

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

SSE is a UK-listed energy company, operating across the UK and Ireland and in carefully selected international markets including East Asia, Europe and North America. It is involved in the generation, transmission, and distribution of electricity; and in the supply of electricity, gas and related services to customers. It is a leading generator of renewable electricity in the UK and Ireland and one of the largest electricity network companies in the UK. SSE's purpose is to provide energy needed today while building a better world of energy for tomorrow; and its vision is to be a leading energy company in a net-zero world. Its strategy is to create value for shareholders and society in a sustainable way by developing, building, operating and investing in the electricity infrastructure and businesses needed in the transition to net zero.

SSE's strategy is aligned to the ambitions set out in the Paris Agreement and an accelerated power sector pathway to net zero consistent with global warming of no more than 1.5oC. SSE also aims to increase the resilience of its business by adapting to the impact of a changed climate.

Aligned to the UN Sustainable Development Goals (SDGs) most material to SSE's business activities, SSE's 2030 Goals are four core business goals focused on addressing the challenge of climate change in a just and fair way – cutting carbon intensity by 80%; increasing renewable energy output fivefold; enabling low carbon generation and demand; and championing a fair and just energy transition. They provide a framework for the Company as it works towards its net zero ambitions, ensuring that as it does, it creates and shares value with its stakeholders along the way.

SSE aims to achieve net zero across scope 1 and 2 emissions by 2040 at the latest (subject to security of supply requirements) and for remaining scope 3 emissions by 2050 at the latest. SSE will, first and foremost, take action to reduce emissions as low as possible and its Net Zero Transition Plan sets out the key actions it is taking to achieve its targets to drive progress towards its net zero ambitions. Only when abatement is maximised will SSE deploy technologies or nature-based solutions that will neutralise any residual emissions.

SSE's Net Zero Transition Plan was first published in March 2022 and updated in October 2022 in response to shareholder and wider stakeholder feedback. The updated Net Zero Transition Plan outlines SSE's net zero aligned targets and describes 17 actions to reduce material GHG emissions across scopes 1, 2 and 3.

SSE's businesses and how they contribute to net zero:

SSE's businesses are well positioned to capture the growth opportunities generated by driving and accelerating the net zero agenda through electricity infrastructure:

- **SSE Renewables:** develops, finances, constructs and operates in assets that generate electricity from renewable sources.
- **SSE Thermal:** owns and operates conventional flexible thermal generation in GB and Ireland and around **40%** of GB's conventional underground gas storage capacity. These assets provide much-needed system flexibility. SSE Thermal is actively developing options to progressively decarbonise its portfolio (most notably in carbon capture and storage and hydrogen technologies, with biofuel as a bridge into hydrogen).
- **SSEN Transmission:** owns, operates and develops the high voltage electricity transmission network in the north of Scotland.
- **SSEN Distribution:** owns, operates and maintains the electricity distribution networks in the north of Scotland and central southern England.
- **SSE Energy Customer Solutions:** SSE Business Energy in GB (non-domestic) and SSE Airtricity on the island of Ireland (domestic and non-domestic) provide a shopfront and route to market for SSE's generation, renewable green products and low-carbon energy solutions.
- **SSE Distributed Energy:** brings low-carbon energy solutions to business-to-business markets including heat networks, solar, battery and EV charging solutions.
- **SSE Energy Portfolio Management:** trades commodities in wholesale markets and manages volatility through risk-managed trading of energy-related commodities for SSE's market based businesses.

SSE has been reporting to CDP on climate-related issues and opportunities since 2004. The most material environment impact and opportunity for SSE is climate-related and SSE's business strategy places climate change and the challenge and opportunity of decarbonisation at its core.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

April 1 2022

End date

March 31 2023

Indicate if you are providing emissions data for past reporting years

No

Select the number of past reporting years you will be providing Scope 1 emissions data for

<Not Applicable>

Select the number of past reporting years you will be providing Scope 2 emissions data for

<Not Applicable>

Select the number of past reporting years you will be providing Scope 3 emissions data for

<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.

Ireland

United Kingdom of Great Britain and Northern Ireland

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

GBP

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-EU0.7

(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.

Row 1

Electric utilities value chain

Electricity generation

Transmission

Distribution

Other divisions

Gas storage, transmission and distribution

Smart grids / demand response

Battery storage

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	GB0007908733

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Chief Executive Officer (CEO)	<p>Climate-related issues are highly material to the energy industry with climate-related risks and low-carbon opportunities directly impacting SSE's business strategy and its ability to achieve its business objectives. For this reason, SSE's CEO (an Executive Director on the SSE plc Board) has ultimate responsibility in their executive capacity for climate-related issues. Key external activities which support this position include being a member of the UK Government's Hydrogen Advisory Council and the Scottish Energy Advisor Board.</p> <p>The Board is responsible for setting SSE's strategy and the CEO is involved in both setting the Group's strategic direction (in their capacity as an Executive Director) and leading on its implementation (as head of executive management and SSE's Group Executive Committee (GEC)). SSE's strategy 'to create value for shareholders and society in a sustainable way by developing, building, operating and investing in the electricity infrastructure and businesses needed in the transition to net zero' executes its vision of 'being a leading energy company in a net zero world' by focusing on core renewables and economically-regulated electricity networks businesses supporting this transition. When setting strategic objectives, all material influencing factors, including climate change, are considered. The CEO has a specific role to ensure the decisions and actions of the company are sustainable in the long-term, through appropriate management, implementation and progress of sustainability interventions which support SSE's strategy and address material impacts including climate change.</p> <p>SSE'S CEO and Board remain committed to reaching net zero carbon emissions across all operations by 2050 at the latest (covering both SSE's direct and indirect emissions, or its scope 1, 2 and 3 greenhouse gas emissions), supported by SSE's science-based targets which align to the SBTi 1.5°C power sector guidance. The GEC, which the CEO leads, and the SSE plc Board, both approved this decision in November 2021. SSE's Net Zero Acceleration Programme Plus (approved by the Board in May 2023 as an update to SSE's Net Zero Acceleration Programme announced in November 2021) aligns with SSE's science-based targets and is a fully-funded £18bn capital expenditure plan to 2026/27, around 90% of which is expected to be invested in renewables and networks. The Programme is further aligned to the Technical Screening of the EU Taxonomy.</p>
Chief Financial Officer (CFO)	<p>SSE's Finance Director deputises for the Chief Executive and is responsible for setting SSE's financial strategy and overseeing financial performance. The Finance Director is a member of the Accounting for Sustainability (A4S) CFO Leadership Network. The presence of climate-related issues within the Finance Director's role includes:</p> <ul style="list-style-type: none"> • Sustainable debt financing to support the execution of SSE's strategic ambitions, such as the issuance of 'green bonds' and the use of ESG linked finance facilities. The CFO has overseen the issuance of five Green Bonds since 2017. The main selection criteria for a project to be selected for a Green Bonds, includes alignment with, and furtherance of, SSE's commitment to reduce the carbon intensity of its electricity generation and SDG 13 (take urgent action to combat climate change and its impacts). In September 2022, SSE completed a 25% minority interest disposal of the SSEN Transmission business to Ontario Teachers' Pension Plan Board, the proceeds of which are earmarked to fund part of its programme of critical investments in transmission network infrastructure that will help accommodate the significant increase in renewables required to bolster the UK's energy security and achieve the transition to net zero emissions, as well as cover existing maturing debt. These investments are essential in enabling delivery of the UK Government's ambition for enough offshore wind to power every home with renewable energy by 2030. • Engagement with the investment community on ESG and climate-related matters, which are fed-back to the whole Board and considered in decision making where appropriate. • Climate-related financial and non-financial reporting, such as SSE's approach to the Task Force on Climate-related Financial Disclosure (TCFD) recommendations, this CDP report and other material climate-related non-financial disclosures. The Finance Director approves SSE's CDP Climate Change programme response and the Board signs off on SSE's full suite of TCFD disclosures in the Annual Report following review by the Audit Committee.
Board Chair	<p>SSE's Board Chair leads the SSE plc Board, ensuring its effective operation and governance. As set out in SSE's Schedule of Reserved matters, the Board has overall responsibility for setting the strategy of the SSE Group, which is: to create value for shareholders and society in a sustainable way by developing, building, operating and investing in the electricity infrastructure and businesses needed in the transition to net zero. Specifically, the Chair has responsibility for ensuring the decisions of the company are sustainable in the long-term, and the Group's approach to sustainability, including climate change, is addressed through strategic and operational considerations and in the context of assessing risk.</p> <p>In FY2022/23 some of the work carried out by the Board in line with SSE's net zero strategy, included:</p> <ul style="list-style-type: none"> • the approval of an upgraded CapEx plan - SSE's Net Zero Acceleration Programme Plus (NZAP Plus). • a final investment decision in Yellow River wind farm on Ireland. • support for exploratory work at the Coire Glas pumped hydro scheme with a £100m investment boost (Coire Glas is the country's most advanced, flexible energy storage project currently in development). • approval of a battery storage project at Ferrybridge. • approval of updates to SSE's Net Zero Transition Plan. • approval of the acquisition alongside Equinor as 50/50 partners of the e Triton Power portfolio. • support for SSEN Transmission's engagement with Ofgem on the investments required to meet the government's 2030 targets. • support for SSEN Distribution's acceptance of Ofgem's RIIO-ED2 final determinations. • a review of progress against SSE's Just Transition Strategy; overseeing publication of a progress report and considering priorities for action including attracting high-carbon workers into SSE. • considered 'From Ambition to Action: A Delivery Plan for Cleaner, Homegrown Energy'; a resource to help frame political engagement over the course of the year, including the policies which SSE advocates should be adopted, to deliver investment in clean energy infrastructure and achieve cross-party ambitions on decarbonisation, energy security and the green economy - all of which are aligned to, and consistent with, SSE's NZAP Plus and 2030 Goals.
Board-level committee	<p>The Safety, Sustainability, Health and Environment Advisory Committee (SSHEAC) is a sub-Committee of the SSE plc Board with the membership comprising: four non-Executive Directors; the Chair of the Board; the Chief Commercial Officer; the Chief Sustainability Officer; and three senior executives. The Committee's role is to support the Board and provide assurance in matters relating to safety, health, environment (SHE) and sustainability. The SSHEAC provides a leadership forum for non-Executive Directors to work with senior management and shape policy, targets and strategy to improve SHE performance and culture, in addition to supporting SSE's commitment to being a sustainable company that makes a positive contribution. The Committee's roles in relation to sustainability includes responsibility for: reviewing SSE's comparative ESG ratings performance; approving SSE's Sustainability Report; reviewing the physical risks of climate change on SSE's activities with a focus on climate adaptation and resilience; and increased oversight of SSE's policy, practice and performance surrounding environmental impacts, including waste, air emissions, biodiversity and water consumption – under which it continues to oversee the actions which have been agreed to manage SSE's environmental footprint</p>

C1.1b

(C1.1b) Provide further details on the board’s oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	<p>Reviewing and guiding annual budgets</p> <p>Overseeing major capital expenditures</p> <p>Overseeing acquisitions, mergers, and divestitures</p> <p>Reviewing innovation/R&D priorities</p> <p>Overseeing and guiding employee incentives</p> <p>Reviewing and guiding strategy</p> <p>Overseeing and guiding the development of a transition plan</p> <p>Monitoring the implementation of a transition plan</p> <p>Overseeing and guiding scenario analysis</p> <p>Overseeing the setting of corporate targets</p> <p>Monitoring progress towards corporate targets</p> <p>Overseeing and guiding public policy engagement</p> <p>Reviewing and guiding the risk management process</p>	<Not Applicable>	<p>Strategy, plans, budgets, approvals and performance</p> <p>SSE’s Schedule of Reserved Matters outlines the Board’s responsibilities; core to which is agreeing the Company’s purpose and strategy. Climate change is implicitly linked to SSE’s net zero focused strategy and is therefore covered at every Board meeting. The Board also has responsibility in its leadership role to review and approve priorities surrounding SSE’s principal sustainability impacts, including in relation to climate change.</p> <p>In 2023, the Board’s strategic focus continued on the opportunities related to the net zero transition, with Board approval of the updated Capex programme (Net Zero Acceleration Programme Plus).</p> <p>The Board sets the budget for the SSE Group and must approve major projects that materially impact the Group’s strategy through SSE’s financial governance framework.</p> <p>Key Board work in the year related to strategy and progress of the NZAP (now NZAP Plus):</p> <p>(i) Renewables - The Board appraised growth opportunities in Great Britain, Ireland and internationally to support SSE Renewables’ development pipeline (including final investment decision in Yellow River wind farm; acquisition of a renewables platform in southern Europe; and approval of a battery storage project at Ferrybridge).</p> <p>(ii) Low-carbon technologies - The Board confirmed industrial clusters can provide for low-carbon projects to support net zero, and reviewed opportunities to repurpose existing thermal generation sites and partner on the new low carbon technologies (i.e. Aldbrough hydrogen pathfinder project).</p> <p>(iii) Transmission network - The Board has reviewed performance against SSEN Transmissions RIIO-T2 business plan and provided financial approvals for projects within its certain view and within its network-wide Accelerated Strategic Transmission Investment (ASTI) framework, approved eight additional investments within SSEN Transmission’s network area required to meet the Government’s 2030 ambitions.</p> <p>Group Principal Risks</p> <p>Effective identification, understanding and mitigation of SSE’s Principal Risks underpins the Board’s approach to setting strategic objectives and informing strategic decision making, including those relating to climate change. Material changes in the nature and potential impacts of SSE’s Group Principal Risks are regularly assessed with appropriate mitigations implemented where necessary.</p> <p>Climate action, goals and reporting</p> <p>At SSE’s AGM 2021, a framework for annual shareholder advisory votes was established which involved committing to publishing a Net Zero Transition Report. In 2022/23, the Board approved updates to SSE’s Net Zero Transition Plan which details the targets and actions SSE intends to take to achieve its net zero ambitions. This was followed by Board approval of SSE’s Net Zero Transition Report 2023 which summarises the progress against this plan towards SSE’s net zero targets.</p>

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	<p>SSE’s Executive Directors have worked in the energy industry and been with SSE for a significant period. The Chief Executive joined SSE in 1997, the Finance Director joined SSE in 1990 and the Chief Commercial Officer joined SSE in 1998. In their respective roles they have gained, and currently possess, depth of understanding of the climate-related issues facing society and the role of energy sector (and SSE) in addressing climate change. This is reflected in SSE’s purpose and its strategy and the targeted climate action which shapes business objectives (targeted action includes accelerated science-based targets, enhanced 2030 business goals and the creation of a Net Zero Transition Report and Plan). External positions which the Executive Directors hold which support the above are: the Chief Executive – Member of the UK Government’s Hydrogen Advisory Council and Member of the Scottish Energy Advisory Board; the Finance Director – member of the Accounting for Sustainability (A4S) Leadership Network; and the Chief Commercial Officer – member of the Energy UK Board.</p> <p>A number of the non-Executive Directors also possess long-standing executive career experience in the sector and have therefore also assimilated understanding of climate-related issues. Their full biographies can be found in the SSE Annual Report 2023 on pages 116 to 120 and on sse.com. Per the skills matrix on page 115 of the Annual Report, four non-Executive Directors have experience in clean energy, renewables and climate science.</p>	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

- Managing annual budgets for climate mitigation activities
- Providing climate-related employee incentives
- Conducting climate-related scenario analysis
- Assessing climate-related risks and opportunities
- Managing climate-related risks and opportunities

Coverage of responsibilities

<Not Applicable>

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The Chief Executive is an Executive Director on the Board and is head of executive management, leading the Group Executive Committee (GEC). As a member of the Board, the Chief Executive is involved in setting the strategic direction of SSE. As leader of the GEC, the Chief Executive oversees strategic implementation, which is reported back to the Board at each meeting (typically monthly).

Through the Board approved division of responsibilities (across key Board roles), the Chief Executive has overall responsibility for ensuring the decisions and actions of the company are sustainable in the long-term, through appropriate management, implementation and progress of sustainability interventions which support SSE's strategy and address material impacts including climate change.

The Chief Executive is responsible for considering material influencing factors (which includes climate-related issues and low-carbon opportunities) when proposing and leading the delivery of strategy (which is centred on addressing the issue of climate change and supporting the net zero transition); implementing and driving climate-related performance programmes across the organisation; and communicating and providing feedback on the implementation of Board agreed policies, including SSE's Group Climate Change Policy.

Members of the GEC include the: Chief Executive; Finance Director; Chief Commercial Officer; Managing Director, SSEN Transmission; Managing Director, SSEN Distribution; Managing Director, SSE Renewables; the General Counsel; Director of Corporate Affairs and Strategy; and Director of HR. The GEC has responsibility for climate-related issues through its mandate to implement SSE's strategy through the operational management of SSE's Business Units; and its responsibility for identifying SSE's material sustainability impacts and deciding the implementation and delivery of the Group's sustainability strategy including in relation to climate change. It is supported in its role by a suite of sub-Committees with agreed delegated authorities. The members of the GEC ensure that each business within the Group is equipped with the necessary resources to deliver agreed strategy effectively and efficiently by considering the expectations of stakeholders in respect of economic, social and environmental impacts.

The GEC is responsible for delivering strategy under the leadership of the Chief Executive and for overseeing SSE's Group Principal Risks and implementing a comprehensive Principal Risk Self-Assessment, this includes for the Climate Change Group Principal Risk. It drives climate-related performance programmes across the company and considers climate-related issues on a standing basis at least annually, with other climate-related issues being considered as and when required as advised by the Chief Executive or Chief Sustainability Officer.

Position or committee

Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position

Developing a climate transition plan
 Implementing a climate transition plan
 Integrating climate-related issues into the strategy
 Conducting climate-related scenario analysis
 Setting climate-related corporate targets
 Monitoring progress against climate-related corporate targets
 Managing public policy engagement that may impact the climate
 Managing value chain engagement on climate-related issues
 Assessing climate-related risks and opportunities
 Managing climate-related risks and opportunities

Coverage of responsibilities

<Not Applicable>

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

More frequently than quarterly

Please explain

The Chief Sustainability Officer (CSO) is responsible for advising the Board, the GEC and SSE's Business Units on sustainability-related issues and strategy, including those relating to climate. The CSO reports directly to the Chief Executive and is a member of the SSHEAC (a sub-Committee of the Board) and three of the six SSE Group-wide sub-committees of the GEC: the Group Safety, Health and Environment Committee (SHEC); the Group Risk Committee; and the Group Large Capital Projects Committee. The CSO is also a non-Executive Director of the SSEN Transmission Board. The roles and responsibilities of the CSO have been defined in the context of the significance of climate-related issues to the Group's strategy, sustainability approach and long-term success. The role of CSO ensures a continuous focus on sustainability issues through agreed reporting to the Board and executive, ensuring relevant issues are elevated to the most senior level.

The Chief Sustainability Officer is responsible for the Group Sustainability function which assesses, manages and monitors climate-related issues and opportunities in the context of strategic development, and oversees external reporting, which includes non-financial disclosures such as those in relation to climate change. In addition, the Chief Sustainability Officer, is responsible for driving sustainability performance across the organisation and reports progress on sustainability activities to the Board and SSE's stakeholders. This includes working with SSE's Business Units to deliver the business strategy and implementing the four 2030 business goals, three of which address the challenge and opportunity of climate change. The Group Sustainability function monitors: performance against SSE's Science Based Targets; progress against the 2030 goals; and facilitates TCFD risk and opportunity assessments. Results of these are reported to the GEC, Board and CEO.

C1.3**(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?**

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).**Entitled to incentive**

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)Bonus - % of salary
Shares**Performance indicator(s)**Board approval of climate transition plan
Shareholder approval of climate transition plan
Progress towards a climate-related target
Reduction in emissions intensity
Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)**Incentive plan(s) this incentive is linked to**

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

SSE's approach to Executive remuneration reflects the role of sustainability and climate-related considerations within SSE's purpose and strategy, with sustainability-linked metrics and targets forming an element of performance-related pay. The framework of SSE's 2030 Goals has been used since 2019 to assess performance, which was linked to the performance based Annual Incentive Plan (AIP) until 2021/22. The updated Directors' Remuneration Policy, approved by shareholders at the 2022 AGM, has seen two important changes:

- performance against the 2030 Goals is now linked to the longer-term Performance Share Plan (PSP).
- average performance across three independent external ESG ratings, now being linked to the Annual Incentive Performance.

Overall, the link between sustainability performance and Executive remuneration has been strengthened.

• AIP

SSE's AIP is a short-term bonus scheme. It measures performance against a range of financial and non-financial measures (including sustainability). The award is delivered 67% as cash, and 33% in shares which are deferred for a period of three years. The updated sustainability measures include average percentile performance across three key ESG ratings, linked to 10% of the AIP award. These are Moody's, Sustainalytics and S&P Global. SSE assess its performance by deeming the median score as the threshold and performance at the upper quintile, or above, the maximum. In addition to the new sustainability measures, operational measures based on People and Customers ensure a strong focus on sustainability in the AIP.

• PSP

SSE's PSP is a long-term incentive which awards executive directors with a grant of shares equal to a percentage of their base salary. These shares are held in trust for a period of three years before being released subject to certain performance targets being met. These targets are financial and non-financial which includes sustainability. These will vest for the first time in 2025.

These measures are worth 15% of the overall award. In 2022, Shareholders also approved new 'strategic' measures which assess progress towards the successful delivery of SSE's capital investment plan, meaning that 30% of shares awarded under the new PSP are linked to sustainability, either directly through sustainability measures or through strategic measures via SSE's NZAP Plus. Outcomes will be reported in 2025 at the end of the three-year measurement period.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Annual Incentive Plan (AIP): The AIP award is determined by performance against both financial metrics and non-financial performance.

Updated in 2022, the Remuneration Committee aligned 10% of the AIP to sustainability performance by assessing SSE's performance across three key ESG ratings (Moody's ESG rating, Sustainalytics sustainability index and S&P Global sustainability index). These ESG indices factor in performance on a wide range of sustainability matters, such as SSE's environmental performance (e.g., greenhouse gas emissions, water use, biodiversity, waste) and SSE's social performance (e.g., human rights, human resources) and governance performance (e.g., corporate governance, business ethics). By encouraging SSE to achieve its upper quintile ranking across all indices, the incentives are linked to the continuous improvement of SSE sustainability performance.

Performance Share Plan (PSP): PSP is linked to the progress against the achievement of SSE's four business goals aligned to the UN Sustainable Development Goals. Three of the four goals are climate-related and drive renewable development, electrification and reduce carbon intensity of generated electricity. These are:

- SDG 13 Climate Action: Reduce scope 1 carbon intensity by 80% by 2030, compared to 2017/18 levels, to 61gCO₂ e/kWh.
- SDG 7 Affordable and Clean Energy: Build a renewable energy portfolio that generates at least 50TWh of renewable electricity a year by 2030.
- SDG 9 Industry, Innovation and Infrastructure: Enable at least 20GW of renewable generation and facilitate around 2 million EVs and 1 million heat pumps on SSEN's electricity networks by 2030.

The final goal, to champion a real Living Wage and Fair Tax are also important to delivering the first three:

- SDG 8 Decent Work and Economic Growth: Be a global leader for the just transition to net zero, with a guarantee of fair work and commitment to paying fair tax and sharing economic value.

Outcomes will be reported in 2025 at the end of the current three-year measurement period.

Entitled to incentive

Chief Financial Officer (CFO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary
Shares

Performance indicator(s)

Progress towards a climate-related target
Reduction in emissions intensity
Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

SSE's approach to Executive remuneration reflects the role of sustainability and climate-related considerations within SSE's purpose and strategy, with sustainability-linked metrics and targets forming an element of performance-related pay. The framework of SSE's 2030 Goals has been used since 2019 to assess performance, which was linked to the performance based Annual Incentive Plan (AIP) until 2021/22. The updated Directors' Remuneration Policy, approved by shareholders at the 2022 AGM, has seen two important changes:

- performance against the 2030 Goals is now linked to the longer-term Performance Share Plan (PSP).
- average performance across three independent external ESG ratings, now being linked to the Annual Incentive Performance.

Overall, the link between sustainability performance and Executive remuneration has been strengthened.

• AIP

SSE's AIP is a short-term bonus scheme. It measures performance against a range of financial and non-financial measures (including sustainability). The award is delivered 67% as cash, and 33% in shares which are deferred for a period of three years. The updated sustainability measures include average percentile performance across three key ESG ratings, linked to 10% of the AIP award. These are Moody's, Sustainalytics and S&P Global. SSE assess its performance by deeming the median score as the threshold and performance at the upper quintile, or above, the maximum. In addition to the new sustainability measures, operational measures based on People and Customers ensure a strong focus on sustainability in the AIP.

