        | Million m <sup>3</sup>           | =       | 25,131.0 <sup>(A)</sup>    | 24,044.3 <sup>(A)</sup> | 22,658.9 <sup>(A)</sup> |
| Total water consumed <sup>[6]</sup>   | 303-1        | Million m <sup>3</sup>           | ↓       | 5.6 <sup>(A)</sup>         | 7.6 <sup>(A)</sup>      | 5.1 <sup>(A)</sup>      |
| Total water returned <sup>[6]</sup>   | 306-1        | Million m <sup>3</sup>           | =       | 25,126.1 <sup>(A)</sup>    | 24,037.3 <sup>(A)</sup> | 22,654.5 <sup>(A)</sup> |
| Total water abstracted and returned - hydro   | 303-1        | Million m <sup>3</sup>           | =       | 24,238.4                   | 23,506.0                | 22,184.0                |
| Total water consumed - buildings  |              | Million m <sup>3</sup>           | ↑       | 0.095 <sup>(A)</sup>       | 0.089                   | 0.092                   |
| Total water abstracted - thermal <sup>[6]</sup>   | 303-1        | Million m <sup>3</sup>           | ↑       | 892.7                      | 537.9                   | 473.9                   |
| Total water consumed - thermal <sup>[6]</sup>   | 303-1        | Million m <sup>3</sup>           | ↓       | 4.9                        | 7.0                     | 4.4                     |
| Total water returned - thermal <sup>[6]</sup>   | 306-1        | Million m <sup>3</sup>           | ↑       | 887.8                      | 530.9                   | 469.5                   |
| <b>BUSINESS TRAVEL</b>  |              |                                  |         |                            |                         |                         |
| Fuel used in operational plant and vehicles   | 302-1        | Litres                           | =       | 14,247,005 <sup>(A)</sup>  | 14,383,371              | 14,349,772              |
| Flights - distance travelled  |              | km                               | =       | 15,773,216 <sup>(A)</sup>  | 15,209,850              | 13,193,514              |
| Train - distance travelled  |              | km                               | ↑       | 8,789,446 <sup>(A)</sup>   | 7,522,534               | 6,125,637               |
| Company cars - distance travelled   |              | km                               | ↓       | 30,161,374 <sup>(A)</sup>  | 37,708,728              | 33,630,814              |

# ECONOMIC

Contributing to the United Nations Sustainable Development Goals:



|   | GRI Standard | Unit                 | Change* | 2018/19             | 2017/18 | 2016/17                |
|---|--------------|----------------------|---------|---------------------|---------|------------------------|
| <b>FINANCIAL PERFORMANCE</b>  |              |                      |         |                     |         |                        |
| Adjusted profit before tax (PBT) <sup>[1]</sup>   | 102-7        | £m                   | ↓       | 725.7               | 1,179.3 | 1,276.5                |
| Adjusted earnings per share <sup>[1]</sup>  |              | Pence per share      | ↓       | 67.1                | 98.8    | 104.3                  |
| Dividend per share <sup>[1]</sup>   |              | Pence per share      | =       | 97.5                | 94.7    | 91.3                   |
| <b>TAXATION</b>   |              |                      |         |                     |         |                        |
| Adjusted current tax charge (excluding Energy Services)   | 201-1        | £m                   | ↓       | -6.8 <sup>[2]</sup> | 82.5    | 103.8                  |
| Adjusted underlying current tax rate (excluding energy services)  |              | %                    | ↓       | -0.9                | 7.0     | 8.1                    |
| Payment of UK corporation tax (including energy services)   | 201-1        | £m                   | ↓       | 33.6                | 124.2   | 96.8                   |
| Total taxes paid in UK (including energy services)  | 201-1        | £m                   | ↓       | 403.7               | 484.1   | 385                    |
| Payment of Irish corporation tax (including energy services)  | 201-1        | €m                   | ↓       | -2.0 <sup>[3]</sup> | 6.5     | -0.9 <sup>[4]</sup>    |
| Total taxes paid in Ireland (including energy services)   | 201-1        | €m                   | ↓       | 14.6                | 22.6    | 16.5                   |
| <b>INVESTMENT AND SUPPLY CHAINS</b>   |              |                      |         |                     |         |                        |
| Total investment and capital expenditure (adjusted)   | 201-1        | £m                   | ↓       | 1,422.9             | 1,503.0 | 1,726.2                |
| Renewable generation investment (adjusted)  | 203-1        | £m                   | ↑       | 326.1               | 301.7   | 366.4                  |
| Thermal generation investment (adjusted)  | 203-1        | £m                   | ↑       | 187.7               | 89.0    | 108.6                  |
| Networks investment (adjusted)  | 203-1        | £m                   | ↓       | 684.7               | 760.3   | 789.7                  |
| Total procurement spend   | 102-9        | £bn                  | ↑       | c.3.2               | c.2.9   | c.3.0                  |
| <b>ECONOMIC CONTRIBUTION</b>  |              |                      |         |                     |         |                        |
| Total economic contribution - UK GDP <sup>[5]</sup>   | 201-1        | £bn                  | =       | 8.91                | 8.55    | 9.26                   |
| Total economic contribution - Scotland GDP <sup>[5]</sup>   | 201-1        | £m                   | ↓       | 1,596               | 1,819   | 1,899                  |
| Total economic contribution - Ireland GDP <sup>[5]</sup>  | 201-1        | €m                   | ↓       | 689                 | 806     | 779                    |
| Total jobs supported - UK <sup>[6]</sup>  | 203-2        | Number               | =       | 101,170             | 99,000  | 103,720                |
| Total jobs supported - Ireland <sup>[6]</sup>   | 203-2        | Number               | ↓       | 4,080               | 4,520   | 4,720                  |
| Total jobs supported - Scotland <sup>[6]</sup>  | 203-2        | Number               | ↓       | 14,480              | 17,360  | 17,000                 |
| <b>NETWORKS OPERATIONS</b>  |              |                      |         |                     |         |                        |
| Networks customers on Priority Services Register (PSR)  |              | Number               | ↑       | 707,198             | 574,047 | 487,202 <sup>[7]</sup> |
| Electricity distributed   |              | TWh                  | =       | 38.3                | 39.2    | 39.3                   |
| Customer minutes lost - SHEPD   | 203 -1       | Average per customer | ↑       | 59                  | 55      | 60                     |
| Customer minutes lost - SEPD  | 203 -1       | Average per customer | =       | 50                  | 48      | 43                     |
| Customer interruptions - SHEPD  | 203 -1       | Per 100 customers    | ↑       | 69                  | 57      | 68                     |
| Customer interruptions - SEPD   | 203 -1       | Per 100 customers    | ↓       | 52                  | 55      | 48                     |
| Regulated Asset Value - Transmission, Distribution and SSE's share in SGN <sup>[8]</sup>                |              | £m                   | ↑       | 8,729               | 8,304   | 7,679                  |
| Accumulative total of renewable generation capacity connected to SSE's electricity transmission network |              | MW                   | ↑       | 6,236               | 5,209   | 4,760                  |
| <b>ENERGY SUPPLY AND RETAIL OPERATIONS</b>  |              |                      |         |                     |         |                        |
| Total Retail customer accounts <sup>[9]</sup>   |              | Million              | =       | 1.27                | 1.23    | 1.25                   |
| Total SSE Energy Services customer accounts (GB domestic)   |              | Million              | ↓       | 5.78                | 6.35    | 6.76                   |
| Retail customer complaints to third parties (GB) <sup>[10]</sup>  |              | Number               | ↓       | 1,414               | 1,616   | 1,322                  |

|   | GRI Standard | Unit   | Change* | 2018/19              | 2017/18  | 2016/17  |
|---|--------------|--------|---------|----------------------|----------|----------|
| uSwitch overall customer satisfaction rating <sup>[11]</sup>  |              | %      | =       | 70                   | 71       | 76       |
| Aged debt (Business Energy and Artiricity)  |              | £m     | ↑       | 35.8                 | 19.3     | -        |
| Aged debt (GB domestic)   |              | £m     | ↑       | 82.8                 | 76.9     | -        |
| SSE customers on Standard Variable Tariffs (GB)   |              | %      | =       | c.67 <sup>[12]</sup> | c.68     | c.70     |
| Customers that have received assistance from SSE through Warm Homes Discount (WHD) scheme   |              | Number | =       | 340,396              | 352,677  | 359,505  |
| Accumulative total of homes fitted with energy efficiency measures as part of Energy Company Obligation (ECO), since the scheme started in 2013 <sup>[13]</sup> |              | Number | =       | 346,480              | 331,023  | 312,802  |
| Smart meters on supply  |              | Number | ↑       | >1,250,000           | >850,000 | >450,000 |
| <b>DIVERSITY OF ELECTRICITY GENERATION PORTFOLIO</b>  |              |        |         |                      |          |          |
| Total renewable generation output (inc. pumped storage)   |              | GWh    | =       | 9,779                | 9,428    | 7,955    |
| Total thermal generation output   |              | GWh    | ↓       | 21,056               | 23,670   | 18,341   |
| Total generation output (all plant)   |              | GWh    | ↓       | 30,835               | 33,098   | 26,296   |
| Renewable generation (inc. pumped storage) - proportion of total output   |              | %      | =       | 31.7                 | 28.4     | 30.3     |
| Total renewable generation capacity (inc. pumped storage)   |              | MW     | =       | 3,767                | 3,826    | 3,309    |
| Total thermal generation capacity   |              | MW     | ↓       | 6,765                | 7,334    | 7,334    |
| Total electricity generation capacity   |              | MW     | ↓       | 10,532               | 11,160   | 10,643   |
| Renewable generation (inc. pumped storage) - proportion of total capacity   |              | %      | =       | 35.8                 | 34.2     | 31.1     |
| SSE renewable generation capacity potential pipeline  |              | GW     | ↑       | Over 8               | Over 2.5 | Over 2.5 |