• PSP

SSE's PSP is a long-term incentive which awards executive directors with a grant of shares equal to a percentage of their base salary. These shares are held in trust for a period of three years before being released subject to certain performance targets being met. These targets are financial and non-financial which includes sustainability. These will vest for the first time in 2025.

These measures are worth 15% of the overall award. In 2022, Shareholders also approved new 'strategic' measures which assess progress towards the successful delivery of SSE's capital investment plan, meaning that 30% of shares awarded under the new PSP are linked to sustainability, either directly through sustainability measures or through strategic measures via SSE's NZAP Plus. Outcomes will be reported in 2025 at the end of the three-year measurement period.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Annual Incentive Plan (AIP): The AIP award is determined by performance against both financial metrics and non-financial performance.

Updated in 2022, the Remuneration Committee aligned 10% of the AIP to sustainability performance by assessing SSE's performance across three key ESG ratings (Moody's ESG rating, Sustainalytics sustainability index and S&P Global sustainability index). These ESG indices factor in performance on a wide range of sustainability matters, such as SSE's environmental performance (e.g., greenhouse gas emissions, water use, biodiversity, waste) and SSE's social performance (e.g., human rights, human resources) and governance performance (e.g., corporate governance, business ethics). By encouraging SSE to achieve its upper quintile ranking across all indices, the incentives are linked to the continuous improvement of SSE sustainability performance.

Performance Share Plan (PSP): PSP is linked to the progress against the achievement of SSE's four business goals aligned to the UN Sustainable Development Goals. Three of the four goals are climate-related and drive renewable development, electrification and reduce carbon intensity of generated electricity. These are:

- SDG 13 Climate Action: Reduce scope 1 carbon intensity by 80% by 2030, compared to 2017/18 levels, to 61gCO₂ e/kWh.
- SDG 7 Affordable and Clean Energy: Build a renewable energy portfolio that generates at least 50TWh of renewable electricity a year by 2030.
- SDG 9 Industry, Innovation and Infrastructure: Enable at least 20GW of renewable generation and facilitate around 2 million EVs and 1 million heat pumps on SSEN's electricity networks by 2030.

The final goal, to champion a real Living Wage and Fair Tax are also important to delivering the first three:

- SDG 8 Decent Work and Economic Growth: Be a global leader for the just transition to net zero, with a guarantee of fair work and commitment to paying fair tax and sharing economic value.

Outcomes will be reported in 2025 at the end of the current three-year measurement period.

Entitled to incentive

Chief Operating Officer (COO)

Type of incentive

Monetary reward

Incentive(s)

Bonus – set figure
Shares

Performance indicator(s)

Progress towards a climate-related target
Reduction in emissions intensity
Company performance against a climate-related sustainability index (e.g., DJSI, CDP Climate Change score etc.)

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

SSE's approach to Executive remuneration reflects the role of sustainability and climate-related considerations within SSE's purpose and strategy, with sustainability-linked metrics and targets forming an element of performance-related pay. The framework of SSE's 2030 Goals has been used since 2019 to assess performance, which was linked to the performance based Annual Incentive Plan (AIP) until 2021/22. The updated Directors' Remuneration Policy, approved by shareholders at the 2022 AGM, has

seen two important changes:

- performance against the 2030 Goals is now linked to the longer-term Performance Share Plan (PSP).
- average performance across three independent external ESG ratings, now being linked to the Annual Incentive Performance.

Overall, the link between sustainability performance and Executive remuneration has been strengthened.

• AIP

SSE's AIP is a short-term bonus scheme. It measures performance against a range of financial and non-financial measures (including sustainability). The award is delivered 67% as cash, and 33% in shares which are deferred for a period of three years. The updated sustainability measures include average percentile performance across three key ESG ratings, linked to 10% of the AIP award. These are Moody's, Sustainalytics and S&P Global. SSE assess its performance by deeming the median score as the threshold and performance at the upper quintile, or above, the maximum. In addition to the new sustainability measures, operational measures based on People and Customers ensure a strong focus on sustainability in the AIP.

• PSP

SSE's PSP is a long-term incentive which awards executive directors with a grant of shares equal to a percentage of their base salary. These shares are held in trust for a period of three years before being released subject to certain performance targets being met. These targets are financial and non-financial which includes sustainability. These will vest for the first time in 2025.

These measures are worth 15% of the overall award. In 2022, Shareholders also approved new 'strategic' measures which assess progress towards the successful delivery of SSE's capital investment plan, meaning that 30% of shares awarded under the new PSP are linked to sustainability, either directly through sustainability measures or through strategic measures via SSE's NZAP Plus. Outcomes will be reported in 2025 at the end of the three-year measurement period.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Annual Incentive Plan (AIP): The AIP award is determined by performance against both financial metrics and non-financial performance.

Updated in 2022, the Remuneration Committee aligned 10% of the AIP to sustainability performance by assessing SSE's performance across three key ESG ratings (Moody's ESG rating, Sustainalytics sustainability index and S&P Global sustainability index). These ESG indices factor in performance on a wide range of sustainability matters, such as SSE's environmental performance (e.g., greenhouse gas emissions, water use, biodiversity, waste) and SSE's social performance (e.g., human rights, human resources) and governance performance (e.g., corporate governance, business ethics). By encouraging SSE to achieve its upper quintile ranking across all indices, the incentives are linked to the continuous improvement of SSE sustainability performance.

Performance Share Plan (PSP): PSP is linked to the progress against the achievement of SSE's four business goals aligned to the UN Sustainable Development Goals. Three of the four goals are climate-related and drive renewable development, electrification and reduce carbon intensity of generated electricity. These are:

- SDG 13 Climate Action: Reduce scope 1 carbon intensity by 80% by 2030, compared to 2017/18 levels, to 61gCO₂ e/kWh.
- SDG 7 Affordable and Clean Energy: Build a renewable energy portfolio that generates at least 50TWh of renewable electricity a year by 2030.
- SDG 9 Industry, Innovation and Infrastructure: Enable at least 20GW of renewable generation and facilitate around 2 million EVs and 1 million heat pumps on SSEN's electricity networks by 2030.

The final goal, to champion a real Living Wage and Fair Tax are also important to delivering the first three:

- SDG 8 Decent Work and Economic Growth: Be a global leader for the just transition to net zero, with a guarantee of fair work and commitment to paying fair tax and sharing economic value.

Outcomes will be reported in 2025 at the end of the current three-year measurement period.

Entitled to incentive

All employees

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary
Salary increase

Performance indicator(s)

Other (please specify) (Achievement of SSE's sustainability value)

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

The Annual Incentive Plan for employees is based on personal, business and corporate (i.e., group level) objectives. Part of the 'corporate' measure relates to performance against external sustainability indices, and some business measures relate to SSE's Net Zero Acceleration Programme. Depending on their role, employees may have specific personal objectives which relate to sustainability.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

A 'Corporate' element of the annual incentive for all eligible employees, representing between 10% and 25% of the award, flows through directly from Executive Directors' incentive outcomes which includes an element related to performance against three external sustainability indices – Moody's, Sustainalytics and S&P Global.

NB: Activity incentivised is reported as Other: Achievement of SSE's sustainability value

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	3	<p>SSE's time horizons for assessing climate-related risks and opportunities are aligned with other business practice time horizons. The three climate-related time horizons mirror the investment, capital and regulatory time horizons that govern SSE's financial, operational and capital plans.</p> <p>SSE's short-term horizon for assessing climate-related risks and opportunities is 0 to 3 years. This is influenced by the viability assessment of the company. Each year, in line with the requirements within provision C.2.2 of the UK Corporate Governance Code and as part of the risk assessment process, the Board assesses the prospects of the Company over the next 3 financial years. It is through this process that SSE determines its Group Principal Risks. Material influencing factors are considered when reviewing Group Principal Risks including those relating to climate change.</p>
Medium-term	3	10	<p>SSE's medium-term horizon for considering climate-related risks and opportunities is 3 to 10 years. This is influenced by work done by the Committee on Climate Change (CCC), which is an independent, statutory body set up to monitor the UK's progress towards meeting targets set out in the Climate Change Act 2008 and to ensure emissions targets are set based on expert independent assessment of the evidence. The Act requires the Government to set legally-binding, five-yearly carbon budgets, twelve years in advance, from 2008 to 2050, to act as stepping stones towards these targets. In relation to the power sector, the CCC has recommended that electricity generation is entirely low carbon by 2035. The carbon budgets and the CCC's recommendations both impact policy makers' time horizons, which in turn provides a framework for SSE's business planning.</p> <p>An example of SSE using this horizon in its planning is through the setting of its Science Based Targets: to reduce scope 1 GHG emissions intensity by 80% per gCO₂e/kWh between 2017/18 and 2030, and to reduce absolute scope 1 and 2 GHG emissions by 72.5% between 2017/18 and 2030.</p> <p>In addition to this, within this medium-term time horizon, the end of Ofgem price control periods for both electricity transmission and electricity distribution regulatory settlements fall. The current price control periods are in 5-year blocks, meaning that the planning for future price control periods will take place within this medium-term horizon.</p>
Long-term	10	80	<p>SSE's long term time horizon for considering climate-related risks and opportunities is beyond 10 years. This reflects the impacts of transitional and physical climate impacts on the future energy system, including climate-related policy, markets, technology and weather/climate impacts. It also reflects the fact that SSE's core low carbon electricity assets have lifetimes that exceed 20 years; therefore, SSE naturally has a long-term business outlook.</p> <p>For transitional opportunities or risks SSE long term time horizon considers climate-related opportunities and risks up to 30 years; and for the physical risks of climate change these are considered up to 80 years, to reflect the longer-term changes in climate.</p>

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

Definition of substantive financial or strategic impact:

SSE follows the guidance and definitions relating to risk management as outlined in the FRC Corporate Governance Code. Its Principal Risks are therefore those risks that have the potential to impact the liquidity, solvency or business model of one or more of the core Business Units and/or of the Group as a whole to be substantive. SSE only accepts risk when: it is consistent with its core purpose, strategy and values; is well understood; can be effectively managed; is in line with stakeholder expectations and offers commensurate reward. SSE defines risk as any event or circumstance that has potential to threaten achievement of its strategic objectives or compromise its business values.

In determining its appetite for specific risks, the Board is guided by three key principles:

1. Risks should be consistent with SSE's core purpose, financial objectives, strategy and values;
2. Risks should only be accepted where relevant approvals have been attained through the Governance Framework to confirm appropriate reward is achievable on the basis of objective evidence and in a manner that is consistent with SSE's purpose, strategy and values; and
3. Risks should be actively controlled and monitored through the appropriate allocation of management and other resources, underpinned by the maintenance of a healthy business culture.

The Board aims to consider all material influencing factors and key external trends in the energy market, including those relating to climate change, and aims to do so in a way that reflects the expectations of SSE's key stakeholder groups. These material influencing factors also have an impact on the nature and extent of risks the Board is willing to take to meet these objectives, and related mitigation strategies adopted by the Group. Material changes in the nature and potential impacts of SSE's Group Principal Risks are regularly assessed by the oversight committees with appropriate mitigations implemented where necessary. SSE's Group Executive Committee (GEC) and its sub-Committees have responsibility for overseeing SSE's eleven Principal Risks, of which Climate Change is one. All Principal Risks are reviewed by the Board.

Description of the indicators to define substantive financial or strategic impact:

SSE's Group Risk Management Framework is complemented by a specialist TCFD climate assessment that identifies and assesses climate opportunity and risk in the short, medium and long term. The climate risk assessment involves senior business leader interviews supported by ongoing business unit risk assessments to capture and understand a long list of climate opportunities and risks. A materiality test is completed, and a final list of significant climate opportunities and risks defined.

Materiality is tested for each climate opportunity or risk based on its ability (likelihood and impact) to have a substantive potential financial impact on SSE's strategy or significant impact on SSE's stakeholders across the time horizons identified by SSE for climate opportunity and risk assessment.

Likelihood - the probability of the risk or opportunity impacting SSE or its stakeholders in one or more of the three defined time horizons:

- **Low** (exceptionally unlikely to unlikely to occur);
- **Medium** (about as likely as not or more than likely than not to occur); and
- **High** (very likely to virtually certain to occur).

Financial impact - the potential financial impact of the risk or opportunity to SSE or its stakeholders in one or more of the three define time horizons:

- **Low** – <£100m annualised EBIT;
- **Medium** – >£100m <£200m annualised EBIT; and
- **High** – >£200m annualised EBIT.

In terms of governance, the Audit Committee oversees the annual TCFD report within SSE's Annual Report and the Safety, Sustainability, Health and Environment Advisory Committee (SSHEAC) oversees SSE's activities on climate adaptation.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Process used for identifying and assessing climate-related risks and opportunities which could have a substantive financial impact

SSE’s Group Risk Management Framework (RMF) integrates a process for identifying and assessing climate-related risks and opportunities. SSE also undertakes a specialist TCFD climate assessment that identifies and assesses climate opportunity and risk in the short, medium and long term. This specialist TCFD assessment goes into more detail to identify and assess the climate-related risks and opportunities over longer periods of time than the RMF. The climate risk assessment involves senior business leader interviews supported by ongoing business unit risk assessments to capture and understand a long list of climate opportunities and risks. A materiality test is completed, and a final list of significant climate opportunities and risks defined.

Materiality is tested for each climate opportunity or risk based on its ability (likelihood and impact) to have a substantive potential financial impact on SSE’s strategy or significant impact on SSE’s stakeholders across the time horizons identified by SSE for climate opportunity and risk assessment. This assessment is completed across the value chain (direct operations, upstream and downstream activities) for each of the key business areas. Each opportunity or risk is then assessed on its impact to SSE’s strategy and stakeholders involving an assessment of the likelihood and financial impact of the risk or opportunity (as defined in C2.1b) which helps to identify the importance of each material risk or opportunity to the business.

Frequency of risk identification and assessment processes

The climate-related risk and opportunity assessment process is conducted on an ongoing basis by the TCFD Steering Group and working group, with a six monthly review of the outputs by the Group Risk Committee. The TCFD working group consists of finance and sustainability professionals from the core business as well as business unit finance technical experts. The outputs of this process are reviewed by the TCFD Steering Group including SSE’s Company Secretary, Finance Director, Investor Relations and the Chief Sustainability Officer and approved by the Group Risk Committee.

In 2022/23, SSE conducted scenario analysis of its material climate-related opportunities and risks. SSE introduced ‘impact pathways’ to map each potential climate event and its effect on SSE’s business activities. To calculate the potential financial impact a combination of data sources were used involving historical internal business data, external independent climate-related scenario data alongside current and approved forecast financial data.

The purpose of this analysis was to demonstrate the resilience of SSE to climate change. To help stakeholders understand SSE’s resilience, SSE subjected its material climate-related opportunities and risks to different climate outcomes under varying scenarios and timeframes. The analysis did not represent a prediction of the future, simply a tool to understand a plausible spectrum of outcomes.

The decision to mitigate, transfer, accept or control identified risks or opportunities is completed by the Group Risk Committee as part of the risk assessment process. The risk assessment process reviews costs, mitigating actions, the timeframe of the impact against relevant scenarios to provide an indication of the potential financial impact and the relative significance of the risk. This approach is completed for each material climate-related risk or opportunity.

Example of how SSE determines if a risk is mitigated, transferred, accepted or controlled include:

Physical Risk: Variable Wind Generation Risk: The TCFD assessment process identified that chronic long term changes in climate patterns cause higher temperatures that may result in lower rainfall and reduced wind levels. These changes may impact SSE’s renewable output and associated earnings in the short, medium and long term.

Potential Impact to SSE: SSE’s long-term monitoring of weather changes and current forecasts, established that this is a perennial risk that impacts SSE. For instance, in the first half of 2021/22 SSE experienced one of the driest and calmest summer periods (April to September) on record which reduced adjusted operating profit through the summer period and impacted financial plans for the year. For the future, with a five-fold increase in renewables capacity by 2031 and prospects beyond 2031, this risk will continue to impact SSE.

Potential Financial Impact: The scenario analysis identified that in a 4°C scenario there was a greater risk in 2050, with a range of £0.13bn and £0.17bn and a more significant risk in 2080 with a range of £0.20bn to £0.27bn, when compared to a 1.5°C scenario for the same time horizon. The potential financial impact of all scenarios was stated in GBP billion (£bn) based on one-year annualised earnings before interest and tax (EBIT) and presented as a range to reflect sensitivities applied to each climate scenario.

Risk mitigation, transfer, acceptance or control: The technical and geographical nature of SSE’s renewable capacity alongside meteorological monitoring, crisis management and business continuity plans are some of the ways that SSE manages and mitigates its business against this risk.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

Relevance & inclusion	Please explain

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	<p>SSE faces risks from changes in obligations arising from operating in markets in the UK and Ireland which are subject to a high degree of regulatory, legislative and political intervention or uncertainty. The climate-related risks and opportunities relating to current regulation are identified through the Group Principal Risk review process for the 'Political and Regulation Change' and 'Climate Change' Principal Risks. Climate Change legislation (UK Climate Change Act 2008 (2050 Target Amendment) and Irish Government's Climate Action and Low Carbon Development Act 2021 impacts financial, strategic and operational decisions.</p> <p>The risks and opportunities to SSE are in relation to the impact of current legislative frameworks in terms of its financial and strategic decisions around renewables investments, operation of thermal assets and development of new infrastructure. For example, the UK Climate Change Act 2008 and Net Zero Strategy: Build Back Green (published in 2021) describe the mechanisms for the UK to transition to a low-carbon economy. For instance, the UK Government has committed to 50GW of installed offshore wind capacity by 2030 and the Committee on Climate Change sees at least 75GW by 2050. The continued access to Contracts for Difference (CfD) or other price stabilisation mechanism would continue to support an investment case for SSE in off- and onshore wind projects.</p> <p>SSE Renewables has been successful in the UK's fourth Contract for Difference (CfD) Allocation Round, announced in July 2022, and has secured a 15 year low-carbon power contract for 220MW for its wholly-owned Viking Energy Wind Farm (Viking) project, currently being constructed in Shetland. Future CfD auctions also impact on SSE's electricity networks as these auctions determine the scale and location of future new generation plant that requires to be connected to the grid.</p>
Emerging regulation	Relevant, always included	<p>SSE faces risks from changes in obligations arising from operating in markets in the UK and Ireland which are subject to a high degree of regulatory, legislative and political intervention or uncertainty. The climate-related risks and opportunities relating to current regulation are identified through the Group Principal Risk review process for the 'Political and Regulation Change' and 'Climate Change' Principal Risks.</p> <p>International and national agreements such as the 2015 Paris Agreement on Climate Change have been identified as a material influencing factor. Climate Change legislation has the potential to impact the strategy, finance and investment decisions that are made by SSE.</p> <p>The risks and opportunities SSE faces in relation to the impact of emerging legislative frameworks is in terms of its financial and strategic decisions around renewables investments, operation of thermal assets and development of new infrastructure.</p> <p>For example, there is a potential for more aggressive climate change policy that speeds up the closure of unabated gas generation from 2030. SSE expects to operate 2.3GW of Combined Cycle Gas Turbine (CCGT) capacity in 2030. It is, therefore, a plausible scenario that this capacity will not be able to generate beyond 2030 without low-carbon abatement technology. It is therefore assumed that the financial impact of this policy change is a loss operating profit from 2030 onwards for the remaining life of these assets.</p>
Technology	Relevant, always included	<p>The climate-related risks relating to technology are identified through the Group Principal Risk review process for 'Speed of Change' and 'Large Capital Projects Management' Principal Risks as well as a risk in the risk and opportunities assessment process.</p> <p>SSE's 'Speed of change' Principal Risk, highlights that SSE faces the risk of failing to recognise and react appropriately to climate-related competition, technological advancements and changes in customer expectations. SSE's 'Large Capital Projects Management' Principal Risk highlights that SSE faces the risk that its climate-related assets that it builds do not meet the quality standards required to support economic lives of typically 15 to 30 years.</p> <p>Technology has the potential to impact the strategy, finance and investment decisions that are made by SSE. For example, technology risk is relevant to Scottish and Southern Electricity Networks (SSEN), both in transmission and distribution networks. These businesses are central to supporting the transition to a low-carbon electricity system – connecting clean energy, supporting electrification of transport and facilitating change as local 'system operators' – and require significant modernisation and reform. SSEN's distribution businesses in the north of Scotland and central southern England are leading the industry through a number of high impact innovation and demonstration projects.</p> <p>The risk is that SSEN's technologies fail to adapt quickly enough to changed patterns of electricity demand and supply, and that customer expectations are not met. That is why SSEN has a deliberate strategy to take a leadership position within the electricity networks industry with innovative demonstration projects that enable far greater levels of flexibility.</p>
Legal	Relevant, always included	<p>SSE faces risks from changes in obligations arising from operating in markets in the UK and Ireland which are subject to a high degree of regulatory, legislative and political intervention or uncertainty. The climate-related risks and opportunities relating to emerging regulation are identified through the Group Principal Risk review process for the 'Political and Regulatory Change' Principal Risk.</p> <p>International and national agreements such as the 2015 Paris Agreement on Climate Change have been identified as a material influencing factor on the 'Political and Regulatory Change' Principal Risk. Climate Change legislation (UK Climate Change Act 2008 (2050 Target Amendment) and Irish Government's Climate Action and Low Carbon Development Act 2021 has the potential to impact the strategy, finance and investment decisions that are made by SSE. Compliance is core to securing SSE's legitimacy as a provider of energy.</p> <p>As a generator of electricity, SSE is subject to national and international policies that impact the price of carbon. SSE Group has been operating under the established EU ETS carbon pricing system since the 1st of January 2005. Since the 1st of January 2021, following Brexit, the UK Government has established a UK Emissions Trading Scheme (UK ETS) to replace the EU ETS with the Group's UK generation assets now operating under the UK ETS carbon pricing system. Not meeting the legislative requirements of the UK ETS in the United Kingdom and the EU ETS in the Republic of Ireland would represent a legal risk for SSE. While this has created uncertainties which SSE has had to manage prudently, SSE is encouraged that all policy scenarios lead to high carbon pricing, which SSE supports as a critical tool in decarbonisation.</p>
Market	Relevant, always included	<p>SSE 'Portfolio Exposure' Group Principal Risk highlights that SSE faces risks associated with the Group's exposure to fluctuations in both the physical volumes and price of key commodities, including electricity, gas, carbon dioxide permits, oil and related foreign exchange values. International and national agreements on climate change have been identified as material influencing factors on this Principal Risk. SSE's 'Energy Affordability' Group Principal Risk highlights that SSE faces risks from 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.</p> <p>This risk is directly connected to political interventions and commodity price exposure. Public policies, including those aimed at reducing carbon emissions and energy consumption is identified as a material influencing factor on this Principal Risk. Market forces are a relevant risk because they impact on SSE's wholesale, retail and transmission/ distribution activities in the countries in which SSE operates and invests (i.e. UK and Ireland), which have the ability to influence the capital, operational and financial decisions of the company and the markets in which it operates.</p> <p>For example, offshore wind represents an opportunity for SSE to deliver its own decarbonisation ambitions and contribute to the achievement of the UK's and Ireland's carbon targets. The Crown Estate and the Crown Estate Scotland made new seabed rights available to offshore wind developers to ensure new projects can start to operate from the late 2020s. In 2022, SSE Renewables Limited (SSER) partnered with Marubeni Corporation (Marubeni), and Copenhagen Infrastructure Partners (CIP) (the Project Partners) and were successful in the outcome of the ScotWind leasing round winning the rights to develop what will become one of the world's largest floating offshore wind farms off the east coast of Scotland.</p>
Reputation	Relevant, always included	<p>Reputational risk is not determined by SSE as a risk in its own right, however impacts are evaluated, and 'Reputation' is used as an indicator in the risk assessment process. Climate-related reputational risks arise as a result of not managing and responding appropriately to the other climate-related risks highlighted in this table. For example, there is a public and political consensus on the need to address climate change. SSE firmly supports Net Zero legislation and believes that an accelerated path to limit global warming to no more than 1.5 degree centigrade must be pursued. SSE has also publicly announced its longer-term carbon ambition: to reduce the scope 1 emissions intensity of the electricity it generated by 80% by 2030, based on 2018 levels. Failure to take action to meet this ambition could result in reputational damage to SSE for a number of SSE's key stakeholders, including society, shareholders, and government and regulators – especially in the context of the growing public support for tackling climate change.</p>
Acute physical	Relevant, always included	<p>SSE's 'Energy Infrastructure Failure' Group Principal Risk highlights that SSE faces 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. Severe adverse weather that causes damage or interrupts energy supply or generation is identified as a material influencing factor on this risk. In addition to this, weather associated seasonal fluctuations in demand, supply and generation capabilities – which may or may not be in line with historical trends both in GB and across Europe – is highlighted as a material influencing factor on the 'Portfolio Exposure' Principal Risk. Severe adverse weather that causes damage or interrupts energy supply or generation can impact the Group's ability to meet its business objectives and influences investment decisions made. For example, SSE's Networks business is at risk of the impacts of severe adverse weather events which can result in flooding of substations and/or damage to overhead lines.</p> <p>In 2022/23 the network was affected by two extreme weather events, an ice storm in Shetland in December 2022 and Storm Otto in February 2023. However, in an exceptional 2021/22 winter season, seven storms were named by the Met Office including three, Storm Arwen, Storms Malik/Corrie and Storms Eunice/Franklin that became Red Alert events, the most in any year since SSE's records began. Each of these events impacted over 100,000 customers, with a significant number for a multi-day period. In a single 24-hour period, Storm Eunice caused more than 6 months' worth of overhead line damage, with over 1,000 points of damage recorded on our network. Following immediately behind Storm Eunice came Storm Franklin, causing further damage and delaying efforts to restore power as quickly as possible.</p> <p>Future climate models predict that climate change will continue to bring extreme events such as storms, floods and heatwaves which will impact network assets.</p>

	Relevance & inclusion	Please explain
Chronic physical	Relevant, always included	SSE's 'Energy Infrastructure Failure' Group Principal Risk highlights that SSE faces 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. Severe adverse weather that causes damage or interrupts energy supply or generation is identified as a material influencing factor on this risk. In addition to this, weather associated seasonal fluctuations in demand, supply and generation capabilities – which may or may not be in line with historical trends both in GB and across Europe – is highlighted as a material influencing factor on the 'Portfolio Exposure' Principal Risk. Long-term changes in climate have the potential to impact SSE's ability to meet its obligations. For example, changes in climate could impact SSE's ability to produce electricity from its wind and hydro generation assets, which would impact on SSE's Wholesale business. Changes in climate could also impact the amount of gas and electricity used by customers which would affect SSE's Retail business. SSE's Networks business is at risk of the impacts of changes in climate, including severe adverse weather events which can result in flooding of substations and/or damage to overhead lines. It would also need to adapt its approach to operation and investment in infrastructure to meet the change in electricity generation and consumption patterns as a result of long-term changes in climate.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical	Other, please specify (Chronic long-term changes in temperature and/or precipitation)
------------------	---

Primary potential financial impact

Other, please specify (Decreased future adjusted operating profits and potential impact to recoverable value of assets.)