\*Arrows denote a change of 5% or more between 2017/18 and 2018/19

[1] At 31 March 2019 SSE Energy Services is held for disposal and has been accounted for as a discontinued operation. Therefore, the results of SSE Energy Services have been excluded from the profit and loss metrics.

[2] The reduction in adjusted current tax charge is primarily due to SSE's reduced underlying profits for 2019 resulting in a lower corporation tax charge for the year, this then being more than eliminated by tax credits from earlier years. As SSE has continued to invest heavily in capital projects, at a time when profits are reduced, the capital allowances obtained on that expenditure also has a more significant impact on SSE's adjusted current tax rate for the year.

[3] In FY19, the ROI group received a net corporation tax refund of €2m. This mainly related to refunds of preliminary tax overpaid of €2.2m for FY18 and €0.2m for years prior to FY18. A preliminary tax payment of €0.4m was also made in relation to FY19.

[4] In FY17, the ROI group received a net corporation tax refund of €0.9m. A refund of €1m was received in relation to FY14 as preliminary corporation tax was overpaid for that period. A preliminary tax payment of €0.1m was made in relation to FY17 due to the availability of capital allowances.

[5] Total direct, indirect and induced Gross Value Added, from PwC analysis.

[6] Measured as headcount, from analysis undertaken by PwC.

[7] This number has been restated.

[8] SSE's share in SGN reduced from 50% to 33% from 26 October 2016.

[9] Includes Business Energy customer accounts and All-Island energy market customers (Ire).

[10] Ombudsman: Energy Services and Citizens Advice.

[11] The uSwitch independent survey asks energy customers to rate energy suppliers in a number of areas, including customer service, online service and value for money.

[12] Subject to Default Tariff Cap.

[13] Historic figures may vary from previously reported figures, due to Energy Efficiency savings being verified and determined by the scheme administrator throughout the scheme. Until such time as savings are determined, the number of measures or properties treated in a scheme can change while verification checks are completed by the administrator.

## SOCIAL

## Contributing to the United Nations Sustainable Development Goals:



|   | GRI Standard | Unit                         | Change* | 2018/19       | 2017/18       | 2016/17       |
|---|--------------|------------------------------|---------|---------------|---------------|---------------|
| <b>SAFETY</b>   |              |                              |         |               |               |               |
| Accident Frequency Rate - employees and contractors combined  | 403-2        | Per 100,000 hours            | ↓       | 0.08          | 0.10          | 0.11          |
| Accident Frequency Rate - employees/contractors   | 403-2        | Per 100,000 hours            | ↓/↓     | 0.05/0.16     | 0.07/0.21     | 0.05/0.30     |
| Total Recordable Injury Rate - employees and contractors combined   | 403-2        | Per 100,000 hours            | ↓       | 0.16          | 0.20          | 0.22          |
| Total Recordable Injury Rate - employees/contractors  | 403-2        | Per 100,000 hours            | ↓/↓     | 0.10/0.32     | 0.12/0.44     | 0.13/0.51     |
| Fatal incidents - employees/contractors   | 403-2        | Number                       | =       | 0/0           | 0/0           | 0/1           |
| Accountable Road Traffic Collision (RTC) Class 1 (Potential for major harm to people and the environment)         |              | Number                       | ↓       | 12            | 23            | 19            |
| Accountable RTC Class 1 and RTC Class 2 (Potential for serious harm to people and the environment)                |              | Rate per million miles       | ↓       | 0.53          | 1.14          | 1.43          |
| <b>WORKFORCE COMPOSITION</b>  |              |                              |         |               |               |               |
| Total SSE employees <sup>[1]</sup>  | 102-7        | Number                       | =       | 20,370        | 20,785        | 21,157        |
| Contingent Labour Force Size <sup>[2]</sup>   | 102-         | Number                       | ↓       | 4533          | 4,851         | 4,074         |
| Average age of employees <sup>[3]</sup>   | 405-1        | Years                        | =       | 40.9          | 40.5          | 40            |
| Mean/median length of service   |              | Years                        | ≠       | 9.82/7.67     | 9.52/7.52     | 9.27/7.17     |
| Average employee earnings <sup>[4]</sup>  |              | £                            | =       | 45,230        | 43,144        | 40,723        |
| Employees with flexible working arrangements <sup>[5]</sup>   |              | %                            | =       | 12.0          | 11.9          | 11.5          |
| Employees that say they can "work differently" <sup>[6]</sup>   |              | %                            | ↑       | 44            | 37            | -             |
| <b>GENDER BALANCE</b>   |              |                              |         |               |               |               |
| Proportion of employees that are female   | 405-1        | %                            | =       | 31.4          | 31.1          | 31.4          |
| Diversity of Board of Directors   | 405-1        | % female                     | =       | 30            | 30            | 33.3          |
| Total SSE plc (UK) median gender pay gap  | 405-2        | %                            | ↑       | 21.0          | 19.6          | 19.3          |
| Male/female employees earning over £40,000  |              | %                            | ↑/↑     | 29.8/18.0     | 25.7/14.3     | 24.7/12.8     |
| Executive Committee and Direct Reports to the Executive Committee (excluding administrative roles) <sup>[7]</sup> |              | % female                     | =       | 18.5          | 19.1          | 18.2          |
| <b>WORKFORCE STABILITY AND WELLBEING</b>  |              |                              |         |               |               |               |
| Total number of hours worked <sup>[8]</sup>   | 401-1        | Number                       | =       | 37,958,925    | 38,780,846    | 39,534,659    |
| Employees on permanent/temporary/non-guaranteed or short hour contracts   |              | %                            | ≠/≠     | 95.1/4.7/0.2  | 95.3/4.4/0.2  | 96.3/3.4/0.3  |
| Employee retention and turnover rate <sup>[9]</sup>   |              | % retention/% turnover       | ≠       | 86.8/13.2     | 86.3/13.7     | 85.7/14.3     |
| Regrettable or voluntary turnover <sup>[10]</sup>   | 403-2        | Number (% of total turnover) | ↓/≠     | 1,700 (63.5%) | 1,817 (63.7%) | 1,751 (57.9%) |
| Lost days per year due to sickness  | 102-38       | Number                       | =       | 217,049       | 215,738       | 204,122       |
| Employees covered by the negotiating arrangements under the Joint Negotiating and Consultative Committee          |              | %                            | =       | 65            | 65            | 66            |
| Ratio of CEO earnings to average employee earnings <sup>[11]</sup>  |              | Number:1                     | ↓       | 36:1          | 62:1          | 72:1          |
| Employee productivity - direct contribution to GDP per capita (UK)  |              | £                            | ↓       | 140,470       | 148,120       | 172,000       |

|  | GRI Standard | Unit                            | Change* | 2018/19    | 2017/18    | 2016/17    |
|--|--------------|---------------------------------|---------|------------|------------|------------|
| Employee productivity compared to national averages - UK <sup>[12]</sup>       |              | Number:1                        | ↓       | 2.4:1      | 2.6:1      | 3.1:1      |
| Employee productivity compared to national averages - Scotland <sup>[12]</sup> |              | Number:1                        | ↓       | 2.7:1      | 2.9:1      | 3.4:1      |
| Employee productivity compared to national averages - Ireland <sup>[12]</sup>  |              | Number:1                        | ↑       | 2.5:1      | 2.3:1      | 2.4:1      |
| <b>EMPLOYEE SKILLS AND CAPABILITIES</b>  |              |                                 |         |            |            |            |
| Learning and development expenditure <sup>[13]</sup>                           | 404-2        | £m                              | ↓       | 11.1       | 12.4       | 9.5        |
| Investment in pipeline programmes <sup>[14]</sup>                              | 404-2        | £m                              | ↑       | 17.2       | 15.4       | 9.4        |
| Average training hours per full-time equivalent employee                       |              | Number                          | =       | 22         | 22         | 21         |
| <b>EMPLOYEE ENGAGEMENT</b>   |              |                                 |         |            |            |            |
| Employee engagement survey participation <sup>[15]</sup>                       |              | %                               | =       | 78         | 82         | -          |
| Employee engagement survey result <sup>[15]</sup>                              |              | % engagement index              | ↓       | 68         | 73         | -          |
| Employees participating in the share incentive plan                            |              | %                               | ↑       | 65         | 58         | 75         |
| Employees participating in the sharesave plan                                  |              | %                               | ↓       | 34         | 42         | 43         |
| <b>BUSINESS ETHICS</b>   |              |                                 |         |            |            |            |
| Speak up contacts made   | 102-17       | Number                          | ↑       | 112        | 105        | 92         |
| Formal grievances raised   |              | Number (Rate per 100 employees) | ↑(↑)    | 164 (0.81) | 143 (0.69) | 153 (0.72) |
| Formal disciplinary procedures instigated                                      | 102-17       | Number (Rate per 100 employees) | ↑(↑)    | 334 (1.64) | 234 (1.13) | 254 (1.20) |
| Human rights grievances filed through formal mechanisms                        |              | Number                          | =       | 0          | 0          | 0          |
| <b>COMMUNITY</b>   |              |                                 |         |            |            |            |
| Employee days donated to charity   |              | Number                          | ↓       | 2,188      | 2,494      | 3,407      |
| Employees involved in community volunteering                                   |              | %                               | =       | 11.5       | 11.4       | 16         |
| Value of employee days donated to charity <sup>[16]</sup>                      |              | £                               | ↓       | 251,814    | 274,282    | 361,155    |
| Community investments funds  |              | £m                              | ↑       | 8.16       | 5.70       | 5.78       |
| Investment in communities <sup>[17]</sup>                                      |              | £m                              | ↑       | 8.45       | 6.51       | 6.93       |