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Variable renewable generation risk:

SSE's businesses activities are significantly influenced by the weather. Weather affects production of renewable energy, the operation of the electricity transmission and distribution networks, and the amount of gas and electricity SSE's energy customers use.

This risk is focused on the impact of weather to SSE's renewable energy generation business. In particular, where longer term changes in climate patterns cause sustained higher temperatures that may result in lower rainfall and reduced wind levels. These changes may impact SSE's renewable output and associated earnings.

In total, SSE has approximately 3.9GW of renewable electricity capacity involving: 1,459MW of hydro electricity generation capacity (including pumped storage) which includes 91 hydro dams in the north of Scotland covering a water catchment area of 5,382 sq. miles; and 2,456MW of on-and off-shore wind generation capacity.

Weather variability is a perennial feature of risk for SSE as the largest generator of renewable electricity in UK and Ireland. One of the most material impacts that weather can have is fluctuations in weather patterns impacting adversely on the output of SSE's hydro-electric and wind generation assets. For instance, in the first half of 2021/22 SSE experienced one of the driest and calmest summer periods (April to September) on record which reduced adjusted operating profit through the summer period and impacted financial plans for the year.

Changes in generation output that is associated with changes in the weather is already factored into SSE's Risk Management Framework. There is the possibility that climate change could exacerbate these weather-related fluctuations by impacting weather patterns over the longer term. In addition, SSE has plans for a five-fold increase in renewables capacity by 2031 and prospects beyond 2031 and therefore this risk will continue to impact SSE.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

100000000

Potential financial impact figure – maximum (currency)

140000000

Explanation of financial impact figure

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 potential financial impact figure of between £100-140m was quantified in a 1.5oC scenario at 2050 by applying a combination of the IEA NZE 2050 wind generation CAGR (Compound Average Annual Growth Rate) to 2050 and the IPCC RCP 2.6 projected reduction in average wind speed times to SSE's existing earnings before tax and interest (EBIT) from wind generation for financial year to 31 March 23. The basis for this potential financial impact figure is quantified on a one-year annualised EBIT at 2050.

Cost of response to risk
333000

Description of response and explanation of cost calculation

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. For example, 2,456MW of on-and off-shore wind capacity in UK and Ireland and 1,459MW of hydro generation capacity (inc. pumped storage) in Scotland. This diversity enabled SSE to generate a renewable output of 10.2 TWh in 2022/23.

SSE monitors short- and long-term weather conditions so that it can manage and respond to conditions across its assets. To respond to weather pattern changes over the past few years, SSE has operated and adapted its conventional hydro generation plant in a way that allows it to more flexible and responsive for the needs of the electricity system, with increased storage and adaptive operating regimes.

In addition, SSE has crisis management and business continuity plans in place to deal with severe weather events that can damage energy assets.

One element of management costs directly attributed to this climate-related risk is the monitoring/forecasting of weather by SSE's meteorological team. The costs directly attributed to SSE's meteorological team and the management of weather is in the region of £333,000 annually.

Comment

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Other, please specify (Acute changes in temperature and/or precipitation)
----------------	---

Primary potential financial impact

Other, please specify (Decreased future adjusted operating profits and potential impact to recoverable value of assets.)

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Increased severity of extreme weather events, such as storms, floods and heat waves bring prolonged extreme temperatures, wind or rainfall. This may damage or stress network assets resulting in additional costs to repair and maintain the network and the loss of incentive revenue for distribution operators.

The impact of weather is a perennial feature of operating an electricity distribution network in the north of Scotland and south of England. In 2022/23 the network was affected by two extreme weather events, an ice storm in Shetland in December 2022 and Storm Otto in February 2023.

Future climate models predict that climate change will continue to bring extreme events such as storms, floods and heatwaves which will impact network assets. For example, severe adverse weather events can result in flooding of substations and/or damage to overhead lines.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

70000000

Potential financial impact figure – maximum (currency)

90000000

Explanation of financial impact figure

The potential financial impact figure of between £70-90m was quantified in a 1.5oC scenario at 2050 by the aggregation of two elements of this risk:

- The first by applying a combination of the National Grid Future Energy Scenarios CAGRs (Compound Average Annual Growth Rate) and the IPCC RCP 2.6 projected reduction in average winter wind speed times to SSE's most recent exceptional storm costs for a financial year, which occurred in the financial year 21/22; and
- The second by applying the National Grid Future Energy Scenarios CAGRs to the financial quantification of the effect of heat on the network assets, based on the number of faults under different temperatures on the network assets.

Storm, wind and heat damage to networks assets risk is stated in GBP billion (£bn) based on one year annualised storm costs. External climate models have inherent limitations, with a lack of data on extreme climate events, and lower confidence levels on certain climate variables such as wind. SSE's assessments account for uncertainties by extracting average wind speed data to assess the impact.

Cost of response to risk

56800000

Description of response and explanation of cost calculation

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 (including overhead line replacement and refurbishment).

Using the Met Office's Climate Projections, asset resilience is reviewed using climate projections in the short, mid and long term. This includes assessing the impact to the assets from higher temperatures, changing rainfall patterns, rising sea levels, and more extreme weather events such as floods, droughts and heatwaves. This process is part of the UK Government's critical infrastructure assessment which takes place every five years. SSEN Transmission and Distribution responded to the latest call for updates to actions in December 2021.

This is a perennial risk that impacts SSE. For instance, in 2021/22, extreme weather events (storms, floods and heatwaves) impacted the resilience of SSENs electricity networks. Seven Met Office named storms impacted SSEN's distribution network in the winter of 2021/22, three of which became Red Alert events, Storm Arwen, Storms Malik/ Corrie and Storms Eunice/Franklin. These impacted over 100,000 customers, with many over a multi-day period. In addition, in 2022/23 the SSEN Distribution network was affected by two extreme weather events, an ice storm in Shetland (Dec '22) and Storm Otto (Feb '23). Although the number and the intensity of extreme weather events that occurred in 2022/23 were less when compared to 2021/22, SSE continues to prioritise this as a material climate-related risk.

As SSE invests in its networks infrastructure, the impacts of climate change continue to be built into its capital and operational investment plans, including a Climate Resilience Strategy published as part of the RIIO-ED2 Distribution business plan.

The impact of these severe weather events includes significant costs that arise through the provision of compensation, customer welfare and additional operational and maintenance requirements. In 2022/23, the total cash expenditure incurred on storm responses was £56.8m, including overhead line replacement and refurbishment (£32.7m), tree cutting (£23.0m) and flood protection (£1.1m). Weather-related resilience spend is managed over price control periods and SSEN's RIIO-ED2 business plan for the upcoming price control period from 2023 to 2028 outlines significant new investment in network resilience.

Comment**Identifier**

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Legal	Other, please specify (Transition risk, early retirement of existing assets (thermal power plants) due to more aggressive climate policies.)
-------	--

Primary potential financial impact

Other, please specify (Decreased future adjusted operating profits and potential impact to recoverable value of assets.)

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Accelerated gas closure risk

More aggressive climate change policy may bring forward the closure of unabated gas generation from 2030. The UK Government's Net Zero Strategy outlines plans to decarbonise the power sector by 2035 with a target of 95% of GB electricity to be low carbon by 2030. It is plausible that to meet climate change commitments the UK Government (and potentially the Irish Government too) may strengthen climate change policies to require unabated gas generation to cease in the 2030s.

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, 2.3GW of Combined Cycle Gas Turbine (CCGT) capacity will still be in operation in 2030. It is a plausible scenario that this capacity will not be able to generate beyond 2030 without low-carbon abatement technology. For assets currently assumed to have a life beyond 2030, it is possible that SSE could invest further in low-carbon abatement technology to prolong their life beyond this date.

However, for the purposes of quantifying this risk, it is assumed that the financial impact of this policy change is the early closure of the remaining gas assets in 2030. This may result in a financial impact to operating profit as the output of gas-fired generation is impacted beyond 2030 (this involves 2.3GW of Combined Cycle Gas Turbine capacity which is expected to be in operation in 2030 and beyond).

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

340000000

Potential financial impact figure – maximum (currency)

510000000

Explanation of financial impact figure

SSE's existing 5.3GW fleet of installed gas- and oil-fired generation will be nearing the end of its expected life towards the end of the 2020s and early 2030s. However, 2.3GW 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 without low carbon technology. It is therefore assumed that the financial impact of this policy change is a loss operating profit from 2030 onwards for the remaining life

of these assets.

The potential financial impact figure of between £340-510m was quantified in a 1.5oC scenario at 2030 by the including the in scope CCGTs with an expected life beyond 2030 and then projecting the potential Net Present Value for each CCGT post 2030.

Cost of response to risk

29700000

Description of response and explanation of cost calculation

SSE continues to accelerate action on climate change by focusing on increasing renewable generation deployment & decarbonising thermal generation, heat and transport. SSE is targeting net zero across scope 1 and 2 emissions by 2040 (subject to security of supply requirements) and for remaining scope 3 emissions by 2050. To deliver GHG reductions in line with a 1.5C pathway, considerable emissions reductions from SSE Thermal's generation plant are required. SSE Thermal's strategy is focused on decreasing the output from, and investment in, existing unabated generation whilst increasing investment to build a significant portfolio of carbon capture and storage (CCS) and hydrogen power stations and repurposing the assets for the net zero world.

SSE Thermal is developing CCS projects with Equinor at Keadby and Peterhead, as well as two further projects in the Humber, Keadby Hydrogen power station and a hydrogen storage facility at Aldbrough. These projects will play a pivotal role in helping to achieve national net zero targets. In December 2023, Keadby 3 Carbon Capture Power Station became the first power-CCS project to secure planning consent in the UK. SSE Thermal also made progress on the development of its low-carbon hydrogen projects, alongside Equinor.

In addition, SSE engages with UK and Irish Governments, EU Commission, Members of EU Parliament and others on accelerated climate policy.

Over 2022/23, SSE Thermal engaged the UK Government on making the case for investment in CCS, including in the Humber region and Scotland, and provided design input for the heads of terms for dispatchable power for CCS technology. SSE is a member of the UK Government's expert groups on hydrogen transport and storage infrastructure and has been active in informing the needs case assessment for hydrogen policy interventions. SSE also responded to the Irish Government's strategy, supporting the development of a hydrogen economy and outlining the need for coordinated and effective incentives for its production, use, transport and storage; and to the UK Government's consultations on negative emissions technologies.

SSE also supports a Carbon Price Floor, the EU ETS, Levy Control Framework and other legislation that supports a move towards transition to a low-carbon economy. The costs to mitigate the risk relate to the R&D costs for CCS in 2022/23 as well as the amounts capitalised on Keadby 3 CCS and Peterhead 2 CCS. These are in the region of £29.7m in 2022/23.

Comment

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Market	Other, please specify (Oversupply of renewable electricity on the market.)
--------	--

Primary potential financial impact

Other, please specify (Decreased future adjusted operating profits and potential impact to recoverable value of assets.)

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Wind capture market risk

In net zero consistent scenarios, the price wind energy can capture is forecast to reduce as more marginal cost wind generation is connected. All credible pathways to net zero in the UK and beyond assume the dramatic scaling up of wind (especially offshore) generated electricity. This significant growth in wind power output without a corresponding increase in demand represents a potential climate related transition risk.

As wind generation capacity increases, the market (and SSE) expects the average electricity price which wind power receives ('wind capture price') to be less than the average price for electricity ('baseload price'). As wind becomes the dominant source of electricity output it will define the market price, so the volatility of electricity prices correlates to wind output, both high and low.

While this is expected in the medium term, and is factored into investment decisions, there is a risk that this lower average price for wind output is more extreme than what the market (or SSE) expects. In the long term, and with careful market design reform, the effect of the wind capture price will stabilise as more low carbon technologies adapt their patterns of demand according to the price signal sent by the market. In its British Energy Security Strategy, the UK Government committed to a Review of Electricity Market Arrangements which will seek, among other things, to ensure future low-carbon generation is fairly remunerated.

There is however the risk that this lower average price for wind output is more extreme than expected by the market or SSE. And for the future, SSE expects to increase its renewable capacity five-fold by 2031 and has further prospects beyond 2031, this risk will therefore continue to impact SSE.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

380000000

Potential financial impact figure – maximum (currency)

520000000

Explanation of financial impact figure

The potential financial impact figure of between £380-520m was quantified in a 1.5°C scenario at 2050 by applying a combination of the following assumptions to SSE's existing earnings before tax and interest (EBIT) from wind generation for financial year to 31 March 2023:

- IEA NZE 2050 wind generation CAGR (Compound Average Annual Growth Rate) to 2050;
- SSE's internal assumptions in relation to merchant generation output; and
- SSE's internal assumptions in relation to wind capture price factors.

The basis for this potential financial impact figure is quantified on a one-year annualised EBIT at 2050.

The wind capture market risk has the potential to be greater in a 1.5°C scenario due to the expectation that new renewable capacity will be built at a greater pace to meet the net zero by 2050 goal.

Cost of response to risk

7300000

Description of response and explanation of cost calculation

The effect of a wind capture price only materially impacts wind generation that is fully exposed to market prices (or 'merchant' wind output), as it is not supported by government-backed fixed price mechanisms such as the Contracts for Difference. To mitigate these risks, SSE will seek, where appropriate, to submit certain development projects into CfD auctions, thereby removing merchant risk. Further, with its integrated customer facing business, SSE will work with large customers wishing to purchase renewable energy, to provide long term power contracts, called power purchase agreements (PPAs), which again removes merchant risk.

Services by EPM support the most economic market outcomes for SSE's electricity generation, the overall cost of this service provided by EPM is in the region of £7.3m annually. This activity supports all market activities in renewables, not simply any risks associated with wind price capture.

SSE will also continue to invest in a geographically and technologically diverse generation portfolio of renewable and low carbon thermal assets in order to balance the effect of price volatility. For example, SSE Renewables' core markets of the UK and Ireland continue to offer considerable growth opportunities and it is progressing developments in Southern Europe with at least three projects totalling c.100MW, as well as developments in Northern Europe, Japan and the US.

SSE will also continue to engage with the UK and Irish Governments, European Commission, Members of European Parliament and others on policies that support the reduction of risk in low carbon electricity and therefore supports lower-cost renewable energy production.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Other, please specify (Increased adjusted operating profit)

Company-specific description

Accelerated transmission growth

This opportunity involves the investment in transmission infrastructure in the north of Scotland to support the delivery of an accelerated low-carbon electricity system.

Significant growth in renewable wind in the north of Scotland requires significant expansion of the north of Scotland electricity transmission network, to transport the renewable electricity from the sources of generation to the sources of demand. In April 2022, the UK Government set out in the British Energy Security Strategy that it would ensure Ofgem expedites its approvals process to build networks in anticipation of major new sources of generation and demand. This is demonstrated by the Scottish Government's proposed target of 8-12GW of additional onshore wind by 2030, announced in November 2021, and the Crown Estate Scotland award of seabed leases in January 2022 of c.25GW of new offshore wind capacity.

SSEN operates the transmission network in the north of Scotland. SSEN's transmission network allows the renewable energy generated in the north of Scotland to be transmitted down south to areas of higher demand. This makes it fundamental in facilitating the transition to a low-carbon electricity system. SSEN Transmission's current RIIO-T2 business plan to 2026 envisages expanding and reinforcing the existing network for major new sources of generation. While SSEN Transmission has completed

the first year of its five-year RIIO-T2 investment plan, making progress with key strategic investments under the Ofgem uncertainty mechanism, the scale of growth to 2030 has become clear. Ofgem's 'Pathway to 2030' identified £7bn of further investment required in the north of Scotland establishing confidence that both national climate targets can be met, and that SSEN Transmission's growth will more closely align with the 'Leading the way' climate scenario.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

1100000000

Potential financial impact figure – maximum (currency)

1500000000

Explanation of financial impact figure

The potential financial impact figure of between £1.1-1.5bn was quantified in a 1.5oC scenario at 2050 by applying the National Grid Future Energy Leading the Way Scenario for projected renewables capacity for Scotland to SSE's existing earnings before tax and interest (EBIT) from the Transmission Business Unit for financial year to 31 March 23. The basis for this potential financial impact figure is quantified on a one-year annualised EBIT at 2050.

In May 2023, SSE updated its existing Net Zero Acceleration Programme to create the Net Zero Acceleration Programme Plus. The NZAP Plus is a fully-funded capital investment plan worth £18bn up to 2027 which is aimed at accelerating clean growth, alongside ambitious 2031 targets, aligned with net zero and 1.5°C. SSEN Transmission (c.30%) will comprise the majority of expected investment in electricity networks, as the RIIO-T2 baseline investment programme has increased through uncertainty mechanism projects such as the Skye and Orkney subsea links. Whilst the majority of Ofgem's Accelerated Strategic Transmission Investment (ASTI) framework will be delivered towards the end of the decade, the five-year plan also includes early construction costs as these projects are progressed. As such, SSEN Transmission investment is expected to increase to over £5bn from over £3bn in the previous plan, net of the 25% Minority Interest share, driving the gross Regulatory Asset Value ('RAV') to between £8-9bn by the end of 2026/27, and deliver expected adjusted operating profits of at least £400m on average across the five year plan. SSEN Transmission earns a return on its RAV, therefore growth of the RAV should result in earnings growth in future periods, subject to future regulatory earnings agreements.

Cost to realize opportunity

5000000000

Strategy to realize opportunity and explanation of cost calculation

SSEN operates the transmission network in the north of Scotland. This network enables renewable energy generated in the north of Scotland to be transmitted south to areas of high demand.

To realise this opportunity and ensure that SSEN can continue to invest in this critical infrastructure, SSEN has an ongoing programme of investment, construction, maintenance and refurbishment. 2022/23 marked the second year of SSEN Transmission delivery against its business plan for the new five-year RIIO-T2 price control period, running from 2021 to 2026.

Significant progress was made building out critical network infrastructure the north of Scotland including the Shetland HVDC transmission link which is expected to connect the islands to the GB energy system for the first time in 2024. The RIIO-T2 period is expected to deliver significant growth in the capacity of renewables connected to SSEN Transmission's network. In 2022/23, the total installed renewable capacity connected to the network increased to 9.2GW in total. Beyond the RIIO-T2 price control period, further network upgrades in both onshore and offshore transmission infrastructure will be needed to enable the forecasted growth in renewables.

The costs associated with realising this opportunity is based on the capital investment actions associated with the investment in the transmission network, these are estimated to be approximately £5bn to 2026/27.

Comment

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Other, please specify (Increased adjusted operating profit)

Company-specific description

Accelerated wind investment

International agreements to decarbonise electricity systems, alongside increased energy security and the need to reduce reliance on imported fossil fuels enhance the case for accelerated wind investment. The UK Government has ambitions for up to 50GW of installed offshore wind capacity by 2030 (including up to 5GW of floating offshore wind) and the Irish Government has targeted 4GW of incremental onshore wind and 5GW of offshore wind capacity by 2030. In the long term, the Climate Change Committee's balanced net zero pathway suggests 95GW of UK offshore wind by 2050.

SSE currently has the largest renewable energy capacity across the UK and Ireland at around 3.9GW (including pumped storage) and in 2022/23 SSE generated 10.2 TWh (including biomass, pumped storage and constrained off wind in GB).

SSE aims to build a renewable energy portfolio that generates at least 50TWh of electricity a year by 2030. SSE's accelerated capital investment plan (the Net Zero Acceleration Programme Plus) first published in November 2021 and updated in May 2023, aims to more than double installed renewable capacity to >9GW (net) by 2026 and targets at least 13GW (net) of installed renewable capacity by 2027. In the longer term, SSE is exploring opportunities in the UK, Ireland and internationally.

SSE Renewables made good progress on key offshore projects in 2022/23, including at Dogger Bank A and Dogger Bank B (each 1,200MW, SSE Renewables share 40%) and at Seagreen 1 (1,075MW, SSE Renewables share 49%), with 84 turbines installed and 53 turbines exporting power to the grid as of April 2023. Onshore, construction is progressing well on Viking (443MW) in Shetland with turbine installation under way and all turbines expected to be up by the end of 2023 and fully operational by Autumn 2024. SSE has further offshore wind project interests in Berwick Bank in Scotland, Greater Gabbard Extension in England and Arklow Bank Wind Park in Ireland.

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.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

1090000000

Potential financial impact figure – maximum (currency)

1500000000

Explanation of financial impact figure

The potential financial impact figure of between £1.09-1.5bn was quantified in a 1.5oC scenario at 2050 by applying a combination of the following assumptions to SSE's existing earnings before tax and interest (EBIT) from wind capacity for financial year to 31 March 23:

- IEA NZE 2050 wind capacity CAGR (Compound Average Annual Growth Rate) to 2050; and
- SSE's internal assumptions in relation to wind capture price factors.

The basis for this potential financial impact figure is quantified on a one-year annualised EBIT at 2050.

SSE aims to build a renewable energy portfolio that generates at least 50TWh of electricity a year by 2030. SSE's accelerated capital investment plan (the Net Zero Acceleration Programme Plus) first published in November 2021 and updated in May 2023, aims to more than double installed renewable capacity to >9GW (net) by 2026 and targets at least 13GW (net) of installed renewable capacity by 2027. In the longer term, SSE is exploring opportunities in the UK, Ireland and internationally.

The opportunities that exist include consented as well as pipeline development projects. Growth opportunities come from key offshore projects involving: Dogger Bank A, B and C (each 1,200MW, 40% share); Seagreen 1 (1,075W, 49% share); Ossian (3.6GW, 40% share) in Scotland; and Arklow Bank (800MW) in Ireland. SSE has future onshore growth through consented sites at Viking wind farm (443MW) in Scotland and Lenalea (30MW) in Ireland. At 31 March 2023, SSE's pipeline of renewable capacity in the UK and Ireland consisted of 2.8GW in construction, up to 2.9GW consented, up to 9.5GW requiring consent and a further 13GW of future prospects.

Additionally, SSE is exporting its capabilities internationally. With 8GW of early-stage development opportunities across Japan through joint ownership company Pacifico Energy; a 50/50 joint venture with ACCIONA Energia to develop offshore wind opportunities in the Polish energy market; and onshore wind development projects across Spain, France, Italy and Greece alongside the scope for up to 1GW of solar development opportunities, through its acquisition of Siemens Gamesa Renewable Energy's (SGRE) Southern Europe wind, solar and batteries development platform.