\*Arrows denote a change of 5% or more between 2017/18 and 2018/19

1 Headcount as at 31 Mar in each financial year – figure includes all SSE UK and ROI employees, excludes contingent/agency staff.

2 A contingent worker describes external personnel where the business determines that it cannot fulfil the requirement internally. A contingent worker can be a Consultant, Contractor or Temporary Agency Worker.

3 Based on average of all ages as at 31 March in each financial year.

4 Average employee earnings are based on staffing costs calculated on the same basis as Note 8.1 of the accounts in SSE's Annual Report 2019 (page 182), excluding social security costs.

5 Defined as employees with working hours of <1.0 FTE.

6 "Working differently" includes agile work arrangements such as compressed hours, job sharing and flexible start and end times. Result from SSE's employee 'Great Place to Work' (GPTW) survey.

7 The figures for the Executive Committee include the relevant members of the Committee in each financial year, as well as the Company Secretary and MD, Corporate Affairs and Sustainability, who attend all Committee meetings. Administration employees have not been included when calculating the direct reports to these individuals. Note that this percentage increased to 23.2% on 1 April 2019 following a reorganisation of SSE's business.

8 Based on standard contractual hours over a 52-week period (excludes Overtime and Standby).

9 Excludes end of fixed term contracts and internal transfers.

10 Based on turnover reason of "Regretted" as at 31 March of each financial year.

11 See page 55 for further details. Note SSE has also reported its median CEO pay ratio following the methodology outlined by the UK Government in line with its new reporting requirements.

12 Based on GVA per capita and data provided by the UK's Office for National Statistics (ONS) and Ireland's Central Statistics Office (CSO), from PwC analysis.

13 Total internal and external learning and development expenditure excluding pipeline programme investment. 2017/18 figures have been restated to include relevant investment data not previously captured.

14 Total cost of apprentice, engineering graduate and Technical Skills Trainee programmes, including salary costs.

15 Results from SSE's employee 'Great Place to Work' (GPTW) survey.

16 Calculated using the median base salary for those financial years (2016/17: £27,561, 2017/18: £28,594, 2018/19: £29,923).

17 Total across UK and Ireland, including: charitable donations through matched funding, Community Investment Funds, Resilient Communities Fund and financial value of employee volunteering.

# SSE'S UK GENDER PAY GAP

## AS AT 5 APRIL 2019

[Read more on pages 58 and 59.](#)