Cost to realize opportunity

7000000000

Strategy to realize opportunity and explanation of cost calculation

SSE has a secured pipeline of over 15GW of potential new wind opportunities. SSE will develop these projects in partnership and will recycle some capital to support further development.

In addition to the immediate opportunities at Seagreen, Dogger Bank and Viking, SSE has further offshore wind project interests in Berwick Bank and Marr Bank in Scotland, Greater Gabbard Extension in England and Arklow Bank Wind Park in Ireland.

SSE engages with UK, Scottish and Irish Governments, European Commission, Members of European Parliament and others on low-carbon policies.

In May 2023, SSE updated its existing Net Zero Acceleration Programme to create the Net Zero Acceleration Programme Plus. The NZAP Plus is a fully-funded capital investment plan worth £18bn up to 2027 which is aimed at accelerating clean growth, alongside ambitious 2031 targets, aligned with net zero and 1.5°C. Based on SSE's net zero acceleration programme plus, the cost to realise the opportunity is based on the capital plan for renewable developments which is around £7bn until 2026/27.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Other, please specify (Increased adjusted operating profit)

Company-specific description

Valuable flexible hydro

Increasing volumes of intermittent wind energy will require support from flexible generators that provide system services, such as short-term reserve, frequency and long-duration energy storage services. The opportunity exists, from existing hydro expertise, to develop long-duration, low-carbon flexibility solutions that provide significant enduring value to the GB electricity system.

Hydro is unique in SSE's portfolio (it represents 17% of its portfolio capacity), as it can be characterised as both renewable and flexible. In addition to 400MW of run-of-river hydro, SSE has 750MW of flexible hydro and SSE's 300MW of pumped storage as well as planning consent for an additional 1.5GW of pumped storage. Flexible hydro operates as 'Britain's biggest battery' and SSE has a significant role to play in providing this. For SSE's existing hydro portfolio, ongoing investment in maintenance, upgrades and repowering will optimise the provision of low carbon flexibility.

SSE also has an important development option for large-scale, long-duration pumped hydro storage at Coire Glas in Scotland, with planning consent for a 1.5GW capacity project and c.30GWh of storage capacity potential. This would more than double existing pumped hydro storage capacity in GB. SSE is working with Government and the regulator to establish a market mechanism that would unlock investment into long-duration storage projects such as Coire Glas given the critical role they can play in securing low-carbon energy supplies in the UK.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

150000000

Potential financial impact figure – maximum (currency)

200000000

Explanation of financial impact figure

The potential financial impact figure of between £150-200m was quantified in a 1.5oC scenario at 2050 by applying a combination of the following assumptions to SSE's existing earnings before tax and interest (EBIT) from Hydro output for financial year to 31 March 23:

- SSE's internal assumptions on the projected increase in optimisation of existing hydro assets;
- SSE's investment projections in Coire Glas pumped storage station, and
- IEA NZE 2050 hydro generation CAGR (Compound Average Annual Growth Rate) to 2050; and
- SSE's internal assumptions in relation to power price factors to take account of market volatility.

The basis for this potential financial impact figure is quantified on a one-year annualised EBIT at 2050.

SSE has 1,459MW of existing hydro capacity (inc. pumped storage) and has planning consent for an additional 1.5GW of pumped storage at Coire Glas. SSE continues to invest in its hydro generation assets to increase flexibility to the UK grid. This represents 17% of SSE's generation capacity and 14% of the Group's electricity generation output in 2022/23.

Cost to realize opportunity

1000000

Strategy to realize opportunity and explanation of cost calculation

In order to realise this opportunity, SSE is continuing to invest in a diversified generation portfolio of renewable and flexible generation assets (including hydro generation assets) as described in Opportunity 1 (accelerated wind investment) and Opportunity 5 (Valuable Flexible Thermal).

The costs associated with realising this opportunity are wrapped up in the costs of the refurbishment of SSE's assets (which involves upgrades and replacement of plant as a result of age as well as to respond to this opportunity to provide more flexibility) as well as the capital development expenditure of Coire Glas.

SSE has been investing in its hydro fleet to make them more efficient and provide flexible and renewable energy to ensure that they can take advantage of a decarbonized energy system. SSE has an ongoing programme of maintenance, refurbishment and construction to ensure these assets continue to deliver during the low-carbon transition. In 2022/23 SSE invested c.£50m on existing hydro asset maintenance and repowering.

Early-stage development expenditure has already been incurred on Coire Glas, with the total capital cost for development expected to be in excess of £1bn. The timing of that investment, and returns generated, will depend on the emergence of suitable market mechanisms to stimulate this investment in long-duration storage. Therefore, the costs to realise this opportunity have been estimated at around £1bn which represents the capital expenditure of Coire Glas alongside the maintenance and refurbishment programme for the existing hydro.

Comment**Identifier**

Opp4

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Other, please specify (Increased adjusted operating profit)

Company-specific description

Driving distribution transformation

To deliver net zero targets across all sectors and countries requires a shift to zero emission vehicles and electric heating.

The UK Government's Net Zero Strategy accelerates the shift to zero emission vehicles, banning new petrol or diesel cars from 2030. National Grid's Future Energy Scenarios (2022) anticipates all cars sold by 2035 to be electric vehicles and 600,000 residential heat pumps per year to be installed in GB by 2025. Depending on the scenario, there is potential for a five to ten-fold increase in annual load spend between now and 2038.

In December 2022, Ofgem published its Final Determinations for the RIIO-ED2 price control outlining its response to SSEN's Business Plan 'Powering Communities to Net Zero'. SSEN Distribution accepted Ofgem's Final Determination in March 2023 and will continue to work closely with the regulator to ensure the price control has the agility and flexibility required to keep pace with net zero requirements. The price control began in April 2023 and will run until March 2028.

SSEN Distribution is already seeing a significant rise in the uptake of low-carbon technologies, particularly EV charge points, heat pumps, and battery storage. The business has seen a 75% increase in the number of registered electric vehicle charge points connected compared to last year.

SSEN Distribution's draft RIIO-ED2 business plan for the period 2023 – 2028 establishes an investment and innovation programme that will enable customers to connect their electric vehicles and electric heating to the local electricity grids.

Increased uptake of EVs and electric heating has the potential to provide opportunities for SSEN as a network operator. There is also the opportunity to invest in and develop the network infrastructure required to electrification, including smart energy systems, demand side response and distributed flexible and renewable energy.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

310000000

Potential financial impact figure – maximum (currency)

420000000

Explanation of financial impact figure

scenario at 2050 by applying the National Grid Future Energy Consumer Transformation Scenario for projected electricity consumer demand to SSE's existing earnings before tax and interest (EBIT) and existing electricity distributed from the Distribution Business Unit for financial year to 31 March 2023. The basis for this potential financial impact figure is quantified on a one-year annualised EBIT at 2050.

The uptake of EVs and electric heating on SSE's networks is likely to provide a significant investment opportunity to support the low carbon transport transition. 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.

Over the RIIO-ED2 period to 2028, SSEN Distribution expects to invest around £3.5bn in distribution networks resilience and reinforcement. This is expected to increase RAV to between £6-7bn by 2026/27 and deliver expected adjusted operating profits of at least £450m on average across the five year plan. SSEN Distribution earns a return on its RAV, therefore growth of the RAV should result in earnings growth in future periods, subject to future regulatory earnings agreements.

Cost to realize opportunity

3500000000

Strategy to realize opportunity and explanation of cost calculation

SSEN is taking a leadership role on electrification and has a 2030 target to 'build network flexibility that helps accommodate 2 million electric vehicles in the SSEN's distribution networks by 2030'. Over the RIIO-ED2 period to 2028, SSEN Distribution expects to invest around £3.5bn in distribution networks resilience and reinforcement. This is expected to increase RAV to between £6-7bn by 2026/27 and deliver expected adjusted operating profits of at least £450m on average across the five year plan. SSEN Distribution earns a return on its RAV, therefore growth of the RAV should result in earnings growth in future periods, subject to future regulatory earnings agreements.

In 2022/23, SSEN Distribution continued its strategic partnerships and initiatives exploring smart grid solutions to support low-carbon technologies, including:

- Project LEO: an innovative energy trial, seeking to accelerate the UK's transition to a zero-carbon energy system.
- Optimise Prime: the world's largest trial of commercial EVs which seeks to investigate the effects of commercial fleets on the electricity distribution network. Physical trials for the project began in August 2021.
- The Skyline: is establishing data sharing with the automotive and charge point industries, allowing Distribution Network Operators (DNOs) to pinpoint when and where new electricity demand to charge electric vehicles is coming from, to inform infrastructure requirements and improve customer experience.
- Project Re-Heat: the first DNO-led large scale heat trial and will see 150 heat pumps installed in domestic homes across three local authority areas.

SSE is also a member of the Climate Group's global EV100 initiative and pledged to switch 2,684 of its vehicles to electric by 2030 and install charging points at its sites. By the end of 2022/23, 57% of its car fleet was fully electric and there are currently another 201 fully electric vehicles on order. The success of the car scheme has resulted in a reduction in the average CO2 across SSE's car fleet from 106gCO2/km when the scheme launched, to just 36.33gCO2/km at the end of 2022/23 and this continues to

reduce with every new delivery.

The opportunity is estimated to be up to £3.5bn of capital investment by 2026/27 for SSE in its network areas.

Comment

Identifier

Opp5

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Other, please specify (Increased adjusted operating profit)

Company-specific description

Valuable flexible thermal

As the electricity system decarbonises, increasing volumes of intermittent wind energy requires support from flexible generators that provide system services, such as short term reserve, frequency, security of supply and price stability. There is the opportunity to repurpose SSE's existing gas-powered electricity generators, as well as invest in new low-carbon thermal generation assets.

Carbon capture and storage and hydrogen technologies remain at the heart of the UK Government's decarbonisation plans. In March 2023 the UK Government announced the first carbon capture projects to be supported by government-backed contracts – this included projects located in Teesside and the northwest of England with the Humber as a region to be supported through subsequent phases of its cluster sequencing process by 2030 at the latest. The UK Government also announced in 2022/23 its commitment to deliver hydrogen transport and storage models by 2025 to support 10GW of hydrogen production ambition.

SSE is actively developing options to decarbonise its fleet, most notably in carbon capture and storage and hydrogen technologies. Projects include carbon capture and storage projects as part of the UK cluster sequencing programme at Keadby in the Humber and Peterhead in the North of Scotland alongside hydrogen projects at Keadby and Saltend and the repurposing of SSE's Aldbrough Gas Storage site for the safe storage of hydrogen.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

660000000

Potential financial impact figure – maximum (currency)

990000000

Explanation of financial impact figure

The potential financial impact figure of between £660-990m was quantified in a 1.5oC scenario at 2050 by applying a combination of the following assumptions to SSE's projected earnings before tax and interest (EBIT) from CCS generation:

- SSE's investment projections in Peterhead CSS and Keadby CSS, and
- IEA NZE 2050 Natural gas with CCUS CAGR (Compound Average Annual Growth Rate) to 2050.

The basis for this potential financial impact figure is quantified on a one-year annualised EBIT at 2050.

SSE's Net Zero Acceleration Programme seeks to invest £2.5bn in low-carbon flexible thermal generation, mainly carbon-capture technology but with some development investment in hydrogen projects ahead of potential investment decisions in the second half of the decade. Returns from CCS and hydrogen will depend on the level and nature of government support mechanisms, and plant availability, future consumer demand, generation supply mix within the system and energy commodity price volatility.

Cost to realize opportunity

2500000000

Strategy to realize opportunity and explanation of cost calculation

SSE's Net Zero Acceleration Programme Plus seeks to invest £2.5bn in low-carbon flexible thermal generation between 2021/22 and 2026/27, mainly carbon-capture technology but with some development investment in hydrogen projects ahead of potential investment decisions in the second half of the decade.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization’s strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan

Our climate transition plan is voted on at Annual General Meetings (AGMs)

Description of feedback mechanism

<Not Applicable>

Frequency of feedback collection

<Not Applicable>

Attach any relevant documents which detail your climate transition plan (optional)

SSE Net Zero Transition Plan.pdf

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future

<Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy

<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization’s use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Physical climate scenarios RCP 2.6	Company-wide	<Not Applicable>	<p>SSE used the climate-related data within the IPCC RCP 2.6 scenario in the quantification process of its two material physical climate risks, in the ARA for 22/23. The quantification of the Variable renewable generation risk applied the IPCC RCP 2.6 average wind speed times data at the country level for Scotland on a 60km resolution at the time horizons to 2050 and 2080. SSE's internal assumption is that this IPCC RCP 2.6 dataset is the most relevant to SSE'S wind portfolio as it demonstrates the most significant decline in average wind speed times in the time horizons under the 1.5oC scenario.</p> <p>The quantification of the Storm, wind and heat damage to networks assets risk applied the IPCC RCP 2.6 average winter wind speed times data at the country level for Scotland on a 60km resolution and the IPCC RCP 2.6 mean summer temperature change for the administrative region for London at the time horizons to 2050 and 2080. SSE's internal assumption is that this IPCC RCP 2.6 dataset is the most relevant to SSE'S wind portfolio and network assets as it demonstrates the most significant increase in average winter wind speed times and the effect of heat on the network assets in the time horizons under the 1.5oC scenario.</p>
Physical climate scenarios RCP 8.5	Company-wide	<Not Applicable>	<p>SSE used the climate-related data within the IPCC RCP 8.5 scenario in the quantification process of its two material physical climate risks, in the ARA for 22/23. The quantification of the Variable renewable generation risk applied the IPCC RCP 8.5 average wind speed times data at the country level for Scotland on a 60km resolution at the time horizons to 2050 and 2080. SSE's internal assumption is that this IPCC RCP 8.5 dataset is the most relevant to SSE'S wind portfolio as it demonstrates the most significant decline in average wind speed times in the time horizons under the 4oC warming scenario.</p> <p>The quantification of the Storm, wind and heat damage to networks assets risk applied the IPCC RCP 8.5 average winter wind speed times data at the country level for Scotland on a 60km resolution and the IPCC RCP 8.5 mean summer temperature change for the administrative region for London at the time horizons to 2050 and 2080. SSE's internal assumption is that this IPCC RCP 8.5 dataset is the most relevant to SSE'S wind portfolio and network assets as it demonstrates the most significant increase in average winter wind speed times and the effect of heat on the network assets in the time horizons under the 4oC warming scenario.</p>
Transition scenarios Customized publicly available transition scenario	Business division	1.5°C	<p>SSE used the climate transition data within the FES Leading the Way scenario in the quantification process of its material transition risk - Accelerated gas closure risk in the ARA for 22/23. The quantification of the Accelerated gas closure risk applied the FES Leading the Way installed unabated natural gas generation capacity data for the UK at the time horizon to 2030.</p>
Transition scenarios Customized publicly available transition scenario	Company-wide	2.1°C - 3°C	<p>SSE used the climate transition data within the FES Falling Short scenario in the quantification process of its material transition risk - Accelerated gas closure risk, in the ARA for 22/23. The quantification of the Accelerated gas closure risk applied the FES Falling Short installed unabated natural gas generation capacity data for the UK at the time horizon to 2035.</p>

Climate-related scenario		Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios	IEA NZE 2050	Company-wide	<Not Applicable>	SSE used the climate transition data within the IEA NZE scenario in the quantification process of its material transition climate risk, in the ARA for 22/23. The quantification of the Wind capture market risk applied the IEA NZE wind capacity data at the World level for time horizons to 2030 and 2050.
Transition scenarios	IEA STEPS (previously IEA NPS)	Company-wide	<Not Applicable>	SSE used the climate transition data within the IEA STEPS scenario in the quantification process of its material transition climate risk, in the ARA for 22/23. The quantification of the Wind capture market risk applied the IEA STEPS wind capacity data at the World level for time horizons to 2030 and 2050.
Transition scenarios	IEA STEPS (previously IEA NPS)	Company-wide	<Not Applicable>	SSE used the climate transition data within the IEA STEPS scenario in the quantification process of its material climate opportunities, in the ARA for 22/23. The quantification of the Accelerated wind investment opportunity applied the IEA STEPS wind capacity data at the World level for time horizons to 2030 and 2050. The quantification of the Valuable flexible hydro opportunity applied the IEA STEPS hydro generation capacity data at the World level for time horizons to 2030 and 2050. The quantification of the Valuable flexible thermal opportunity applied the IEA STEPS natural gas with carbon capture and storage generation data at the World level for time horizons to 2030 and 2050.
Transition scenarios	Customized publicly available transition scenario	Company-wide	1.5°C	SSE used the climate transition data within the FES Leading the Way scenario in the quantification process of its material climate opportunity - Accelerated transmission growth opportunity, in the ARA for 22/23. The quantification of the Accelerated transmission growth opportunity applied the FES Leading the Way renewables generation capacity data for Scotland at the time horizons to 2030 and 2050.
Physical climate scenarios	Customized publicly available physical scenario	Company-wide	2.1°C - 3°C	SSE used the climate transition data within the FES Falling Short scenario in the quantification process of its material climate opportunity - Accelerated transmission growth opportunity, in the ARA for 22/23. The quantification of the Accelerated transmission growth opportunity applied the FES Falling Short renewables generation capacity data for Scotland at the time horizons to 2030 and 2050.
Physical climate scenarios	Customized publicly available physical scenario	Company-wide	1.5°C	SSE used the climate transition data within the FES Consumer Transformation scenario in the quantification process of its material climate opportunity – Driving distribution transformation opportunity, in the ARA for 22/23. The quantification of the Driving distribution transformation opportunity applied the FES Consumer Transformation electricity consumer demand data for the UK at the time horizons to 2030 and 2050.
Physical climate scenarios	Customized publicly available physical scenario	Company-wide	2.1°C - 3°C	SSE used the climate transition data within the FES Falling Short scenario in the quantification process of its material climate opportunity - Driving distribution transformation opportunity, in the ARA for 22/23. The quantification of the Driving distribution transformation opportunity applied the FES Falling Short electricity consumer demand data for the UK at the time horizons to 2030 and 2050.
Transition scenarios	IEA NZE 2050	Company-wide	<Not Applicable>	SSE used the climate transition data within the IEA NZE scenario in the quantification process of its material climate opportunities, in the ARA for 22/23. The quantification of the Accelerated wind investment opportunity applied the IEA NZE wind capacity data at the World level for time horizons to 2030 and 2050. The quantification of the Valuable flexible hydro opportunity applied the IEA NZE hydro generation capacity data at the World level for time horizons to 2030 and 2050. The quantification of the Valuable flexible thermal opportunity applied the IEA NZE natural gas with carbon capture and storage generation data at the World level for time horizons to 2030 and 2050.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

In the year to 31st March 2023, SSE conducted climate-related scenario analysis of its most material climate-related risks and opportunities, meaning that SSE is fully compliant with all recommendations under the TCFD and Listing rule requirements. The purpose of TCFD disclosures is to demonstrate the resilience of a company to climate change. An important way to consider that resilience, is to define climate-related opportunities and risks and subject them to different climate outcomes.

Climate change scenarios present different possible futures and are based on independent projections from external scenario providers including the International Energy Agency (IEA), National Grid Future Energy Scenarios and the Intergovernmental Panel on Climate Change (IPCC). Scenarios are not forecasts and should not be relied upon for decision making. The scenarios are designed for SSE to test its resilience against a range of different future states and inform strategic decision making.

With this in mind, SSE's focal questions for its climate-related scenario analysis was:

"What are the different impact pathways for SSE's material climate-related risks and opportunities under a range of different temperature scenarios and timeframes, what would the potential financial impact be under each scenario, and what should SSE's response be to each material climate-related risk and opportunity identified?"

Results of the climate-related scenario analysis with respect to the focal questions

To SSE, climate-related risk expresses itself in two ways: through the physical risk associated with a climate changed world; and through the transition risks associated with policy or market change. The impacts described are designed to aid understanding of SSE's climate risks and are not intended to be forward looking guidance.

The scenario analysis completed by SSE on its material climate transition risks indicates that SSE is resilient to identified climate-related scenarios including 1.5°C and 2.5°C pathways. For SSE, the potential financial impact at a 1.5°C pathway presents a greater risk than the 2.5°C pathway in these climate scenarios. This reflects the potential impact of climate policy in the 1.5°C scenario which may bring forward the closure of unabated thermal generation to 2030 or earlier and potentially impact future earnings. Whilst the wind capture market risk has the potential in the 1.5°C scenario to have a greater impact on SSE's current renewable capacity and future new renewable capacity and potential future earnings.

The scenario analysis completed by SSE on its material climate physical risks indicates that SSE is reasonably resilient to identified climate related scenarios including 1.5°C and 4°C pathways. For SSE, the potential financial impact at a 1.5°C pathway presents a lower risk in the scenarios than a 4°C pathway. This reflects the potential impact of greater global warming and the associated weather impacts of sustained higher temperatures and extreme weather events associated with a warming world.

The scenario analysis completed by SSE on its material climate opportunities indicates that SSE, its strategy and financial plans are resilient under a range of climate-related scenarios, including a 1.5°C and 2.5°C temperature pathway. Due to SSE's strategy to focus on the transition to a net zero world, opportunities under a 1.5°C scenario represent greater growth than those under a 2.5°C temperature pathway.

Due to SSE's strategy to focus on transition to a net zero world, opportunities under a 1.5oC scenario represent greater growth than those under a 2.5oC scenario. It is with this in mind that SSE decided to update its existing capital expenditure plan in May 2023 to create the Net Zero Acceleration Programme Plus (NZAP Plus). The new NZAP Plus includes investment of £18bn over the five years to 2027 and is focused on climate solutions that are aligned to a 1.5°C pathway. By using the results of the climate-related scenario analysis, SSE could estimate the potential financial impact of investing in solutions that will realise its climate-related opportunities, such as investing £7bn in its renewables business and £5bn in its transmission business. In quantifying the potential financial impact of its climate-related opportunities, SSE can expect a return on this investment.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>Climate-related risks and opportunities have shaped SSE's short, medium, and long-term strategy, which is focused on its economically regulated electricity networks and renewables, complemented by thermal generation. These businesses have a crucial role in the net-zero transition. SSE's product-related strategy is influenced by climate change legislation and policy such as the UK Government's Energy Security Strategy and the Irish Government's Climate Action and Low Carbon Development Act. These developments signal a more supporting policy environment which provides the opportunity for SSE to deliver its strategy and realise the growth opportunities from an accelerated transition to net zero.</p> <p>Examples of a substantial decision made that has been influenced by climate related policy opportunity in SSE's products:</p> <p>1) In 2023, the UK Government published its 'Powering Up Britain' Strategy which outlines its ambition for hydrogen production to up to 10GW by 2030 and to provide up to £20 billion for of funding for early deployment of CCUS. Aldbrough Hydrogen Pathfinder, SSE Thermal's hydrogen value chain proof of concept project, was shortlisted to progress to a due diligence phase after submitting a bid for funding and Hydrogen Production Business Model support through the Net Zero Hydrogen Fund. This project will enable and inform the scaling up of SSE's, the wider Humber, and the UK's hydrogen ambitions and help de-risk further hydrogen investment.</p> <p>2) The UK and Irish Governments have set 2030 ambitions for new offshore wind, with the 'Powering Up Britain' Strategy targeting 50GW in the UK and at least 7GW in Ireland. This strong policy support has influenced SSE's short and medium-term strategy and as such SSE is working to deliver a renewable energy portfolio that generates at least 50TWh of renewable electricity a year by 2030.</p>
Supply chain and/or value chain	Yes	<p>SSE's short, medium, and long-term strategy is influenced by climate change legislation and policy such as UK Climate Change Act 2008 and in Ireland the Climate Action and Low Carbon Development Act. This in turn has influenced elements of SSE's supply chain/value chain strategy.</p> <p>Supply chain: example of a substantial decision made that has been influenced by climate-related policy risks:</p> <p>To manage the risk of climate change impacts in its supply chain, SSE established the Powering Net Zero Pact. The Powering Net Zero Pact ("the Pact") is an initiative created by SSE with 10 other founding partners as a legacy of COP26. The Pact brings together companies across all tiers of the power sector globally – including civils, shipping, renewables, electrical engineering, and others – to achieve a fair and just energy transition to net zero. The Pact focuses on five areas of ambition: achieving net zero carbon emissions; protecting and enhancing the natural environment; transitioning to a circular economy; guaranteeing fair work and sustainable jobs; and adding value to local communities. The Pact also includes five shared commitments and five topics for collaboration, which together encourage the delivery of common ambitions for a sustainable future.</p>
Investment in R&D	Yes	<p>UK and Irish climate change legislation and policy shapes SSE's short, medium and long-term strategy, and in turn influences its approach to innovation and R&D, which is required to deliver net zero.</p> <p>R&D: example of a substantial decision made that has been influenced by climate-related policy opportunities:</p> <p>The UK and Irish Governments have set 2030 ambitions for new offshore wind, with the 'Powering Up Britain' Strategy targeting 50GW in the UK and at least 7GW in Ireland. To achieve these targets, SSE will need to contribute to the rapid build out of offshore wind assets. In 2023, SSE Renewables in collaboration with Sif, Cambridge Vacuum Engineering and TWI, created a new, more productive and more sustainable manufacturing process for the welding of large steel structures for offshore wind. The pioneering £2.5m project, co-funded by the UK's innovation agency, Innovate UK, will be incorporated into an offshore wind turbine monopile foundation, which will be installed in the second phase of Dogger Bank Wind Farm later in 2023.</p> <p>This technique opens up the potential to use electron beam welding on large structures, while reducing costs and enhancing productivity. The technology has been shown to weld monopiles at least 25 times faster than current methods, while using 90% less energy, costing 88% less, and producing 97% less CO2 emissions.</p>
Operations	Yes	<p>To deliver its strategy, SSE has had to implement initiatives into its operations in response to climate-related policy as well as the physical impacts of climate change.</p> <p>Examples of a substantial decision made that has been influenced by climate related policy opportunities in SSE's operations:</p> <p>In the long-term, as part of the UK Govt's net zero target, it is understood that SF6, a potent GHG, needs to be removed or replaced as far as possible by 2050. In the medium-term, Ofgem (the government regulator) has now included setting a science-based target (SBT) as a minimum requirement within the RIIO-T2 business plan guidance. This SBT covers SSEN Transmission's significant SF6 emissions.</p> <p>In the electricity industry, SF6 is widely used in substations, power transformers, wind turbines, circuit breakers and switchgear due to its excellent insulating properties. This policy impacts the operations of SSE's electricity networks businesses in the short and medium-term. SSEN must address the issue of SF6 as part of their respective science-based targets in their price controls (RIIO-T2 for Transmission and RIIO-ED2 for Distribution). SSEN Distribution maintain a strategy for SF6 switchgear to minimise leakage, involving: establishing a working group to address SF6 leakage; improvements utilising a more pro-active approach to the SF6 switchgear repairs process; and changes to internal systems to target leaking SF6 assets.</p> <p>SSEN Transmission is undertaking a key research project, called the Condition Assessment of SF6 Alternatives (CASA), to understand the changes in operating conditions associated with the use of SF6 alternatives and their potential impact on the network system when rolled out at scale. The research looks at the condition monitoring requirements of the alternative gases with the aim of gaining key insights into the type and severity of defects associated with these systems. With this information it is hoped that network operators will be able to detect defects earlier and implement planned interventions to manage the network. In addition, the research will help to reduce the industry to develop and advance international measurement standards and diagnostic data tools to support the use of these innovative SF6 alternative solutions.</p>

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Indirect costs Capital expenditures Capital allocation Acquisitions and divestments Access to capital Assets Liabilities	<p>Climate-related risks and opportunities surrounding decarbonisation and the transition to a low-carbon economy are factored into all aspects of SSE's financial planning in the short, medium and long-term.</p> <p>For example in terms of SSE's revenues:</p> <p>SSE has a resilient and highly complementary business model built on a mix of market-based and economically regulated businesses, focused on supporting the delivery of net zero. The UK and Irish legislative and policy support for net zero means SSE's businesses are well placed to realise opportunities associated with the transition. Over recent years SSE has deliberately designed its business model to place renewables and electricity networks at the core – businesses which are key to enabling a net zero economy and have significant growth potential. While these businesses accounted for 26% of SSE's total revenue (adjusted) in 2022/23 they contribute 74% of SSE's operating profit. SSE believes that, because of high 'pass through' costs in the electricity sector, operating profit is a better indicator of economic activity than revenue.</p> <p>For example, in terms of SSE's direct and indirect costs:</p> <p>Severe adverse weather that causes damage or interrupts energy supply or generation is a climate-related risk for SSE that is factored into SSE's financial planning. For example, SSEN's distribution business' operations can be impacted by severe weather events which cause damage to infrastructure and interruption to electricity supply for its customers.</p> <p>For example, in terms of SSE's capital expenditures:</p> <p>The opportunity of low carbon electricity system influences the development and expansion of SSE's off- and on-shore wind pipeline to support a low-carbon electricity system as well as investment in transmission infrastructure in the north of Scotland to support the delivery of an accelerated low-carbon electricity system. This presents opportunities for SSE to raise funds using low carbon or sustainable access to capital.</p> <p>In May 2023, SSE updated its existing Net Zero Acceleration Programme to create the Net Zero Acceleration Programme Plus, a fully funded £18bn capital expenditure plan to 2026/27 focused on low-carbon electricity assets and infrastructure, aligned to a 1.5°C global warming pathway. With around 90% of the NZAP Plus expected to be invested in either renewables or networks, the substantial majority of the investment plan is directly focussed on climate solutions to achieve SSE's 2030 Goals, the four material UN Sustainable Development Goals (SDGs) which underpin them and is aligned to the Technical Screening Criteria of the EU Taxonomy.</p> <p>In 2022/23, SSE's investment and capital expenditure totalled £2,160.6, 81.2% of which was in renewables and electricity networks.</p> <p>For example, in terms of SSE's capital allocation:</p> <p>In July 2022, issued its fifth green bond of €650m. The proceeds from all five of SSE's Green Bonds were directly allocated to the refinancing of eligible green projects listed in the Green Bond Frameworks, and therefore fully employed at settlement. This was SSE's fifth green bond, reaffirming SSE's position as the largest issuer of Green Bonds in the UK corporate sector. For Green Bond 5 proceeds have been allocated to three SSE Renewables' onshore and offshore wind generation projects that are either under construction or have recently been completed. As listed in SSE's Green Bond Framework 2021, these involve: Seagreen offshore wind farm; Viking onshore wind farm; and, Gordonbush Extension onshore wind farm. These Green Bonds SSE Group to take a leading role in supporting the transition to net zero through continued investment in renewable energy generation and the infrastructure needed to transport it to homes and businesses across the country.</p> <p>For example, in terms of SSE's acquisitions and divestments:</p> <p>SSE's strategy is to support the transition to a low carbon electricity system. Core to this is focusing on its low-carbon businesses of renewable generation and regulated energy networks. Climate-related risks and opportunities surrounding decarbonisation are factored into SSE's acquisitions and divestments.</p> <p>SSE's model is to partner with an increasing number of significant Joint Ventures (operated and non-operated) rather than to acquire businesses. The importance of joint ventures and partner management continues to increase in SSE as its Business Units pursue their strategic and business objectives in association with other companies and organisations, both in the UK and Ireland and in some cases other carefully selected international markets.</p> <p>In 2022/23, SSE completed two acquisitions and one divestment. These were:</p> <ul style="list-style-type: none"> • In September 2022, SSE Renewables completed the acquisition from Siemens Gamesa Renewable Energy of an onshore development platform across Spain, France, Italy and Greece for a consideration of €580m (£519.5m); and • In September 2022, SSE Thermal, alongside Equinor as 50/50 partners, completed the acquisition of the Triton Power portfolio with SSE's share of the purchase being £123.2m. • In December 2022, a 25% Minority Interest stake in SSEN Transmission was disposed of, with £1.46bn of proceeds received from Ontario Teachers Pension Plan. <p>For example, in terms of SSE's assets:</p> <p>The UK Government's Net Zero Strategy outlines plans to decarbonise the power sector by 2035 with a target of 95% of GB electricity to be low carbon by 2030. It is plausible that to meet climate change commitments the UK Government (and potentially the Irish Government too) may strengthen climate change policies to require unabated gas generation to cease in the 2030s. 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, 2.3GW of Combined Cycle Gas Turbine (CCGT) capacity will still be in operation in 2030.</p> <p>SSE has identified the potential risk of seeing more aggressive climate change policy being introduced, which could bring forward the closure of unabated gas generation from 2030. This has influenced SSE's financial planning as SSE Thermal has started to develop CCS projects with Equinor at Keadby and Peterhead, as well as two further projects in the Humber, Keadby Hydrogen power station and a hydrogen storage facility at Aldbrough. These projects will play a pivotal role in helping to achieve national net zero targets by replacing unabated gas assets and providing flexible generation to an electricity network dominated by renewables.</p>

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with both our climate transition plan and a sustainable finance taxonomy	At the company level only

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric

CAPEX

Type of alignment being reported for this financial metric

Alignment with a sustainable finance taxonomy

Taxonomy under which information is being reported

EU Taxonomy for Sustainable Activities

Objective under which alignment is being reported

Climate change mitigation

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

1755200000

Percentage share of selected financial metric aligned in the reporting year (%)

81

Percentage share of selected financial metric planned to align in 2025 (%)

90

Percentage share of selected financial metric planned to align in 2030 (%)

90

Describe the methodology used to identify spending/revenue that is aligned

SSE has taken a best-efforts approach to consider its alignment to the EU Taxonomy. Key strategic activities (i.e. onshore wind, offshore wind, transmission, distribution) from SSE's Reporting Segments were assessed against the technical screening criteria. While an internal assessment against the Do No Significant Harm and minimum safeguards criteria was undertaken, a second party opinion has not yet been sought.

Taxonomy eligible activities in 2022/23 are from SSE's onshore and offshore wind generation, hydro (run of river and pumped storage) as well as its networks transmission and distribution activities.

The taxonomy non-eligible activities are associated with SSE's thermal generation and gas storage businesses. As these businesses continue their decarbonisation pathways, it is expected that emerging activities such as low-carbon flexible generation or hydrogen storage will qualify in the future.

Activities that have not been identified in the taxonomy as they either do not significantly contribute to climate change mitigation or could yet be integrated into the Taxonomy at a later date comprise SSE's Business Energy, Airtricity, Distributed Energy, EPM and Corporate businesses. These activities either operate as customer focussed businesses, a route to market for generation, or do not contain material activities at this time.

SSE's accounting policies for these calculations are based on the current EU Taxonomy Regulation 2020/852, and delegated acts. In calculating each taxonomy-eligible proportion, a 'linkage principle' has been applied, stipulating that any revenue, operating profit/loss or capital expenditure that can be justifiably linked to an identified taxonomy economic activity can be classified as taxonomy-eligible. Using this principle, revenue and operating profits from SSE's balancing activities, hedging, and trading can be linked to the EU taxonomy eligible activities when the activity is undertaken to directly support the eligible activities.

Where financial results are not appropriately split into Taxonomy eligible activities (namely Energy Portfolio Management trading and power sale activities), revenue has been allocated based on purchased power volumes from renewable versus non-renewable assets, and operating profit/loss has been apportioned based on internal contractual trading agreements.

The analysis has been prepared by applying a top-down review of SSE's activities and the alignment with existing segmental reporting within taxonomy eligible activities. There are some activities that fall below specified thresholds which are not taxonomy eligible. As SSE's reporting processes and controls will be refined ahead of implementation of the UK Green Taxonomy, it is expected that some reclassification of activities may occur due to changes in materiality thresholds or clarification on eligible activity criteria.

N.B. Through its Net Zero Acceleration Programme, which was updated to the Net Zero Acceleration Programme Plus in May 2023, SSE has reshaped its capital allocation to c50% Networks, c40% Renewables, c10% other flexible generation, distributed energy, and customer businesses. SSE considers its Transmission and Distribution (Networks) and Renewables businesses to conduct taxonomy eligible activities, therefore SSE expects 90% of its CAPEX will be aligned with a 1.5°C world (using CDP's definition of alignment) over the 5 years to 2026/27. CAPEX plans beyond 2026/27 are yet to be published, therefore a similar capital allocation has been extended to 2030 for the purpose of this disclosure.

With around 90% of the NZAP Plus expected to be invested in renewables and networks, the substantial majority of the investment plan is focused on climate solutions to achieve SSE's interim 2030 Goals which are linked to material UN Sustainable Development Goals (SDGs), and it is aligned to the Technical Screening Criteria of the EU Taxonomy.

C3.5c

(C3.5c) Provide any additional contextual and/or verification/assurance information relevant to your organization's taxonomy alignment.

SSE Annual Report 2023:

- EU Taxonomy pages 46 to 47
- NZAP Plus pages 83 to 84

In addition to adjusted investment and capital expenditure, SSE disclosed the alignment of its adjusted operating profit related to the businesses aligned with the taxonomy categories, as well as revenue, against the EU Taxonomy in 2022/23. The proportion of SSE's taxonomy-eligible activities across the different measures were adjusted operating profit, 55% (£1,397.4m); and, revenue, 26% (£3,243.8m).

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target
Intensity target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Abs 1

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1
Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

<Not Applicable>

Base year

2018

Base year Scope 1 emissions covered by target (metric tons CO2e)

10154749

Base year Scope 2 emissions covered by target (metric tons CO2e)

907745

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)

<Not Applicable>

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

11062493

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1:

Purchased goods and services (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

<Not Applicable>

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

100

Target year

2030

Targeted reduction from base year (%)

72.5

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

3042185.575

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

6079172

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

438580

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

6517753

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

56.6654089322518

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

This target covers: Direct GHG emissions (scope 1): GHG emissions from the consumption of oil, gas and biomass in SSE's thermal generation plant (including Power Purchase Agreements) to generate electricity, gas consumption in buildings, network and company vehicle fuel (petrol, diesel or gas oil) consumed and fugitive emissions (use of sulphur hexafluoride (SF6) in the transmission and distribution networks for conductivity (used in the switchgears and substations)); and Indirect GHG emissions (scope 2): GHG emissions from electricity consumption in buildings, networks and thermal power stations as well as distribution losses (this is the electricity lost in SSE's distribution network in the north of Scotland (SHEPD) and southern central England (SEPD) transporting electricity to the customer). It is important to note that SSE does not expect the achievement of this target in 2030 to have followed a linear year-to-year reduction path. Market driven and weather-related fluctuations may mean there are

some years in which emissions may increase.

However, SSE fully expects to achieve its 2030 target and the long-term trend continues to be significant reduction in the absolute emissions from the electricity it generates. This target covers SSE's scope 1 and 2 emissions and is a science-based target, validated by the SBTi.

Plan for achieving target, and progress made to the end of the reporting year

Plan for achieving target: SSE understands that credible net zero targets must be backed up by a clear plan of actions that will be taken to achieve them. SSE's Net Zero Transition Plan was first published in March 2022 and updated in October 2022 in response to shareholder and wider stakeholder feedback. The updated Net Zero Transition Plan outlines SSE's net zero aligned targets and actions to reduce material GHG emissions across scopes 1, 2 and 3. SSE's Net Zero Transition Plan was designed to provide clarity for its stakeholders, outlining in detail 17 key actions it will take to ensure its net zero ambitions are met. The key actions focus primarily on addressing SSE's largest source of GHG emissions from electricity generation, alongside a plan to address remaining GHG emissions across all scopes.

Some key actions covering this target include:

Scope 1 –

- Reduce emissions from unabated gas generation
- Develop new low-carbon flexible generation
- Build a renewable energy portfolio of 13GW of capacity by 2031
- Reduce SSEN's leakage and reliance on SF6
- Switch vehicle fleet to electric in line with EV100 commitment
- Reduce reliance on SSEN's Scottish Island backup diesel generation

Scope 2 –

- Reduce electrical losses from SSEN Distribution
- Deliver a net zero property estate

Performance against the target: SSE's target is to reduce Scope 1 and 2 GHG emissions by 72.5% by 2030, based on 2018 levels. In comparison to the baseline year of 2017/18, SSE's Scope 1 and 2 GHG emissions fell by 41%. The main contributing factors to this decrease included:

• Emissions from electricity generation activities: emissions fell as a direct result of the decarbonisation of the fuels used to generate electricity. The main cause for the emissions decrease was the closure of Fiddler's Ferry. With the closure of its last remaining coal-fired power station, 2020/21 was the first year since 2005 that SSE's generation fleet contained no electricity output from coal.

• Power Purchase Agreements expiring: SSE changed the way it accounts for the GHG emissions from its 50% owned Seabank gas-fired power station from 1 October 2021. Prior to this date SSE had operational control of the plant under a Power Purchase Agreement and as such 100% of emissions from the station were accounted for in scope 1 inventory. Following cessation of the agreement on 30 September 2021, 50% of its emissions (aligned with equity ownership) will be accounted for within scope 3.

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

Target reference number

Abs 2

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

Well-below 2°C aligned

Year target was set

2020

Target coverage

Company-wide

Scope(s)

Scope 3

Scope 2 accounting method

<Not Applicable>

Scope 3 category(ies)

Category 11: Use of sold products

Base year

2018

Base year Scope 1 emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 2 emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

2538729

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)

2538729

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

2538729

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

<Not Applicable>

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

<Not Applicable>

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

100

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12:

End-of-life treatment of sold products (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13:

Downstream leased assets (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

62

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

62

Target year

2034

Targeted reduction from base year (%)

50

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

1269364.5

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

2163427

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

2163427

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

2163427

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

29.5661332895319

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

his target covers: The indirect emissions (scope 3) use of sold products which relates to the 'gas sold to customers by SSE' - (industrial and commercial business customers in the UK and Ireland and domestic customers in Northern Ireland and the Republic of Ireland) that is then used by our customers for heating and power purposes. This figure is calculated by taking the amount of gas sold (millions therms) converting it to kWh and then applying a carbon dioxide conversion factor provided by BEIS reporting guidelines.

At present, SSE's scope 3 emissions are 40% or more of total scope 1, 2, and 3 emissions, and therefore a scope 3 target is required. SSE is involved in the sale and distribution of natural gas and so a scope 3 target for the use of sold products irrespective of the share of these emissions compared to the total scope 1, 2, and 3 emissions is applicable. SSE's gas sold target covers all the emissions in this category. The target also aligns to the 'well below 2 degrees' scenario and so is ambitious in its approach.

Plan for achieving target, and progress made to the end of the reporting year

Plan for achieving target: SSE understands that credible net zero targets must be backed up by a clear plan of actions that will be taken to achieve them. SSE's Net Zero Transition Plan was first published in March 2022 and updated in October 2022 in response to shareholder and wider stakeholder feedback. The updated Net Zero Transition Plan outlines SSE's net zero aligned targets and actions to reduce material GHG emissions across scopes 1, 2 and 3. SSE's Net Zero Transition Plan was designed to provide clarity for its stakeholders, outlining in detail 17 key actions it will take to ensure its net zero ambitions are met. The key actions focus primarily on addressing SSE's largest source of GHG emissions from electricity generation, alongside a plan to address remaining GHG emissions across all scopes.

The key actions covering this target are:

Scope 3 –

- Support customers to fuel switch and consume less gas.
- Advocate for a pathway for decarbonised heat.

Performance against the target: SSE's target is to reduce absolute GHG emissions from use of products sold by 50% by 2034 from a 2018 base year. This means that SSE's use of products sold is forecast to be around 1.3 million tonnes CO2e by 2030. SSE's Scope 3 GHG emissions decreased by 15% between 2017/18 and 2022/23. It is important to note that SSE does not expect the achievement of this target in 2034 to have followed a linear year-to-year reduction path. Market driven and weather-related fluctuations may mean there are some years in which emissions may increase. However, SSE fully expects to achieve its 2034 target and the long-term trend continues to be to move to lower carbon sources of heat during this time period. This target covers SSE's scope 3 emissions and is a science-based target, validated by the SBTi.

SSE has a suite of targets which together meet the SBTi criteria.

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Is this a science-based target?

Yes, and this target has been approved by the Science Based Targets initiative

Target ambition

1.5°C aligned

Year target was set

2021

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2 accounting method

<Not Applicable>

Scope 3 category(ies)

<Not Applicable>

Intensity metric

Metric tons CO2e per megawatt hour (MWh)

Base year

2018

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

307

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

307

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

<Not Applicable>

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

<Not Applicable>

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2030

Targeted reduction from base year (%)

80

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

61.4

% change anticipated in absolute Scope 1+2 emissions

72.5

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

254

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

254

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

21.5798045602606

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

This target covers SSE's carbon emissions that arise from the consumption of coal, oil, gas and biomass in SSE's thermal generation plant (including Power Purchase Agreements). The intensity ratio covers the total output from SSE's thermal (oil, gas, coal, multifuel) and renewable (wind, both onshore and offshore, hydro including pumped storage and biomass) electricity generation portfolio.

It is important to note that SSE does not expect the achievement of this target in 2030 to have followed a linear year-to-year reduction path. Market driven and weather-related fluctuations may mean there are some years in which emissions may increase. However, SSE fully expects to achieve its 2030 target and the long-term trend continues to be significant reduction in the carbon intensity of the electricity it generates.

This target covers SSE's scope 1 emissions and is a science-based target, validated by the SBTi. SSE has a suite of targets which together meet the SBTi criteria.

Plan for achieving target, and progress made to the end of the reporting year

Plan for achieving target: SSE's Net Zero Transition Plan was first published in March 2022 and updated in October 2022 in response to shareholder and wider stakeholder feedback. The updated Net Zero Transition Plan outlines SSE's net zero aligned targets and actions to reduce material GHG emissions across scopes 1, 2 and 3. SSE's Net Zero Transition Plan was designed to provide clarity for its stakeholders, outlining in detail 17 key actions it will take to ensure its net zero ambitions are met. The key actions focus primarily on addressing SSE's largest source of GHG emissions from electricity generation, alongside a plan to address remaining GHG emissions across all scopes.

The key actions covering this target are:

Scope 1 –

- Reduce emissions from unabated gas generation
- Develop new low-carbon flexible generation
- Build a renewable energy portfolio of 13GW of capacity by 2031

Performance against the target: SSE's carbon intensity was 17% lower in 2022/23 than the base year (2017/18). In 2022/23, the carbon intensity of SSE's scope 1 emissions decreased slightly to 254gCO2e/kWh in comparison to 259gCO2e/kWh in 2021/22. Total Scope 1 emissions increased 6% from 5.8 Mt CO2e to 6.1 Mt CO2e.

Despite the increase in emissions, SSE's scope 1 intensity decreased slightly in 2022/23 from the previous year. Output from SSE's renewable generation portfolio increased to 9.7TWh in 2022/23, from 8.8TWh the previous year, a rise of 10% between the same periods. This was driven by increased output having experienced an exceptionally still and dry weather conditions the previous year and output from the operational turbines at Seagreen offshore wind farm. Output from SSE's thermal generation also increased, however, this was by a lesser extent than for renewables output. This meant that the proportion of total generation output contributed to by renewable generation continued to represent 40% of the total portfolio in 2022/23. Overall, SSE's scope 1 GHG intensity was slightly lower than the previous year due to a reduction in output from the most carbon intensive generating plant in SSE's portfolio, including from carbon intensive peaking plant in Ireland.

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

Net-zero target(s)

Other climate-related target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2018

Target coverage

Company-wide

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2018

Consumption or production of selected energy carrier in base year (MWh)

0

% share of low-carbon or renewable energy in base year

0

Target year

2023

% share of low-carbon or renewable energy in target year

100

% share of low-carbon or renewable energy in reporting year

51.7

% of target achieved relative to base year [auto-calculated]

51.7

Target status in reporting year

Underway

Is this target part of an emissions target?

This target is part of the RE100 initiative.

Is this target part of an overarching initiative?

RE100

Please explain target coverage and identify any exclusions

While the Climate Group's RE100 is targeted at non-renewable energy providers, SSE has joined in spirit and, as of 31 March 2023, 51.7% of the electricity that SSE purchased for its assets was from renewable sources, backed by renewable guarantees of origin (REGO) certificates

Plan for achieving target, and progress made to the end of the reporting year

Plan for achieving target: SSE understands that credible net zero targets must be backed up by a clear plan of actions that will be taken to achieve them. In March 2022, SSE published its Net Zero Transition Plan which details the targets and actions SSE intends to take to achieve its net zero ambitions.

SSE's Net Zero Transition Plan was designed to provide this clarity for its stakeholders, outlining in detail 17 key actions it will take to ensure its net zero ambitions are met. One of these key actions is to deliver a net zero property estate. To do this SSE will install energy efficiency measures to its properties alongside monitoring equipment to reduce energy and carbon; and install micro generation technologies to reduce electrical consumption where viable. Whilst SSE works towards reducing energy use and carbon emissions, it will buy 100% of electricity from a renewable source. SSE purchased 100% of its electricity for use in its facility managed offices from renewable sources, backed by renewable guarantees.

List the actions which contributed most to achieving this target

<Not Applicable>

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number

Oth 1

Year target was set

2020

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Engagement with suppliers	Percentage of suppliers (by procurement spend) with a science-based target
---------------------------	--

Target denominator (intensity targets only)

<Not Applicable>

Base year

2019

Figure or percentage in base year

4

Target year

2024

Figure or percentage in target year

50

Figure or percentage in reporting year

52

% of target achieved relative to base year [auto-calculated]

104.347826086957

Target status in reporting year

Revised

Is this target part of an emissions target?