| SSE Business Entity with 250 or more employees      | Number of relevant employees in entity | Proportion of male and female employees in business entity (M%/F%) | Mean hourly pay difference between male and female employees (%) | Median hourly pay difference between male and female employees (%) | Proportion of men/women in lower quartile pay band (M%/F%) | Proportion of men/women in lower middle quartile pay band (M%/F%) | Proportion of men/women in upper middle quartile pay band (M%/F%) | Proportion of men/women in upper quartile pay band (M%/F%) | Mean difference in bonus payment between male and female employees (%) | Median difference in bonus payment between male and female employees (%) | Proportion of men/women receiving bonus pay (M%/F%) |
|---|--|--|--|--|--|---|---|--|--|--|---|
| SSE Electricity Ltd                                 | 4,930                                  | 41.6/58.4  | 14.9   | 2.7  | 41.4/58.6  | 42.1/57.9   | 35.7/64.3   | 54.0/46.1  | 59.4   | 75.1   | 15.2/11.1   |
| SSE Metering Ltd                                    | 2,737                                  | 84.7/15.3  | 3.6  | 11.8   | 77.8/22.2  | 85.6/14.4   | 94.2/5.8  | 86.3/13.8  | 1.8  | -6.7   | 24.5/11.0   |
| SSE Contracting Ltd                                 | 2,116                                  | 87.9/12.1  | 20.3   | 21.6   | 75.0/25.1  | 87.2/12.8   | 95.1/4.9  | 94.6/5.4   | -5.9   | -14.0  | 33.0/8.2  |
| Southern Electric Power Distribution plc            | 1,942                                  | 78.8/21.2  | 20.7   | 22.1   | 57.4/42.6  | 82.4/17.6   | 86.6/13.4   | 92.1/7.9   | 24.5   | 5.1  | 10.8/4.6  |
| SSE Services plc                                    | 1,926                                  | 56.2/43.8  | 22.7   | 23.5   | 47.5/52.5  | 49.16/50.8  | 55.1/44.9   | 76.1/23.9  | 51.2   | 26.5   | 28.0/24.0   |
| SSE Generation Ltd                                  | 1,092                                  | 86.4/13.6  | 22.4   | 29.6   | 73.4/26.6  | 85.2/14.8   | 94.1/5.9  | 94.8/5.2   | 35.2   | 24.1   | 83.2/74.3   |
| Scottish Hydro Electric Power Distribution plc      | 1,056                                  | 77.6/22.4  | 18.2   | 20.7   | 61.9/38.1  | 78.1/21.9   | 85.0/15.0   | 88.1/11.9  | 45.0   | 24.7   | 20.5/12.7   |
| SSE Energy Supply Ltd                               | 741                                    | 53.4/46.6  | 32.1   | 8.9  | 54.6/45.4  | 45.4/54.6   | 46.4/53.6   | 72.2/27.8  | 86.2   | 28.9   | 36.6/15.9   |
| Scottish and Southern Energy Power Distribution Ltd | 652                                    | 96.3/3.7   | 15.8   | 27.4   | 91.3/8.7   | 98.1/1.9  | 97.5/2.5  | 98.1/1.9   | 60.6   | 41.7   | 6.4/12.5  |
| SSE Home Services Ltd                               | 471                                    | 80.5/19.5  | 19.1   | 22.4   | 42.2/57.8  | 94.9/5.1  | 99.1/0.9  | 88.7/11.3  | -26.1  | -49.5  | 81.0/2.2  |
| SSE Telecommunications Ltd                          | 412                                    | 76.0/24.0  | 23.6   | 31.7   | 54.5/45.5  | 80.2/19.8   | 85.0/15.0   | 90.1/9.9   | 65.1   | 26.5   | 40.6/29.3   |
| Scottish Hydro Electric Transmission plc            | 350                                    | 80.9/19.1  | 26.6   | 32.4   | 59.3/40.7  | 85.9/14.1   | 92.9/7.1  | 92.9/7.1   | 48.8   | 26   | 39.9/37.3   |
| SSE Renewables Holdings (UK) Ltd                    | 283                                    | 65.0/35.0  | 31.5   | 37.6   | 56.3/43.7  | 60.0/40.0   | 61.4/38.6   | 93.7/6.4   | 46.8   | 53.4   | 72.3/53.5   |
| TESGL Ltd   | 257                                    | 79.4/20.6  | 36.7   | 42.1   | 39.1/60.9  | 92.1/7.9  | 95.2/4.8  | 93.7/6.4   | 39.1   | 53.4   | 43.1/24.5   |
| <b>Total SSE plc (UK)</b>                           | <b>19,480</b>                          | <b>68.8/31.2</b>   | <b>21.4</b>  | <b>21.0</b>  | <b>53.7/46.3</b>   | <b>64.3/35.7</b>  | <b>78.9/21.1</b>  | <b>82.8/17.2</b>   | <b>33.8</b>  | <b>9.3</b>   | <b>30.6/15.7</b>                                    |

# SSE'S GREEN BOND REPORTING

SSE issued its second green bond of €650m in September 2018. This, in addition to SSE's inaugural €600m Green Bond issued in September 2017, means SSE is now the largest issuer of Green Bonds in the UK corporate sector.

This report constitutes SSE's second annual Green Bond update to investors and covers the allocation of proceeds and environmental impact from SSE's inaugural Green Bond and SSE's second Green Bond in accordance with its Green Bond Framework published on [sse.com/investors/green-bond](https://www.sse.com/investors/green-bond).

## ALLOCATION OF PROCEEDS

The proceeds from both SSE's Green Bonds were directly allocated to the refinancing of eligible green projects listed in the Green Bond Framework, and therefore fully employed at settlement.

Table 1 includes the details of SSE's two Green Bonds, including the total value allocated to eligible green projects in Sterling. The proceeds of these Green Bonds have been allocated to refinancing of part of SSE's £1.1bn portfolio of eligible projects of onshore wind

SSE's Tax and Treasury Committee, led by SSE's Finance Director, evaluated and selected eligible green projects for inclusion in its Green Bond Framework. These eligible projects were completed in the 24 months up to 31 August 2017 or were due to be completed in the near future. The main criteria for a project to be eligible within the Green Bond Framework was that it must make a positive environmental impact, support SSE's commitment to the ongoing reduction of the carbon intensity of its electricity generation and finally, support the United Nations Sustainable Development Goal 13 (to take urgent action to combat climate change and its impacts).

farms in the UK and Ireland and the Caithness-Moray HVDC (High Voltage Direct Current) connection, as listed in SSE's Green Bond Framework and shown in Table 2, which has been independently verified by PwC. The assurance statement and the criteria used for reporting can be found at [sse.com/sustainability](https://www.sse.com/sustainability).

It is SSE's intention, where possible, to maintain a ratio of 1.2 to 1 of eligible green project to total Green Bonds outstanding.

**Table 1: SSE plc's Green Bonds**

|                     | Green Bond 2017  | Green Bond 2018  |
|---------------------|------------------|------------------|
| Issuer              | SSE plc          | SSE plc          |
| Currency            | EURO             | EURO             |
| ISIN                | XS1676952481     | XS1875284702     |
| Size                | €600,000,000     | €650,000,000     |
| GBP:EUR at issuance | 1.09404          | 1.0990           |
| Sterling Equivalent | £548,426,017.30  | £591,446,676.80  |
| Pricing Date        | 30 August 2017   | 28 August 2018   |
| Settlement Date     | 6 September 2017 | 4 September 2018 |
| Maturity Date       | 6 September 2025 | 4 September 2027 |
| Coupon              | 0.875%           | 1.375%           |

## ENVIRONMENT IMPACT OF SSE'S GREEN BONDS

To report the environment impact of the green bonds, SSE calculates:

**Onshore wind farm green projects:** The carbon emissions are assumed to be zero and the environment impact is the reduction of carbon emissions from generating wind power rather than generating grid-connected electricity. The criteria for green bond reporting is described at [sse.com/sustainability](https://www.sse.com/sustainability).

**Transmission networks, Caithness-Moray:** Caithness-Moray is a HVDC technology used to transmit power through 113km of subsea cable beneath the Moray Firth seabed between the new converter stations at Spittal in Caithness and Blackhillock in Moray. The transmission link provides up to 1,200MW<sup>1</sup> of capacity to transmit

power from the north of Scotland across the UK.

For the Caithness-Moray transmission link, the green impact refers to the 1,200MW of capacity that transmits power from the north of Scotland across the UK. The project has already facilitated the connection of 985MW of renewable generation to connect to the national grid. This includes the recently connected turbines from Beatrice offshore wind farm (588MW capacity) and Dorenell onshore wind farm (177MW capacity on completion).

The project supports the additional connection of onshore renewable generation on the mainland as well as the Scottish Islands of the Western Isles, Orkney and Shetland.

**Table 2: Allocation of Green Bond proceeds to refinancing eligible green projects**

| Type of Eligible green project   | Eligible green project  | Total actual capex spend (£m) (1) | Total project capacity (MW) | Qualifying Capacity (MW) (1) | Date fully operational | Allocation of 2017 Green Bond proceeds (£m) | Allocation of 2018 Green Bond proceeds (£m) |
|----------------------------------|---|-----------------------------------|-----------------------------|------------------------------|------------------------|---|---|
| Onshore wind farm                | Strathy North   | 102.9                             | 67                          | 67                           | Nov 15                 | 102.9                                       | NIL   |
| Onshore wind farm                | Tievenameenta   | 42.9                              | 34                          | 34                           | Feb 17                 | 41.5  | NIL   |
| Onshore wind farm                | Slieve Divena 2   | 26.5                              | 19                          | 19                           | Jun 17                 | 26.5  | NIL   |
| Onshore wind farm                | Comhlach Gaoithe Teoranta (Galway Wind Park)                    | 85.6                              | 66                          | 66                           | Jun 17                 | 81.9  | NIL   |
| Onshore wind farm                | Dunmaglass  | 88.9                              | 94                          | 47                           | Aug 17                 | 88.9  | NIL   |
| Onshore wind farm                | Clyde Extension (part of Clyde Windfarm (Scotland))             | 100.3                             | 173                         | 87                           | Sep 17                 | 100.3                                       | NIL   |
| Onshore wind farm                | Bhlaraidh   | 117.1                             | 110                         | 110                          | Oct 17                 | 106.6                                       | NIL   |
| Onshore wind farm                | Leanamore   | 30.8                              | 18                          | 18                           | Feb 18                 | NIL   | 30.8  |
| Onshore wind farm                | Stronelairg   | 147.6                             | 228                         | 114                          | Dec 18                 | NIL   | 147.6                                       |
| <b>Total</b>                     | <b>Onshore wind farm project</b>                                | <b>742.6</b>                      | <b>809</b>                  | <b>562</b>                   |                        | <b>548.6</b>                                | <b>178.4</b>                                |
| HDVC Transmission connection (2) | Caithness Moray transmission link                               | 1,020.0                           | 1,200                       | 1,200                        | Jan 19                 | NIL   | 413.0                                       |
| <b>Total</b>                     | <b>Onshore wind farms and Caithness Moray transmission link</b> | <b>1,762.6</b>                    | <b>2,009</b>                | <b>1,762</b>                 |                        | <b>NIL</b>                                  | <b>591.4</b>                                |