This target covers SSE's scope 3 emissions and is a science-based target, validated by the SBTi.

SSE has a suite of targets which together meet the SBTi criteria.

Is this target part of an overarching initiative?

Science Based Targets initiative – approved supplier engagement target

Please explain target coverage and identify any exclusions

SSE's scope 3 emissions are 40% or more of total scope 1, 2, and 3 emissions, and therefore a scope 3 target is required. SSE's engagement target covers the suppliers that are in the top 50% by spend of SSE's total procurement spend. The vast majority of SSE's total supplier spend is in the 'Services' industry (over 70%) and the majority of the top 50% of SSE's procurement spend in any given year is also in the 'Services' industry (over 90%). The 'Services' industry makes up nearly 90% of the total carbon emissions from SSE's supply chain. This target is ambitious as it covers the dominant carbon emitting 'Services' industry suppliers. Therefore, if those suppliers that are in the top 50% of spend have an SBT then those suppliers would cover over 70% of the supplier scope 3 emissions. This means that the combination of the gas sold target and the supplier engagement target will cover the significant emissions in the scope 3 category.

For the supply chain target (SBT) SSE has reported the base year in the SR21 as 2019/20 and 4% of suppliers had set SBTs at this stage. This means percent of target achieved was 54% from this base year. However, at 31 March 2023, 34% of SSE's suppliers (by value) had set their own science-based targets through the SBTi with a further 17% committed to setting one. SSE will now only consider suppliers that have set their own science-based targets only as meeting the criteria for this target.

Plan for achieving target, and progress made to the end of the reporting year

Plan for achieving target: SSE understands that credible net zero targets must be backed up by a clear plan of actions that will be taken to achieve them. In March 2022, SSE published its Net Zero Transition Plan which details the targets and actions SSE intends to take to achieve its net zero ambitions. SSE's Net Zero Transition Plan was designed to provide this clarity for its stakeholders, outlining in detail 17 key actions it will take to ensure its net zero ambitions are met. Two of these key actions were in relation to its supplier engagement target.

SSE is committed to:

- Establish a framework for supplier collaboration on net zero action; and
- Partner with the CDP supply chain engagement programme.

To achieve this objective:

- SSE's Sustainable Procurement Code outlines the expectation on suppliers to have a net zero carbon reduction strategy with an associated commitment or target that is aligned with climate science;
- Workshops are being held with key suppliers to facilitate dialogue and knowledge sharing around the setting of science-based carbon targets and the challenges and opportunities presented for various industries;
- SSE is working with CDP Supply Chain to deliver webinars around carbon reporting and science-based target setting; and,
- Tools and techniques are provided through the Supply Chain Sustainability School partnership that supports suppliers to understand and set net zero carbon reduction strategies.

List the actions which contributed most to achieving this target

<Not Applicable>

Target reference number

Oth 2

Year target was set

2019

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Low-carbon vehicles	Other, please specify (Number of company owned electric vehicles)
---------------------	--

Target denominator (intensity targets only)

<Not Applicable>

Base year

2018

Figure or percentage in base year

138

Target year

2030

Figure or percentage in target year

2684

Figure or percentage in reporting year

991

% of target achieved relative to base year [auto-calculated]

33.503534956795

Target status in reporting year

Underway

Is this target part of an emissions target?

In July 2019, SSE joined The Climate Group's EV100 initiative and committed to electrify its vehicle fleet. In joining the EV100, SSE has committed that by 2030 it will switch 2,684 of its vehicles to electric and install charging points at its sites.

Is this target part of an overarching initiative?

EV100

Please explain target coverage and identify any exclusions

In July 2019, SSE joined The Climate Group's EV100 initiative and committed to electrify its vehicle fleet. In joining the EV100, SSE has committed that by 2030 it will switch 2,684 of its vehicles to electric and install charging points at its sites. SSE's Net Zero Transition Plan outlines the plans to be 100% electric across its vehicles up to 3.5 tonnes and 75% across its vehicles up to 7.5 tonnes by 2030. SSE will make EVs the 'new normal' by switching its vehicles to electric and install charging points for its employees to use.

Plan for achieving target, and progress made to the end of the reporting year

Plan for achieving target: SSE understands that credible net zero targets must be backed up by a clear plan of actions that will be taken to achieve them. In March 2022, SSE published its Net Zero Transition Plan which details the targets and actions SSE intends to take to achieve its net zero ambitions. SSE's Net Zero Transition Plan was designed to provide this clarity for its stakeholders, outlining in detail 17 key actions it will take to ensure its net zero ambitions are met.

One of these key actions is to switch vehicle fleet to electric in line with EV100 commitment. Since the launch of SSE's low emission company car scheme in June 2020, the uptake of pure electric vehicles has increased significantly. By the end of 2022/23, 57% of its car fleet was fully electric and there are currently another 201 fully electric vehicles on order. The success of the car scheme has resulted in a reduction in the average CO2 across SSE's car fleet from 106gCO2/km when the scheme launched, to just 36.33gCO2/km at the end of 2022/23 and this continues to reduce with every new delivery.

SSE has also expanded its fully electric commercial van fleet between 2020/21 and 2022/23, from 12 to 47 with a further 1 on order. SSE is trialling all low emission and fully electric vans that come to market and will increase volumes when suitable vans become available to match operational requirements.

Munro 4x4 Vehicle Trial: SSE continues to lead the charge on low carbon transport as it becomes the first UK company to trial a 4x4 Zero Emissions utility vehicle built entirely in Scotland, for the utility industry. The new MK_1 was unveiled in December 2022 ahead of production starting Q2 2023. It promises even greater off-road capability and load-hauling capability together with low running costs and zero emissions. The trial will take place with SSE Renewables at the Clyde Wind Farm during June 2023, with the intention of developing a vehicle that is fit for purpose on more rugged terrains.

List the actions which contributed most to achieving this target

<Not Applicable>

Target reference number

Oth 3

Year target was set

2019

Target coverage

Company-wide

Target type: absolute or intensity

Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Energy productivity	Other, please specify (£/GJ)
---------------------	------------------------------

Target denominator (intensity targets only)

<Not Applicable>

Base year

2011

Figure or percentage in base year

47

Target year

2030

Figure or percentage in target year

326

Figure or percentage in reporting year

245

% of target achieved relative to base year [auto-calculated]

70.9677419354839

Target status in reporting year

Underway

Is this target part of an emissions target?

In 2019, SSE joined the Climate Group's initiative to encourage more businesses to improve their energy productivity through their pledge, the EP100.

Is this target part of an overarching initiative?

EP100

Please explain target coverage and identify any exclusions

SSE has pledged to double its energy productivity in its offices, depots, warehouses and data centres by 2030. To ensure the success of this pledge, SSE has also invested significantly in its property portfolio, consolidating multiple non-operational sites after a series of asset disposals, and providing modern buildings which use energy more efficiently.

Plan for achieving target, and progress made to the end of the reporting year

From April 1st, 2022, a new carbon emissions target was reported to align with the ambition of achieving a Net Zero non-operational buildings estate by 2035.

Performance is measured going forward against a revised annual reduction target of 7.19% against a 2021/22 baseline. SSE reports that its non-operational estate Net Zero target is 12% ahead of target at the date of the CDP report submission.

Performance of an existing carbon emissions target had exceeded expectations. 2021/22 performance for all SSE non-operational buildings (Offices, Depots, Warehouses and Data Centres carbon emissions) was 47.42% ahead of the 5% 3-year target reduction on a 2017/18 baseline. Therefore, the new Net Zero ambition was considered appropriate to introduce.

Latest data confirms that 99.54% of electricity supplied to SSE's offices and depot sites is sourced from renewable generation. All FM sites electricity is supplied from renewable sources.

The EP100 pledge is on target. During 2022/23, energy efficient investments included LED lighting at facility managed and depot sites and investments in solar PV generation. Measures included a £100,000 investment at SSE Perth headquarters for new energy efficient external lighting and a new solar PV system at SSE's Perth training school.

List the actions which contributed most to achieving this target

<Not Applicable>

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Abs1

Abs2

Int1

Target year for achieving net zero

2040

Is this a science-based target?

Yes, we consider this a science-based target, and we have committed to seek validation of this target by the Science Based Targets initiative in the next two years

Please explain target coverage and identify any exclusions

In October 2020, SSE joined the 'Race to Zero' campaign and made a clear public commitment to achieve the long-term goal of reaching net zero greenhouse gas (GHG) emissions across all its operations by 2050 at the latest, covering scope 1, 2 and 3 GHG emissions.

In 2022, recognising the national and international importance of decarbonising the power sector as quickly as possible, SSE committed to achieve net zero across scope 1 and 2 emissions by 2040 at the latest and to reach net zero for all SSE's remaining scope 3 emissions by 2050.

In the short to medium term, SSE has already set four interim science-based targets. Its scope 1 and 2 targets are aligned with a 1.5C scenario.

The SBTi have developed the first global standard for net zero businesses. In the longer term, SSE are monitoring the requirements for an SBTi approved net zero science-based target and will review the mechanisms put in place to neutralise the emissions that are currently unfeasible to be eliminated.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Yes

Planned milestones and/or near-term investments for neutralization at target year

While SSE seeks to achieve net zero emissions across its scope 1 and 2 emissions by 2040 at the latest, it is understood that negative emissions technology may be required to neutralise the remaining, residual emissions associated with electricity generation.

The reduction of greenhouse gas emissions associated with unabated gas generation is the most important action in achieving net zero. Notwithstanding the primary importance of focusing on the reduction of unabated emissions, SSE will start to explore options for the mid-2030s for the neutralisation of its residual scope 1 emissions, and will be guided by the best available science and independent frameworks available, including the GHG Protocol and the Science Based Targets Initiative as well as energy policy frameworks in the UK and Ireland

Planned actions to mitigate emissions beyond your value chain (optional)

n/a

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	19	5300744
To be implemented*	8	10190477
Implementation commenced*	7	14027081
Implemented*	1	8.6
Not to be implemented	0	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Energy efficiency in buildings	Building Energy Management Systems (BEMS)
--------------------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

8.6

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Scope 2 (location-based)

Scope 2 (market-based)

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

43000

Investment required (unit currency – as specified in C0.4)

200000

Payback period

4-10 years

Estimated lifetime of the initiative

21-30 years

Comment

SSE seeks to cut carbon from its non-operational buildings through a combination of investment in physical measures, improved building user engagement and behaviour change. SSE runs its 'Better Off' behavioural change programme to engage employees on energy efficiency activities. To complement these activities energy efficiency and building renewable generation project investments have totalled £13.0m since 2010/11.

The EP100 pledge is on target so far with SSE's non-operational buildings annual electricity consumption in 2022/23 being 24,549MWh and gas consumption 3,323 MWh.

During 2022/23, investments included energy efficient LED lighting at facility managed and depot sites and investments in solar PV generation. Measures included a £100,000 investment at SSE Perth headquarters for new energy efficient external lighting and a new solar PV system at SSE's Perth training school.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Compliance with regulatory requirements/standards	<p>Examples include, Contracts for Difference, meeting UK & EU ETS allocations and Electricity Market Reform requirements.</p> <p>For example, the result of 2022 UK Contracts for Difference auction marks an important milestone in the competitiveness for 'less established' technologies including Remote Island Wind. The strike price of £46.39 per MWh was secured for 220MW of the Viking Energy Wind Farm (50% of its total capacity) for the 2026/27 delivery year. Viking is progressing through construction with all 103 bases installed and the first of the turbines installed in April 2023. When complete in 2024, Viking Energy Wind Farm will be the UK's most productive onshore wind farm in terms of annual electricity output, with the project also contributing to Shetland's security of supply by underpinning the HVDC transmission link that will connect the islands to the mainland for the first time.</p> <p>As a generator of electricity, SSE is subject to national and international policies that impact the price of carbon, which means the price of carbon is an explicit consideration in investment decisions. SSE's generation activities in Ireland are subject to the EU Emissions Trading System (ETS). SSE's generation activities in the UK operated under the EU Emissions Trading Scheme (EU ETS) until 1 January 2021, when a new UK Emissions Trading Scheme (UK ETS) carbon pricing system came into operation to replace the EU ETS in the UK, following Brexit. The UK ETS is a cap-and-trade emissions scheme, similar in design and aims of the EU ETS. SSE welcomed the establishing a UK Emissions Trading System (ETS) and has called upon the UK and the European Union to agree a link between the UK ETS and EU ETS as soon as possible in order to benefit from a wide ranging, liquid and mature carbon market.</p>
Dedicated budget for energy efficiency	<p>SSE has an annual budget for energy efficiency investments in larger projects within its wider property budget. SSE also has a separate budget for smaller scale energy efficiency improvement works which is used following onsite energy audits.</p> <p>SSE acts to reduce energy use and thereby cut carbon from its assets through a combination of physical improvements and building user engagement. For example, from April 1st 2022, a new carbon emissions target was reported to align with the ambition of achieving a net zero non-operational buildings estate by 2035. SSE seeks to cut carbon from its offices and depots through a combination of investment in physical measures and building user engagement through its 'Better Off' behaviour change campaign.</p> <p>SSE has pledged to double its energy productivity in its offices, depots, warehouses and data centres by 2030. To ensure the success of this pledge, SSE has also invested significantly in its property portfolio, consolidating multiple non-operational sites after a series of asset disposals, and providing modern buildings which use energy more efficiently. To complement these activities, energy efficiency and building renewable generation project investments have totalled £13.0m since 2011/12</p>
Dedicated budget for low-carbon product R&D	<p>SSE is focused on enabling, harnessing and deploying new technologies and innovations which can accelerate the journey to net zero.</p> <p>Each SSE business sets their own innovation priorities; whilst Group services co-ordinate cross-cutting innovation and growth areas. An open innovation ecosystem supports the SSE businesses to achieve their innovation priorities which is harnessed through four enabling pillars (Partnering for Innovation; Learning by Doing; Digitalisation; and Talent) which provide the businesses with access to technologies, experience and skills.</p> <p>A culture of innovation is promoted through a dedicated innovation team within SSEN and two Engineering Centres of Excellence. The Networks Innovation team provide expertise to leverage regulatory funding for innovation and their focus is on accelerating a low-carbon transition and co-creation with partners to develop whole-system solutions. The Engineering Technology Centres of Excellence with SSE Renewables and Thermal enable technology and digital solutions for cost-effective renewables and innovation in pumped hydro, CCS and hydrogen.</p> <p>Example of an innovation project that drives investment in emissions reduction activities:</p> <p>Project Raas</p> <p>The Raas - Resilience as a Service – project is investigating an innovative solution to improve the operational resilience of electricity distribution networks in remote locations. The proposed scheme would use services provided by a third party owned Battery Energy Storage System together with local Distributed Energy Resources to swiftly, automatically, restore power to customers in the event of a fault. Through temporary operation of the local network in islanded mode, Raas will maintain supply to customers allowing time for the DNO to respond to the issue. Raas would also allow local renewables to continue generating and exporting energy at times when that zero-carbon electricity, and any associated income, would otherwise have been lost. The Raas concept represents a flexible, low carbon solution to increase security of supply in areas where traditional reinforcement or use of Distribution Network Operator owned standby generation to provide network resilience would be prohibitively costly, supporting the UK's transition to Net Zero.</p>
Employee engagement	<p>SSE has ongoing, two-way channels for engaging with its employees, including:</p> <p>Structured career conversations; annual all-employee engagement surveys; internal social media platforms; employee forums; and structured engagement with trade unions. Over the year calls and townhall events held by the Chief Executive and members of the Group Executive Committee (GEC) were held for SSE's senior leadership team to provide updates on key financial milestones and strategic matters which included SSE's 2030 Goals which address climate change at their core (by cutting carbon emissions, doubling renewable energy output and helping to accommodate electric vehicles).</p> <p>In addition, SSE has numerous local employee engagement initiatives throughout the year focusing on sustainability and the environment, highlighting issues such as energy efficiency, business and commuter travel. Examples of this include our energy reduction initiatives, which involves SSE's Better Off campaign.</p>
Partnering with governments on technology development	<p>SSE works with governments and other partners to develop low carbon technologies. For example: SSEN's Project Local Energy Oxfordshire (LEO) and Project Transition are exploring partnerships with Local Authorities. LEO's Smart and Fair Neighbourhood programme. Working with five different communities in Oxfordshire, LEO is co-creating locally relevant trials of different flexibility services. Project LEO is also concerned to ensure fairness for all electricity market participants.</p> <p>In addition, throughout 2022/23, SSE worked with governments, regulators and industry partners to create the right policy framework to accelerate the development of Carbon Capture, Use and Storage (CCUS) and hydrogen which is considered vital in the transition to net zero. For example, SSE is a member of the UK Government's hydrogen expert groups on hydrogen transport and storage infrastructure and has been active in informing the needs case assessment for hydrogen policy interventions. SSE also responded to the Irish Government's hydrogen strategy, supporting the development of a hydrogen economy and outlining the need for coordinated and effective incentives for its production, use, transport and storage.</p> <p>SSE Thermal has partnered with Equinor to co-develop low-carbon thermal options at its Keadby site, in North Lincolnshire, and at its Peterhead site, in Aberdeenshire. While Keadby 3 Carbon Capture Power Station project has not yet achieved the final stages of the UK Government's Cluster Sequencing Process, a similar project at Peterhead attracted 'Tier 2 Status'.</p>

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Power	Other, please specify (SSEN Transmission and SSEN Distribution)
-------	---

Description of product(s) or service(s)

To provide stakeholders with an indication of the scale of SSE’s green economic activities, SSE has taken a best efforts approach to consider its alignment to the EU Taxonomy. Taxonomy eligible activities in 2022/23 are from SSE’s networks transmission and distribution activities as well as its onshore and offshore wind generation and hydro generation assets.

Support of low carbon energy infrastructure: In total, including that connected at a distribution level, SSE had at 31 March 2023 over 9GW of renewable generation capacity connected to its electricity transmission network, up from 7.8GW in 2021/22. This reduces third party scope 2 emissions as it supports the decarbonisation of electricity generation and the carbon emissions associated with grid electricity mix.

The emissions saved by third parties are related to the scope 2 emissions. The amount of electricity consumed by a customer will be reduced as a result of a reduction in the carbon emission conversion factor which will be lowered because of a higher proportion of renewable electricity generation in the grid.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions

<Not Applicable>

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

<Not Applicable>

Functional unit used

<Not Applicable>

Reference product/service or baseline scenario used

<Not Applicable>

Life cycle stage(s) covered for the reference product/service or baseline scenario

<Not Applicable>

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

<Not Applicable>

Explain your calculation of avoided emissions, including any assumptions

<Not Applicable>

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

14.1

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Power	Other, please specify (SSE Renewables)
-------	--

Description of product(s) or service(s)

To provide stakeholders with an indication of the scale of SSE’s green economic activities, SSE undertook a best efforts approach to consider its alignment to the EU Taxonomy. Taxonomy eligible activities in 2022/23 are from SSE’s onshore and offshore wind generation and hydro generation (run of river and pumped storage) assets as well as its networks transmission and distribution activities.

Core to SSE’s business strategy, is growth in the development of additional renewable energy generation to support the low-carbon transition. SSE’s renewable generation capacity was 3,930MW in 2022/23 compared to 3,935MW in 2021/22, with a further 2.6GW of renewable capacity in construction at 31 March 2023. Progress was made on key projects in 2022/23, including the Berwick Bank offshore wind farm and Ossian offshore wind farm (40% SSE Renewables stake).

Output from SSE’s renewable generation portfolio (inc. pumped storage and biomass) increased to 9.7TWh in 2022/23, from 8.8TWh the previous year, a rise of 10% between the same periods. This was driven by increased output having experienced an exceptionally still and dry weather conditions the previous year along with output from the operational turbines at Seagreen offshore wind farm.

For all energy customers the increasing proportion of renewable energy in SSE’s generation mix plays a role in helping its customers reduce scope 2 emissions as the carbon emissions associated with the grid electricity mix is lowered.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions

<Not Applicable>

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

<Not Applicable>

Functional unit used

<Not Applicable>

Reference product/service or baseline scenario used

<Not Applicable>

Life cycle stage(s) covered for the reference product/service or baseline scenario

<Not Applicable>

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

<Not Applicable>

Explain your calculation of avoided emissions, including any assumptions

<Not Applicable>

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

2.7

Level of aggregation

Group of products or services

Taxonomy used to classify product(s) or service(s) as low-carbon

The EU Taxonomy for environmentally sustainable economic activities

Type of product(s) or service(s)

Power	Other, please specify (Energy Portfolio Management)
-------	---

Description of product(s) or service(s)

To provide stakeholders with an initial indication of SSE's low-carbon products and services, SSE has undertaken preliminary work to assess its activities using the eligible activities of the EU Taxonomy as a basis. The establishment of a European Taxonomy is an important step forward in defining environmentally sustainable economic activity within equity markets and, as a UK-listed energy company, SSE is looking forward to the establishment of a UK Taxonomy based on the broad principles established by the EU.

Through Energy Portfolio Management (EPM), SSE trades commodities for each business unit – ensuring the Group has the energy supplies it requires to meet the needs of customers; procuring the fuel required by the generation plants and selling the power output from its wind farm, hydro and thermal assets. The revenues associates with providing a route to market for SSE Renewables in included as a taxonomy-aligned activity.

The reason that SSE's taxonomy-eligible activity appears low in relation to its revenue, is primarily due to EPM trading activity and the sale of power to end customers, both of which are high volumes, with pass through costs and lower margins than in larger businesses such as renewables generation and networks businesses. SSE believes that revenue is a poor measure in assessing its economic activity and that the most appropriate measures of its taxonomy-eligible economic activity are in relation to its capital investment and its operating profit.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

No

Methodology used to calculate avoided emissions

<Not Applicable>

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

<Not Applicable>

Functional unit used

<Not Applicable>

Reference product/service or baseline scenario used

<Not Applicable>

Life cycle stage(s) covered for the reference product/service or baseline scenario

<Not Applicable>

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

<Not Applicable>

Explain your calculation of avoided emissions, including any assumptions

<Not Applicable>

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

9.2

C-EU4.6**(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.**

SSE has identified that carbon dioxide is its most material greenhouse gas. Therefore, SSE prioritises programmes to reduce carbon dioxide emissions from its generation activities and other indirect sources of carbon dioxide emissions.

Methane emissions from our Thermal operations are recognised as a significant environmental aspect within our Environmental Management Systems. As part of our processes and procedures we calculate emissions of methane, and for sites covered by environmental permits we report annual methane emissions to environmental regulators in line with agreed protocols or guidance. SSE have worked with an electricity supply industry group (The Joint Environmental Programme) to develop new calculation methodologies to provide more accurate calculations that have been trialled during 2022. Furthermore, SSE have part funded two projects focused on improving understanding of emissions and the environmental impact of methane emissions from Combined Cycle Gas Turbines that are underway. Once these studies are complete, the Joint Environmental Programme will assess options for revising monitoring / reporting protocols in consultation with the environmental regulators. Furthermore, the longer-term plans for reducing CO2 from our Thermal operations e.g., exploring the use of hydrogen fuels will also have reduction in methane emissions.

For all GHG emissions SSE reviews the risks of each are reviewed annually. Overwhelmingly carbon dioxide emissions are the most material greenhouse gas priority. SSE remains vigilant regarding the emergence of higher priority risks relating to greenhouse gases.

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

Yes, an acquisition

Name of organization(s) acquired, divested from, or merged with

Triton Power Limited. Joint acquisition of with Equinor.

Details of structural change(s), including completion dates

On the 1st of September 2022, SSE completed the joint acquisition of Triton Power Limited with Equinor. This includes the Saltend gas-fired power station in the Humber, Indian Queens gas-fired power station in Cornwall, and the decommissioned Deeside power station in Flintshire, North Wales. Following the scope 3 guidance set out by Greenhouse Gas Protocol in its chapter 'Category 15: Investments', SSE accounted for the proportional operational emissions of Triton Power Limited based on its equity share of 50%. The SSE share of Triton Power Limited emissions from the date of acquisition was compared to the total emissions (scopes 1, 2 and 3) in SSE's base year inventory of 2017/18. SSE's 50% share of Triton Power Limited's emissions in 2022/23 was below the significance test threshold (10%) based on management's assessment, therefore no recalculation of the baseline was triggered.

Under the operational control approach, SSE includes emissions from all joint arrangements over which it has operational control in its scope 1 and 2 inventory (including for those Joint Ventures with a 100% Power Purchase Agreement).

For those activities that SSE does not have operational control, the emissions from the most material joint arrangements (where SSE holds an equity share of equal to or greater than 50%) are included in its scope 3 inventory under Category 15: Investments.

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	Yes, a change in boundary	On the 1st of September 2022, SSE completed the joint acquisition of Triton Power Limited with Equinor. This includes Saltend gas-fired power station in the Humber, Indian Queens gas-fired power station in Cornwall and the decommissioned Deeside power station in Flintshire, North Wales. Following the scope 3 guidance set out by Greenhouse Gas Protocol in its chapter 'Category 15: Investments', SSE accounted for the proportional operational emissions of Triton Power Limited based on its equity share of 50% from the date of acquisition.

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	No, because the impact does not meet our significance threshold	<Not Applicable>	The Greenhouse Gas Protocol has guided SSE's principles on its recalculation policy and takes account of significant changes to its inventory that arise from significant structural changes, significant changes in calculation methods and discovery of significant errors. The significance test threshold is set at 10%. For structural changes (including joint ventures) arising from acquisition or disposal, the significance of an acquisition or divestment in a reporting year is assessed based on its total emissions (scopes 1, 2 and 3) in the year of acquisition or divestment versus the total emissions in SSE's base year inventory of 2017/18. SSE's 50% share of Triton Power Limited's emissions in 2022/23 was below the significance test threshold (10%) based on management's assessment, therefore no recalculation of the baseline was triggered.	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO₂e)

10154749

Comment

The direct GHG emissions (scope 1) cover:

- Generation power stations – oil, gas and biomass consumed in SSE's thermal power generation plant (including Power Purchase Agreements) to generate electricity.
- Gas consumption in buildings – this is the gas consumed by SSE's non-operational buildings (offices, depots, call centres) to maintain building temperatures.
- Network fuel consumed – this includes diesel and gas oil used by fixed generators on islands and mobile generators to generate electricity to maintain the distribution network.
- Company vehicles – this is the petrol or diesel used by SSE's operational vehicles for business activities (operational vehicles are those vehicles that are owned by SSE and used by employees for SSE business activities).
- Fugitive emissions – use of sulphur hexafluoride (SF₆) in the transmission and distribution networks for conductivity (used in the switchgears and substations).

Scope 2 (location-based)

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO₂e)

907745

Comment

The location-based scope 2 figure is calculated using BEIS conversion factors.

The indirect emissions (scope 2) cover:

- Electricity consumption in buildings – this is the electricity consumed by SSE's non-operational buildings (customer call centres, offices). This data excludes leased buildings (which represent less than 1% of employees).
- Electricity consumption in networks – this is the electricity used by SSE's operational buildings (e.g. substations) in the transmission and distribution network.
- Electricity consumption in thermal power stations – this is the electricity used by SSE's GB thermal power stations for the generation of electricity. This data excludes power stations below 100MW which do not have metering and thermal power stations in Ireland.
- Distribution losses – this is the electricity lost in SSE's distribution network in the north of Scotland (SHEPD) and southern central England (SEPD) transporting electricity to the customer.

Scope 2 (market-based)

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO₂e)

907745

Comment

The market-based scope 2 figure is calculated using BEIS residual conversion factors and this is the same as the location-based conversion factors.

The indirect emissions (scope 2) cover:

- Electricity consumption in buildings – this is the electricity consumed by SSE's non-operational buildings (customer call centres, offices). This data excludes leased buildings (which represent less than 1% of employees).
- Electricity consumption in networks – this is the electricity used by SSE's operational buildings (e.g. substations) in the transmission and distribution network.
- Electricity consumption in thermal power stations – this is the electricity used by SSE's GB thermal power stations for the generation of electricity. This data excludes power stations below 100MW which do not have metering and thermal power stations in Ireland.
- Distribution losses – this is the electricity lost in SSE's distribution network in the north of Scotland (SHEPD) and southern central England (SEPD) transporting electricity to the customer.

Scope 3 category 1: Purchased goods and services

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO₂e)

11983125

Comment

SSE used the CDP supply chain questionnaire and methodology to calculate the estimated carbon emissions associated with SSE's supply chain.

Scope 3 category 2: Capital goods

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

0

Comment

Capital goods are reported as part of the emissions reported in 'purchased goods and services' above. SSE has no other emissions associated with this category not already reported in the above category or in other categories.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

1433903

Comment

Transmission and Distribution emissions from losses for electricity use in non-operational buildings, substations and power stations. Well to tank emissions for fuel consumed with SSE power stations.

Scope 3 category 4: Upstream transportation and distribution

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

0

Comment

There are two Joint Ventures that were in operation and used vessels to maintain offshore windfarms in the UK and Ireland, however fuel use consumption data was not available during the base year.

Scope 3 category 5: Waste generated in operations

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

0

Comment

The carbon impact of SSE's waste was less than 1% of the total carbon emissions and therefore it is not incorporated into SSE's footprint

Scope 3 category 6: Business travel

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

8770

Comment

Flights (domestic, short haul, long haul and international), rail and company car distance travelled by SSE employees for business purposes.

Scope 3 category 7: Employee commuting

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

0

Comment

In comparison to other scope 3 emissions, these emissions are not material (less than 1% of total scope 3 emissions) and the data quality would be based on employee commuting surveys and estimated mileage data from sample data sets.

Scope 3 category 8: Upstream leased assets

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

0

Comment

SSE does not have any activities associated with this activity.

Scope 3 category 9: Downstream transportation and distribution

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

110004

Comment

Transmission losses – the electricity lost in the Scottish Hydro Electric (SHE) Transmission network (the network between the generator and the distribution company) in the north of Scotland.

Scope 3 category 10: Processing of sold products

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

0

Comment

SSE does not have any activities associated with this activity.

Scope 3 category 11: Use of sold products

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

2538729

Comment

Gas sold to customers – the amount of gas sold to customers (retail and business customers) that is then used by SSE customers for heating and power purposes.

Scope 3 category 12: End of life treatment of sold products

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

0

Comment

SSE does not have any activities associated with this activity.

Scope 3 category 13: Downstream leased assets

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

0

Comment

SSE does not have any activities associated with this activity.

Scope 3 category 14: Franchises

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

0

Comment

SSE does not have any activities associated with this activity.

Scope 3 category 15: Investments

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

0

Comment

SSE does not have any activities associated with this activity.

Scope 3: Other (upstream)

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

0

Comment

SSE does not have any activities associated with this activity.

Scope 3: Other (downstream)

Base year start

April 1 2017

Base year end

March 31 2018

Base year emissions (metric tons CO2e)

0

Comment

SSE does not have any activities associated with this activity.

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019

European Union Emission Trading System (EU ETS): The Monitoring and Reporting Regulation (MMR) – General guidance for installations
ISO 14064-1

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?**Reporting year****Gross global Scope 1 emissions (metric tons CO2e)**

6079172

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

The indirect emissions (scope 2) cover:

- Electricity consumption in buildings – this is the electricity consumed by SSE's non-operational buildings (customer call centres, offices). This data excludes leased buildings (which represent less than 1% of employees).
- Electricity consumption in networks – this is the electricity used by SSE's operational buildings (e.g. substations) in the transmission and distribution network.
- Electricity consumption in thermal power stations – this is the electricity used by SSE's GB thermal power stations for the generation of electricity. This data excludes power stations below 100MW which do not have metering and thermal power stations in Ireland.
- Distribution losses – this is the electricity lost in SSE's distribution network in the north of Scotland (SHEPD) and southern central England (SEPD) transporting electricity to the customer.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

438580

Scope 2, market-based (if applicable)

438580

Start date

<Not Applicable>

End date

<Not Applicable>

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source of excluded emissions

Neos Networks

Scope(s) or Scope 3 category(ies)

Scope 3: Investments

Relevance of Scope 1 emissions from this source

<Not Applicable>

Relevance of location-based Scope 2 emissions from this source

<Not Applicable>

Relevance of market-based Scope 2 emissions from this source

<Not Applicable>

Relevance of Scope 3 emissions from this source

Emissions are not relevant

Date of completion of acquisition or merger

<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents

<Not Applicable>

Estimated percentage of total Scope 3 emissions this excluded source represents

0

Explain why this source is excluded

In the year ending 31 March 2019, the SSE Group disposed of 50% of its stake in Neos Networks Limited (formerly SSE Telecommunications Limited). SSE retains a 50% joint venture investment in Neos Networks Limited, but the Group does not have operational control over the activities undertaken by the company. Following the Greenhouse Gas Protocol's operational control consolidation approach, SSE have excluded Neos Networks Limited from its GHG and water inventory.

Neos Networks Limited publish its total emissions annually and have selected calendar year 2019 as its base year. Total emissions (scopes 1, 2 and 3) in 2022 were reported as under 2,900 tCO₂e, which falls under SSE's materiality threshold for inclusion at 1% of total SSE Group emissions. As emissions arising from Neos Networks Limited activities are considered de-minimis, SSE excludes these emissions from its scope 3 emissions under Category 15: Investments

Explain how you estimated the percentage of emissions this excluded source represents

Neos Networks Limited publish its total emissions annually and have selected calendar year 2019 as its base year. Total emissions (scopes 1, 2 and 3) in 2022 were reported as under 2,900 tCO₂e. Using the Greenhouse Gas Protocol's guidance on Category 15: Investments, SSE applied the proportional scope 1 and scope 2 emissions of its equity investment in Neos Networks (50%) and calculated this figure as a proportion of its total scope 3 emissions of 4.81 MtCO₂e. SSE calculated its emissions from its investment in Neos Network as representing under 0.001% of its total scope 3 emissions. As emissions arising from Neos Networks Limited activities are considered de-minimis, SSE excludes these emissions from its scope 3 emissions under Category 15: Investments

Source of excluded emissions

SSE Renewables activities outside of the United Kingdom and Republic of Ireland.

Scope(s) or Scope 3 category(ies)

Scope 1

Scope 2 (location-based)

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source

<Not Applicable>

Relevance of Scope 3 emissions from this source

<Not Applicable>

Date of completion of acquisition or merger

<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents

0

Estimated percentage of total Scope 3 emissions this excluded source represents

<Not Applicable>

Explain why this source is excluded

SSE Renewables activities outside of the United Kingdom and Republic of Ireland are excluded for the GHG and water inventory.

SSE's activities overseas cover employees based at small offices working on renewable energy development opportunities. Overseas operations are considered de-minimis as emissions arising from SSE Renewables' international activities fall under SSE's materiality threshold for inclusion at 1% of total SSE Group emissions.

Approximately 40 employees were on-boarded from SGRE in 2021/22, representing a fraction of the SSE Group total FTEs.

Explain how you estimated the percentage of emissions this excluded source represents

SSE's activities overseas cover employees based at small offices working on renewable energy development opportunities. SSE's equivalent activities in the UK and Ireland (emissions arising from natural gas and electricity consumption in non-operational sites) represented 0.2% of SSE Group's total scope 1, 2 and 3 emissions inventories in 2022/23. SSE employees outside of the United Kingdom and Republic of Ireland represent a fraction of the SSE Group total FTEs. With the emissions from SSE's non-operational sites in the UK and Ireland already falling below the SSE's materiality threshold for inclusion at 1% of total SSE Group emissions it is assumed that emissions arising from SSE Renewables activities outside of the United Kingdom and Republic of Ireland are de-minimis.

C6.5**(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.**

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

2000000

Emissions calculation methodology

Supplier-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

SSE has used the CDP supply chain questionnaire and methodology to calculate the carbon emissions associated with SSE's supply chain. To calculate SSE's supply chain emissions data was gathered from: those supply chain companies that feature in the top 112 of suppliers by spend (which makes up around 68% of SSE's total procurement spend) and are companies that are high carbon emitters (defined by the CDP carbon intensity industry averages: manufacturing, services and infrastructure). The carbon emissions for the supply chain are calculated using a combination of allocated and intensity emission numbers as defined by CDP supply chain methodology. These emissions are reported in SSE's scope 3 emission inventory and cover the 'Products and Services' and 'Capital Goods' categories.

SSE is working with its suppliers and CDP to understand how it can get a more accurate picture of its supplier carbon emissions in the future. SSE has set a verified SBT target to engage with 50% of suppliers by spend to set an SBT by 2024

Capital goods

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

Capital goods are reported as part of the emissions reported in 'purchased goods and services' above. SSE has no other emissions associated with this category not already reported in the above category or in other categories.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1016577

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Transmission and Distribution losses for electricity use in non-operational buildings: This is the transmission and distribution losses (the energy loss that occurs getting the electricity to SSE non-operational buildings from the power plant) associated with the electricity consumed by SSE's operational (power stations) and non-operational buildings (offices, depots, call centres, warehouses). This figure is calculated by taking the scope 2 electricity consumption figure for non-operational buildings and applying a carbon dioxide conversion factor provided by BEIS reporting guidelines. As defined by DEFRA's reporting guidelines the transmission and distribution losses are included in this section instead of scope 2.

Transmission and Distribution losses for electricity use in substations: This is the transmission and distribution losses (the energy loss that occurs getting the electricity to SHE Transmission, SEPD and SHEPD substations from the power plant) associated with the electricity consumed in SHE Transmission, SEPD and SHEPD substations. This figure is calculated by taking the scope 2 substation electricity consumption and applying a carbon dioxide conversion factor provided by BEIS reporting guidelines. As defined by DEFRA's reporting guidelines the transmission and distribution losses are included in this section instead of scope 2.

Well to tank emissions: Fuel purchased during the financial year (oil, gas and biomass) is measured through meters and weight tickets and converted into kWh using standard industry recognised conversion factors. Power Purchase Agreements are reported as Scope 1 emissions as the energy generated from these facilities is 100% used by SSE. PwC assures this data.

PwC assure this data. The assurance statement can be found in the answer to C10.1c.

Upstream transportation and distribution

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO₂e)

11085

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

There are two Joint Ventures that are operational and use vessels to maintain offshore windfarms in the UK and Ireland. Fuel data is collected from the third party that owns and operates the vessels. Scottish Fuels supply all the fuel data for Beatrice Offshore Windfarm Limited (BOWL) and ASCO provide fuel data for Greater Gabbard Offshore Windfarm Limited (GGOWL). This data is sent by each third party and collected by BOWL and GGOWL SHE teams. The fuel data is stored by Renewables SHE and consolidated into one report to cover all offshore vessel activities. The sum of all vessel fuels consumed within 2022/23 is applied to an emission factor for Gas Oil, which is sourced from the 2022 UK Government GHG Conversion Factors for Company Reporting database.

All data is verified by PwC using monthly invoices.

Waste generated in operations

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

The carbon impact of SSE's waste is less than 1% of the total carbon emissions and therefore it is not incorporated into its greenhouse gas inventory.

Business travel

Evaluation status

Not relevant, calculated

Emissions in reporting year (metric tons CO₂e)

4571

Emissions calculation methodology

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Kilometres for flights (domestic, short haul, long haul and international), rail and company car (grey fleet) travel are reported, and relevant BEIS conversion factors are applied to calculate the emissions for each type of travel. The carbon impact of SSE's business travel (flights and rail) is less than 1% of the total carbon emissions.

SSE reports this data and PwC assures this data. The assurance statement can be found in the answer to C10.1c.

Employee commuting

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

In comparison to SSE's other scope 3 emissions, these emissions are not material (less than 1% of total scope 3 emissions) and the data would be based on employee commuting surveys and estimated mileage data from sample data sets.

Furthermore, following society's emergence from the COVID-19 pandemic, SSE launched its 'Flexible First' employee guidelines which were shaped by employee feedback. Throughout the pandemic virtual channels worked well and continue to be used in the Company. The guidelines are designed to harness the benefits of flexibility, balanced with the need to connect and collaborate in the most effective way. As such, many employees have been utilising technology to work from home and therefore reducing the frequency in which they commute to SSE sites.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

SSE does not have any activities associated with this activity.

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

88433

Emissions calculation methodology

Other, please specify (Standard transmission losses guidance (produced by Elexon))

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Transmission losses – the electricity lost in the Scottish Hydro Electric (SHE) Transmission network (the network between the generator and the distribution company) in the north of Scotland. The transmission of electricity is managed by the network operator, National Grid. When transferring power across the SHE Transmission System, some of the power is 'lost' known as 'Transmission Losses'. Figures for transmission losses are calculated using standard transmission losses guidance (produced by Elexon) to compute the losses in the transmission system. This data is reported by National Grid as the system operator. They report this figure for the financial year to SSE for its assets. The figure is for the previous financial year as a result of the timing of the data capture process. This means for the financial year April 2022 to March 2023 the data will be based on the previous financial year April 2021 to March 2022.

The data is verified by an independent third party, WSP, for National Grid. When transferring power across the SHE Transmission System, some of the power is 'lost' known as 'Transmission Losses'. Figures for transmission losses are calculated using standard transmission losses guidance (produced by Elexon) to compute the losses in the transmission system. This data is reported by National Grid as the system operator. They report this figure for the financial year to SSE for its assets. The figure is for the previous financial year as a result of the timing of the data capture process. This means for the financial year April 2022 to March 2023 the data will be based on the previous financial year April 2021 to March 2022. The data is verified by an independent third party, WSP, for National Grid. PwC assure this data. The assurance statement can be found in the answer to C10.1c.

Processing of sold products

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

SSE does not have any activities associated with this activity.

Use of sold products

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO₂e)

2163427

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Gas volumes are based on settlements data published by Xoserve. SSE receive an allocation of the settlements data based on the total amount of gas used by the local distribution zone based on its portfolio of customers. This number covers both domestic and business customers in Ireland and business customers in Great Britain. To calculate the domestic usage values, the monthly demand totals are divided by the mid-month customer number and then totalled for the financial year to give the total energy sold to customers. The carbon emissions are calculated by taking the scope 3 gas sold to customers figure and applying the carbon dioxide conversion factor provided by BEIS reporting guidelines. PwC assure this data. The assurance statement can be found in the answer to C10.1c.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

SSE does not have any activities associated with this activity.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

SSE does not have any activities associated with this activity.

Franchises

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

SSE does not have any activities associated with this activity.

Investments

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1533037

Emissions calculation methodology

Investment-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Emissions data is provided by the third-party owner of the generation site for the financial year. SSE will account for its equity share of the generation's emissions within the financial year.

SSE invests in Thermal electricity generation. Emissions arise from the gas consumed in thermal power generation plant (for example, Seabank or Saltend power stations with SSE's 50% ownership share) that SSE does not operate but has a 50%-and-over equity interest. The emissions associated with the generation of electricity is calculated using greenhouse gas emissions data from the generator's operating company.

Other (upstream)

Evaluation status

Not evaluated

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

SSE does not have any activities associated with this activity.

Other (downstream)**Evaluation status**

Not evaluated

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

SSE does not have any activities associated with this activity.

C6.7**(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?**

Yes

C6.7a**(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.**

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	166466	These emissions relate to the biogenic only emissions from the combustion of wood at the SSE's Slough Heat & Power facility between 1st April 2022 and 31st March 2023.

C6.10**(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.****Intensity figure**

0.00052

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

6517753

Metric denominator

unit total revenue

Metric denominator: Unit total

12490700000

Scope 2 figure used

Location-based

% change from previous year

28

Direction of change

Decreased

Reason(s) for change

Change in revenue

Please explain

In 2022/23, SSE's total carbon emissions consisted of 54% scope 1 emissions, 4% scope 2 emissions and 42% scope 3 emissions. Scope 1 and 2 emissions increased 4.5% from 6.2 million tonnes CO2e in 2021/22 to 6.5 million tonnes CO2e in 2022/23.

This was predominantly a result of a rise in output from SSE's thermal generation plant by 7% compared to the previous year due to market conditions and the reinstatement of operations following planned and unplanned outages the previous year. The impact of weather, demand and availability of plant creates variation in the pathway of emissions reduction.

Despite the increase in output, SSE's scope 1 GHG emissions intensity fell by 2% to 254gCO2 e/kWh from 259gCO2e/ kWh the previous year. SSE's total revenue increased significantly from £8.608 billion in 2021/22 to £12.490 billion in 2022/23. The increase in revenue and reduction in output from the most carbon intensive generating plant in SSE's portfolio, including from carbon intensive peaking plant in Ireland, meant that SSE's carbon intensity of total revenue decreased.

Intensity figure

0.272

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

6517753

Metric denominator

megawatt hour generated (MWh)

Metric denominator: Unit total

23966500

Scope 2 figure used

Location-based

% change from previous year

3

Direction of change

Decreased

Reason(s) for change

Change in output

Other, please specify (Reduction in output from the most carbon intensive generating plant in SSE's portfolio)

Please explain

In 2022/23, SSE's total carbon emissions consisted of 54% scope 1 emissions, 4% scope 2 emissions and 42% scope 3 emissions. Scope 1 and 2 emissions increased 4.5% from 6.2 million tonnes CO2e in 2021/22 to 6.5 million tonnes CO2e in 2022/23.

This was predominantly a result of a rise in output from SSE's thermal generation plant by 7% compared to the previous year due to market conditions and the reinstatement of operations following planned and unplanned outages the previous year. The impact of weather, demand and availability of plant creates variation in the pathway of emissions reduction.

Despite the increase in output, SSE's scope 1 GHG emissions intensity fell by 2% to 254gCO2 e/kWh from 259gCO2 e/ kWh the previous year. SSE's intensity performance is calculated based on two elements – total generation output, comprising thermal and renewables generation sources and total scope 1 GHG emissions (99% of which is from thermal generation). Output from SSE's renewable generation portfolio (inc. pumped storage and biomass) increased to 9.7TWh in 2022/23, from 8.8TWh the previous year, a rise of 10% between the same periods.

This was driven by increased output having experienced an exceptionally still and dry weather conditions the previous year and output from the operational turbines at Seagreen offshore wind farm.

Output from SSE's thermal generation also increased; however, this was by a lesser extent than for renewables output. This meant that the proportion of total generation output contributed to by renewable generation continued to represent 40% of the total portfolio in 2022/23. Overall, SSE's scope 1 GHG intensity was slightly lower than the previous year due to a reduction in output from the most carbon intensive generating plant in SSE's portfolio, including from carbon intensive peaking plant in Ireland.

Intensity figure

535.12

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

6517753

Metric denominator

full time equivalent (FTE) employee

Metric denominator: Unit total

12180

Scope 2 figure used

Location-based

% change from previous year

8

Direction of change

Decreased

Reason(s) for change

Other, please specify (Increase in total SSE employees)

Please explain

In 2022/23, SSE's total carbon emissions consisted of 54% scope 1 emissions, 4% scope 2 emissions and 42% scope 3 emissions. Scope 1 and 2 emissions increased 4.5% from 6.2 million tonnes CO2e in 2021/22 to 6.5 million tonnes CO2e in 2022/23.

This was predominantly a result of a rise in output from SSE's thermal generation plant by 7% compared to the previous year due to market conditions and the reinstatement of operations following planned and unplanned outages the previous year.

SSE's FTE numbers increased from 10,754 in 2021/22 to 12,180 in 2022/23 as a result of the organic growth of the business. Despite the increase in emissions, the carbon intensity per full time equivalent employee decreased by 8% compared to the previous year.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	6057810	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	7447	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	4363	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	9553	IPCC Fourth Assessment Report (AR4 - 100 year)

C-EU7.1b

(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	0	0	9553	9553	SF6 Emissions
Combustion (Electric utilities)	6034692	7443	0	6042134	Emissions from electricity generation.
Combustion (Gas utilities)	0	0	0	0	N/A
Combustion (Other)	23119	4	0	21123	Emissions from Operational Vehicles & Plant, Mobile Plant and Fixed Generation.
Emissions not elsewhere classified	0	0	0	4363	N2O emissions across all SSE activities.