(1) Reported Actual Capex and Qualifying Capacity reflect SSE's 50.1% ownership in Clyde Windfarm (Scotland), Dunmaglass and Stronelairg wind farms as at 31 March 2019.  
(2) For this transmission link, the actual electricity transmitted is controlled by National Grid Electricity System Operator.

Table 3 details the environmental impact from the green projects which the Green Bond proceeds were allocated to. It is estimated that SSE's inaugural Green Bond proceeds were allocated to projects which saved over 324,000 tCO<sub>2</sub>e (Between 1 April 2018 to 31 March 2019) and its second Green Bond 132,000 tCO<sub>2</sub>e (1 September 2018 to 31 March 2019)

**Table 3: Allocation of green project impact for the two Green Bonds**

| Eligible green project                                  | Green Bond 2017 (3)  |                         |   |  | Green Bond 2018 (4)  |                         |   |  |
|---|----------------------|-------------------------|---|--|----------------------|-------------------------|---|--|
|   | Overall output (GWh) | Qualifying output (GWh) | Overall carbon saved (tCO <sub>2</sub> e) | Qualifying carbon saved (tCO <sub>2</sub> e) | Overall output (GWh) | Qualifying output (GWh) | Overall carbon saved (tCO <sub>2</sub> e) | Qualifying carbon saved (tCO <sub>2</sub> e) |
| Strathy North   | 116.1                | 116.1                   | 32,864                                    | 32,864                                       |                      |                         |   |  |
| Tievenameenta   | 92.1                 | 92.1                    | 26,071                                    | 26,071                                       |                      |                         |   |  |
| Slieve Divena   | 49.9                 | 49.9                    | 14,125                                    | 14,125                                       |                      |                         |   |  |
| Comhlach Gaoithe Teoranta (Galway Wind Park)            | 205.5                | 205.5                   | 58,171                                    | 58,171                                       |                      |                         |   |  |
| Dunmaglass (1)  | 257.7                | 257.7                   | 72,947                                    | 72,947                                       |                      |                         |   |  |
| Clyde Extension (part of Clyde Windfarm (Scotland)) (2) | 442.2                | 228.3                   | 125,174                                   | 64,625                                       |                      |                         |   |  |
| Bhlaraidh   | 193.6                | 193.6                   | 54,802                                    | 54,802                                       |                      |                         |   |  |
| Leanamore   | 50.8                 | 38.0                    | -   | -  | 50.8                 | 38                      | 14,380                                    | 10,757                                       |
| Stronelairg (1)   | 476.5                | 430.5                   | -   | -  | 476.5                | 430.5                   | 134,883                                   | 121,862                                      |
| <b>Total</b>  | <b>1,884.4</b>       | <b>1,611.7</b>          | <b>384,154</b>                            | <b>323,605</b>                               | <b>527.3</b>         | <b>468.5</b>            | <b>149,263</b>                            | <b>132,619</b>                               |
| Caithness Moray transmission link (5)                   | -                    | -                       | -   | -  |                      |                         |   |  |

(1) Reported output and carbon saved reflects SSE's 100% ownership in Dunmaglass and Stronelairg wind farms to 31 March 2019 when a 49.9% equity stake sale completed.  
(2) Reported output and carbon saved reflects SSE's 65% ownership in Clyde Windfarm (Scotland) Limited for April and May 2018 and 50.1% from June 2018 to March 2019.  
(3) Green Bond 1 output (GWh) and carbon saved (tCO<sub>2</sub>e) for reporting period 1 April 2018 to 31 March 2019.  
(4) Green Bond 2 output (GWh) and carbon saved (tCO<sub>2</sub>e) for reporting period 1 September 2018 to 31 March 2019.  
(5) See page 74 for explanation of the green impact for the Caithness-Moray transmission link.

<sup>1</sup> For this transmission link, the actual electricity transmitted is controlled by National Grid Electricity System Operator.



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