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
United Kingdom of Great Britain and Northern Ireland	5349439
Ireland	729733

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Generation (excludes biomass)	6046171
Operational vehicles and plant	14839
Mobile plant - gas oil	7404
SF6 for transmission and distribution	9553
Fixed generation in distribution	515
Gas consumed in non-operational buildings	692

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	6033132	<Not Applicable>	Excludes biogenic emissions
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	
Other emissions reduction activities	0	No change	0	
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	279663	Increased	4	Scope 1 and 2 emissions increased from 6.2 million tonnes CO2e to 6.5 million tonnes CO2e. This is equivalent to a 4% increase (279,663 / 6,238,089). This was predominantly a result of a rise in output from SSE's thermal generation plant by 7% compared to the previous year due to market conditions and the reinstatement of operations following planned and unplanned outages the previous year. The impact of weather, demand and availability of plant creates variation in the pathway of emissions reduction.
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	31768489	31768489
Consumption of purchased or acquired electricity	<Not Applicable>	104783	144554	249338
Consumption of purchased or acquired heat	<Not Applicable>	0	3324	3324
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	104783	31916367	32021150

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Not applicable

Other biomass

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Not applicable

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Not applicable

Coal

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Not applicable

Oil

Heating value

LHV

Total fuel MWh consumed by the organization

869016

MWh fuel consumed for self-generation of electricity

869016

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Oil consumed for electricity consumption

Gas

Heating value

LHV

Total fuel MWh consumed by the organization

30902797

MWh fuel consumed for self-generation of electricity

30902797

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Gas consumed for electricity consumption

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Not applicable

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

31771813

MWh fuel consumed for self-generation of electricity

31771813

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

C-EU8.2d

(C-EU8.2d) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

Coal – hard

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Lignite

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Oil

Nameplate capacity (MW)

966

Gross electricity generation (GWh)

341

Net electricity generation (GWh)

341

Absolute scope 1 emissions (metric tons CO2e)

292016

Scope 1 emissions intensity (metric tons CO2e per GWh)

857

Comment

Gas

Nameplate capacity (MW)

3695

Gross electricity generation (GWh)

13961

Net electricity generation (GWh)

13961

Absolute scope 1 emissions (metric tons CO2e)

5741117

Scope 1 emissions intensity (metric tons CO2e per GWh)

411

Comment

Sustainable biomass

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Other biomass

Nameplate capacity (MW)

15

Gross electricity generation (GWh)

68

Net electricity generation (GWh)

68

Absolute scope 1 emissions (metric tons CO2e)

13038

Scope 1 emissions intensity (metric tons CO2e per GWh)

192

Comment

Waste (non-biomass)

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Nuclear

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Fossil-fuel plants fitted with CCS

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Geothermal

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Hydropower

Nameplate capacity (MW)

1459

Gross electricity generation (GWh)

3338

Net electricity generation (GWh)

3338

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Wind

Nameplate capacity (MW)

2457

Gross electricity generation (GWh)

6259

Net electricity generation (GWh)

6259

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Solar

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Marine

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Other renewable

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Other non-renewable

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Total

Nameplate capacity (MW)

8591

Gross electricity generation (GWh)

23966

Net electricity generation (GWh)

23966

Absolute scope 1 emissions (metric tons CO2e)

6046171

Scope 1 emissions intensity (metric tons CO2e per GWh)

252

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

United Kingdom of Great Britain and Northern Ireland

Consumption of purchased electricity (MWh)

248274

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

3267

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

251541

Country/area

Ireland

Consumption of purchased electricity (MWh)

1063

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

57

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

1120

C-EU8.4

(C-EU8.4) Does your electric utility organization have a transmission and distribution business?

Yes

C-EU8.4a

(C-EU8.4a) Disclose the following information about your transmission and distribution business.

Country/area/region

United Kingdom of Great Britain and Northern Ireland

Voltage level

Transmission (high voltage)

Annual load (GWh)

20535

Annual energy losses (% of annual load)

2.86

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO2e)

88432.7

Length of network (km)

5654.9

Number of connections

104

Area covered (km2)

57347.7

Comment

SSE is the owner of three economically regulated electricity network licensees that are jointly operated under the brand of Scottish and Southern Electricity Networks (SSEN). The three networks are:

1. Scottish Hydro Electric Transmission plc which owns 75% of the high voltage network in the north of Scotland.
2. Scottish Hydro Electric Power Distribution plc which owns the low voltage network in the north of Scotland.
3. Southern Electric Power Distribution which owns the low voltage network in central southern England.

This data refers to Scottish Hydro Electricity Transmission Plc.

Length of network is defined as the total route length. The total circuit length for SSE's transmission business is 5,654.9 km.

SSEN Transmission's annual losses across its network equated to 439.1 GWh in 2022/23.

SSE's transmission losses are classified as scope 3 emissions and reported in question C6.5. These emissions are classified as scope 3 because SSE does not operate these transmission assets. SSE's transmission losses emissions in 2022/23 were 88,433 tonnes CO2e.

Country/area/region

United Kingdom of Great Britain and Northern Ireland

Voltage level

Distribution (low voltage)

Annual load (GWh)

36088.4

Annual energy losses (% of annual load)

5.66

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO2e)

390067

Length of network (km)

123009.7

Number of connections

24654

Area covered (km2)

79524.28

Comment

SSE is the owner of three economically regulated electricity network licensees that are jointly operated under the brand of Scottish and Southern Electricity Networks (SSEN). The three networks are:

1. Scottish Hydro Electric Transmission plc which owns 75% of the high voltage network in the north of Scotland.
2. Scottish Hydro Electric Power Distribution plc which owns the low voltage network in the north of Scotland.
3. Southern Electric Power Distribution which owns the low voltage network in central southern England.

This data refers to the totals for Scottish Hydro Electric Power Distribution plc and Southern Electric Power Distribution. Data can be provided for each license area and this can be found in regulatory reports for these businesses.

Emissions from energy losses cover:

- Distribution losses – this is the electricity lost in SSE's distribution network in the north of Scotland (SHEPD) and southern central England (SEPD) transporting electricity to the customer.

Number of connections: Details both the total number of connections by DNO and by Third Parties on SSE's behalf and the totals split by License Area as these are the splits reported to Ofgem. The number of connections, 24,654 refers to the total number for both SHEPD (4,938) and SEPD (19,716) and excludes third parties. The total number of connections by third parties in SHEPD (64) and SEPD (605) is: 669.

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-EU9.5a

(C-EU9.5a) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

Coal – hard

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Not applicable.

Lignite

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Not applicable.

Oil

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Not applicable.

Gas

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

153200000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

15

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

20

Most recent year in which a new power plant using this source was approved for development

2018

Explain your CAPEX calculations, including any assumptions

15% share of CAPEX is FY23 adjusted CAPEX numbers before acquisitions for [SSE Thermal] / [(SSE Thermal + SSE Renewables)].

20% share of planned CAPEX is an approximation of [SSE Thermal and "other" CAPEX] / [SSE Thermal and "other" capex + SSE Renewables capex] planned over 5 years to 2027.

Sustainable biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Not applicable.

Other biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Not applicable.

Waste (non-biomass)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Not applicable.

Nuclear

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Not applicable.

Geothermal

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Not applicable.

Hydropower

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

50000000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

5

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

3

Most recent year in which a new power plant using this source was approved for development

2022

Explain your CAPEX calculations, including any assumptions

SSE has said it will invest around £50m per year in maintaining and modernising its hydro fleet.

5% CAPEX in the reporting year takes this approximate figure as the basis for the numerator for the calculation and the Thermal and Renewables CAPEX before acquisitions as basis for the denominator (total generation CAPEX)

3% of planned CAPEX takes this approximate per annum figure as the basis for the numerator for the calculation and the Thermal and Renewables CAPEX and investment over the five years to 2027 as basis for the denominator (total generation CAPEX)

Wind

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

787500000

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

79

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

77

Most recent year in which a new power plant using this source was approved for development

2023

Explain your CAPEX calculations, including any assumptions

Wind CAPEX in reporting year is calculated as SSE Renewables CAPEX in reporting year less approximate estimate of ~£50m Hydro CAPEX

Planned wind capex is calculated as planned SSE Renewables capex over 5 years to 2027 less approximate estimate of ~£50m pa Hydro CAPEX

Solar

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Some CAPEX planned but quantum is not disclosed nor highly material.

Marine

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Not applicable.

Fossil-fuel plants fitted with CCS

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

CCS development expenditure over the 5 years to 2027 is included in SSE's plans but the quantum is not disclosed

Other renewable (e.g. renewable hydrogen)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Not applicable.

Other non-renewable (e.g. non-renewable hydrogen)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

0

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

0

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

0

Most recent year in which a new power plant using this source was approved for development

<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Not applicable.

C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
Other, please specify (SSEN Transmission)	All numbers are approximate. SSEN Transmission owns, operates and develops the high voltage electricity transmission system in the North of Scotland and its islands.	5400000000	30	2027
Other, please specify (SSEN Distribution)	All numbers are approximate. SSEN Distribution, operating under licence as Scottish Hydro Electric Power Distribution plc (SHEPD) and Southern Electric Power Distribution plc (SEPD), is responsible for safely and reliably maintaining the electricity distribution networks supplying over 3.9m homes and businesses across central southern England and the North of Scotland	3600000000	20	2027

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	Research costs in 2022/23 were £10.8m as shown in SSE's Sustainability Report 2023 on page 44.

C-CO9.6a/C-EU9.6a/C-OG9.6a

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)	Average % of total R&D investment planned over the next 5 years	Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan
Smart grid integration	Applied research and development	20	10800000	21	<p>SSE is focused on enabling, harnessing and deploying new technologies and innovations which can accelerate the journey to net zero. A culture of innovation is promoted through a dedicated innovation team within SSE which focuses on accelerating a low-carbon transition and co-creation with partners to develop whole-system solutions.</p> <p>Examples of innovation projects:</p> <p>Project Transition</p> <p>Transition is an Ofgem Electricity Network Innovation Competition funded project, led by SSE. Transition will inform the design requirements of a Neutral Market Facilitator and Whole System Coordinator, develop the roles and responsibilities within the marketplace, develop the market rules required for the trials, and implement and test these by means of a programme of trials. The Transition project is also integral to the Project LEO and will demonstrate a Smart Local Energy System at county scale, to maximise economic, environmental and social prosperity for the region. Working together, Transition and the Project LEO programme will determine how opportunities can be maximised and unlocked from the transition to a smarter, more flexible electricity system and how households, businesses and communities can realise the benefits through participation in the markets for flexibility.</p>
Battery storage	Pilot demonstration	6	10800000	6	<p>SSE is focused on enabling, harnessing and deploying new technologies and innovations which can accelerate the journey to net zero. A culture of innovation is promoted through a dedicated innovation team within SSE which focuses on accelerating a low-carbon transition and co-creation with partners to develop whole-system solutions.</p> <p>Examples of innovation projects:</p> <p>Project Raas</p> <p>The Raas - Resilience as a Service – project is investigating an innovative solution to improve the operational resilience of electricity distribution networks in remote locations. The proposed scheme would use services provided by a third party owned Battery Energy Storage System together with local Distributed Energy Resources to swiftly, automatically, restore power to customers in the event of a fault. Through temporary operation of the local network in islanded mode, Raas will maintain supply to customers allowing time for the DNO to respond to the issue. Raas would also allow local renewables to continue generating and exporting energy at times when that zero carbon electricity, and any associated income, would otherwise have been lost.</p> <p>The Raas concept</p> <p>Represents a flexible, low carbon solution to increase security of supply in areas where traditional reinforcement or use of Distribution Network Operator owned standby generation to provide network resilience would be prohibitively costly, supporting the UK's transition to Net Zero</p>
Other, please specify (Low carbon heating)	Large scale commercial deployment	2	10800000	2	<p>SSE is focused on enabling, harnessing and deploying new technologies and innovations which can accelerate the journey to net zero. A culture of innovation is promoted through a dedicated innovation team within SSE which focuses on accelerating a low-carbon transition and co-creation with partners to develop whole-system solutions.</p> <p>Examples of innovation projects:</p> <p>Project Re-HEAT</p> <p>Re-HEAT is a large-scale trial led by electricity DNOs, SP Energy Networks and Scottish and Southern Electricity Networks (SSEN), working in partnership with energy supply and solutions provider E.ON, heat pump manufacturers, Daikin and thermal storage unit manufacturers, Sunamp.</p> <p>Using smart grid controls and smart heating management with domestic heat storage, Re-Heat will demonstrate technical solutions that not only accelerate the deployment of low carbon electrified heating, but also reduce demand on the electricity network, in turn reducing or removing the need for traditional network reinforcement.</p> <p>The first combined heat pump and home heat battery storage system has been installed in a home near Inverness as part of the roll out of 150 zero carbon heating systems across Scotland. The Re-HEAT project is testing the benefits of zero carbon heating for households and how Distribution Network Operators (DNOs) can manage the impact that heat pumps may have on grids.</p>

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

sse-pwc-isae_3000_revised_limited_assurance_report_final_15-june-2023.pdf

Page/ section reference

1 to 3

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

sse-pwc-isae_3000_revised_limited_assurance_report_final_15-june-2023.pdf

Page/ section reference

1 to 3

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)

Scope 3: Upstream transportation and distribution

Scope 3: Business travel

Scope 3: Investments

Scope 3: Downstream transportation and distribution

Scope 3: Use of sold products

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

sse-pwc-isae_3000_revised_limited_assurance_report_final_15-june-2023.pdf

Page/section reference

1 to 3

Relevant standard

ISAE 3410

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Year on year emissions intensity figure	ISAE3000 (Revised), ISAE3410	PwC assure SSE's scope 1 emissions intensity as part of the annual assurance process sse-pwc-isae_3000_revised_limited_assurance_report_final_15-june-2023.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

EU ETS

UK ETS

Other carbon tax, please specify (Carbon Price Support (CPS) - GB only)

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS

100

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1 2022

Period end date

December 31 2022

Allowances allocated

0

Allowances purchased

755326

Verified Scope 1 emissions in metric tons CO2e

755326

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

SSE Thermal's power stations in the Republic of Ireland are covered by the EU ETS.

UK ETS

% of Scope 1 emissions covered by the ETS

100

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1 2022

Period end date

December 31 2022

Allowances allocated

480

Allowances purchased

5193441

Verified Scope 1 emissions in metric tons CO2e

5193921

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Facilities we own and operate

Comment

SSE Thermal's power stations in the United Kingdom are covered by the UK ETS

Examples of facilities that SSE owns and operates include some joint ventures such as Marchwood power station.

The figure also includes the purchase of credits for a third-party site at Sullom Voe, which is not owned or operated by SSE. Contractual agreements in place between SSE and the site for the offtake of electricity requires SSE to complete the power station's UK ETS obligations.

C11.1c

(C11.1c) Complete the following table for each of the tax systems you are regulated by.

Other carbon tax, please specify

Period start date

April 1 2022

Period end date

March 31 2023

% of total Scope 1 emissions covered by tax

100

Total cost of tax paid

95400000

Comment

£95.4m of CPS Tax was paid by SSE plc for Gas and Oil consumed to produce electricity. Gas paid and expensed when consumed and Oil offsets fuel duty reclaims and expensed when consumed.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Emissions Trading Systems (ETSs) apply to SSE's electricity generation business, which has by far the greatest carbon emitting impact of our entire business. SSE's overall strategy is to seek to comply through a mix of reducing its covered emissions and purchasing allowances for its remaining emissions. Emissions under ETS are treated as a cost of generation, similar to fuel, for the purposes of managing our energy portfolio. Therefore, the trading of emissions allowances is carried out in conjunction with trading associated commodities, electricity and gas.

SSE's generation activities in the UK operated under the EU Emissions Trading System (EU ETS) until 1 January 2021, when a new UK Emissions Trading System (UK ETS) carbon pricing system came into operation to replace the EU ETS in the UK, following the UK's exit from the EU. The UK ETS is a cap-and-trade emissions scheme, similar in design and aims of the EU ETS. As such, SSE's strategy for complying with the UK ETS will be the same as its strategy to comply with the EU ETS. SSE's generation assets in Ireland continue to operate under the EU ETS. SSE welcomed the establishment of a UK ETS and has called upon the UK and the EU to agree a link between the UK ETS and EU ETS as soon as possible in order to benefit from a wide ranging, liquid and mature carbon market. In all markets it operates SSE advocates for ETS to be aligned with net zero targets, with robust 2030 ambitions to help decarbonise electricity in the 2030s.

In order to comply with targets SSE is constantly trying to improve the efficiency of its power stations and trialling various carbon abatement technologies. For example, SSE Thermal's £350m 893MW CCGT at Keadby 2 in Lincolnshire was fully commissioned at the end of 2022/23. This project will introduce Siemens' first-of-a-kind, high efficiency, gas-fired generation technology to the UK, which will displace older, less efficient gas generation including SSE's existing assets. As part of the co-operation agreement with Equinor, SSE Thermal is also exploring options to blend hydrogen at Keadby 2.

To further reduce the emissions of SSE's and the UK's gas generation fleet, SSE is developing low carbon thermal options across its sites and will not develop any gas generation projects without a low carbon pathway to ensure it fits well within the respective jurisdiction's climate commitments, including if the commitments were tightened at a later date. In co-operation with Equinor, SSE Thermal is developing Keadby 3 Carbon Capture Power Station and Keadby Hydrogen Power Station in the Humber, and Peterhead Carbon Capture Power Station in Scotland, to plug into the shared CCS and hydrogen infrastructure within the clusters.

In December 2022, Keadby 3 Carbon Capture Power Station became the first power-CCS project to secure planning consent in the UK. In March the UK Government announced the first carbon capture projects to be supported by government-backed contracts – this included project located in Teesside and the northwest of England. As a Humber-based project, Keadby 3 has not progressed to the final stage of negotiations for a Dispatchable Power Agreement. The UK Government has instead identified the Humber as a region to be supported through subsequent phases of its cluster sequencing process by 2030 at the latest. In addition, Peterhead Carbon Capture Power Station is continuing to develop with a planning application submitted in March 2022 and announcement of the award of a FEED (Front End Engineering Design) contract in July 2022.

SSE Thermal is seeking opportunities to expand its low-carbon pipeline in Great Britain. It continues to explore the decarbonisation of the Medway site through hydrogen or CCS. It has identified a potential new location for low-carbon power generation in northwest England, where CCS and hydrogen operations are being developed, well-located relative to the HyNet cluster. It is also investigating options to use alternative fuels, such as hydrogen derivatives. Construction activity for Slough Multifuel remains on track to complete in summer 2024.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

Yes

C11.2a

(C11.2a) Provide details of the project-based carbon credits canceled by your organization in the reporting year.

Project type

Hydro

Type of mitigation activity

Emissions reduction

Project description

SSE purchased credits from the Arca Hydro Electric Power Plan Project (Small Hydro Power Project in Turkey). The credits were purchased from Carbon Footprint Ltd and are verified by Verified Carbon Standard (VCS).

The number of purchased project-based carbon credits relates to the 2021/22 financial year. SSE voluntarily purchases credits to provide 100% certified renewable gas and carbon-neutral gas to its SSE Green Gas customers. This offering provides customers with 25% certified renewable gas and 75% carbon-neutral gas backed by carbon offsets. SSE also pledges to plant one tree in the UK for every SSE Green Gas customer.

The number of project-based carbon credits required for 2022/23 is under review. SSE must ensure that all billed consumption data is accurate for SSE Green Gas customers before purchasing credits.

Credits canceled by your organization from this project in the reporting year (metric tons CO2e)

2692

Purpose of cancellation

Voluntary offsetting

Are you able to report the vintage of the credits at cancellation?

No

Vintage of credits at cancellation

<Not Applicable>

Were these credits issued to or purchased by your organization?

Purchased

Credits issued by which carbon-crediting program

VCS (Verified Carbon Standard)

Method(s) the program uses to assess additionality for this project

Other, please specify (The project is validated to the VCS version 2007 standard and implements CDM approved tools to demonstrate additionality. The project is under VCS version 3.0 Verification.)

Approach(es) by which the selected program requires this project to address reversal risk

No risk of reversal

Potential sources of leakage the selected program requires this project to have assessed

Other, please specify (As per registered VCS PD and applied methodology ACM 0002, version 13.0.0. The leakage emissions are considered zero.)

Provide details of other issues the selected program requires projects to address

No further requirements for the project. The Arca project has been developed and implemented as a VCS project activity, which has contributed to global GHG emission reductions since 06/04/2012. As part of the VCS procedure, the project underwent the VCS Validation and is successfully registered on the Markit registry. The respective VCS Validation Report N°2012-9316 v01, was issued on 31/07/2013 and assures project additionality and confirms the potential annual emission reductions of 11,4752 tCO2 due to the activity.

Comment

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Other, please specify (Forecast of explicit price)

How the price is determined

Alignment with the price of allowances under an Emissions Trading Scheme
Cost of required measures to achieve emissions reduction targets
Benchmarking against peers

Objective(s) for implementing this internal carbon price

Drive low-carbon investment
Identify and seize low-carbon opportunities
Stress test investments

Scope(s) covered

Scope 1
Scope 3 (upstream)
Scope 3 (downstream)

Pricing approach used – spatial variance

Differentiated

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

1. Expect UK ETS and EU ETS to converge by late-2020s
2. Prices of both expected to drop in the short-term, recovering by the late 2020s then increasing between 2030 and 2050 (the end of our outlook period).

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

69

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

108

Business decision-making processes this internal carbon price is applied to

Capital expenditure
Operations
Risk management
Opportunity management
Public policy engagement

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for all decision-making processes

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

As a generator of electricity, SSE is subject to policies that impact the price of carbon, which means the price of carbon is an explicit consideration in many investment decisions. SSE's generation activities in Great Britain are subject to the UK Emissions Trading Scheme (UK ETS), which is a cap-and-trade emissions scheme. In addition, SSE's generation assets in Great Britain are subject to the Carbon Price Support mechanism which sets a price per tonne of carbon emitted and combined with the UK ETS allowance price, makes up the Total Carbon Price paid by electricity generators. In Ireland SSE's generation assets are subject to the EU Emissions Trading Scheme (EU ETS). At the time of reporting, SSE used carbon prices of £78/tCO₂ in GB and €86/tCO₂ in the EU. SSE's future plans include assumptions on low, central and high carbon range forecasts

The price of carbon is reflected in decisions to invest in and operate thermal generation plant and renewable generation technologies, the investments made in capital projects and how SSE performs in the energy markets. Robust carbon pricing will be particularly important to support SSE's activities in CCS and hydrogen, which ties back to two of SSE's key actions within its net zero transition plan: 1. Reduce emissions from unabated gas generation; and 2. Develop new low-carbon flexible generation.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers/clients

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Collect GHG emissions data at least annually from suppliers
Other, please specify (Collect climate change and carbon information at least annually from suppliers)

% of suppliers by number

% total procurement spend (direct and indirect)

68

% of supplier-related Scope 3 emissions as reported in C6.5

100

Rationale for the coverage of your engagement

112 suppliers responded (out of 198 suppliers that were asked to take part) to the CDP supply chain programme to SSE's request for climate change data in 2021/22. Total scope 1 and 2 and 3 allocated emissions for these suppliers was 2 million tonnes tCO₂e. The carbon emissions calculated covers all the scope 1, 2 and 3 allocated emissions reported by these 112 companies. SSE will be one of many customers for each of these suppliers. These suppliers represent around 68% of SSE's total procurement expenditure in 2022/23. These suppliers feature in SSE's top 250 and were selected based on the level relevance/impact of climate change to the supplier as well as the level of spend in SSE's supplier programme. In other words, these are the suppliers that, like SSE, their most material environment impact is carbon emissions and the suppliers with which SSE spend the most. These suppliers support SSE's capital projects for renewable generation projects, transmission and distribution operations as well as IT, human resource and financial services. These suppliers provide capital goods (such as wind turbines and steel lattice towers) to SSE.

SSE are looking to increase the share of its suppliers that it engages with, not only to improve emissions data gathering but to also to collaborate in order to identify opportunities to reduce the company's suppliers' emissions. SSE has been a principal partner with the Supply Chain Sustainability School since 2021 and is a member of several working groups relating to labour standards, infrastructure, carbon, and more. SSE has worked with the school to engage with its employees by delivering bespoke training programmes and workshops, as well as collaborate closer with its suppliers. SSE will be aiming to partake in webinars and e-events with its suppliers, with progress to be disclosed in the 2022/23 disclosure.

During 2022/23, SSE continued to make progress against its supplier engagement science-based target. These targets meet the strict SBTi criteria and were approved by SBTi in April 2020, meaning SSE's target reflect the latest climate science. As part of the SBT, SSE has set a target to "Engage with 50% of suppliers by spend to set an SBTi by 2024".

NB: This data has not been assured. This was the fifth year SSE has taken part in the CDP supply chain request and SSE is taking part in this programme in 2022/23.

Impact of engagement, including measures of success

The impact of SSE's supplier engagement strategy is measured through a series of indicators including: 1. Number/percentage of suppliers responding to the CDP request for data on climate change; 2. Number/percentage of suppliers providing scope 1 and 2 emissions data; and 3. SSE's ability to improve its scope 3 data reporting to include suppliers.

As a result of the 2021/22 CDP supply chain programme the impact of the engagement included: 1. 57% of SSE's suppliers responded; 2. 43% reported verified scope 1 and 2 emissions enabling SSE to continue to report its scope 3 emissions related to its suppliers; and 3. 47% of our suppliers reported an emissions intensity or allocated emissions to SSE.

In addition, during 2022/23, SSE continued to make progress against its supplier engagement science-based target approved by SBTi in April 2020. As part of the SBT, SSE has set a target to "Engage with 50% of suppliers by spend to set an SBT by 2024". On 31 March 2023, 51% of SSE's suppliers (by value) had set or committed to set their own science-based targets through the SBTi, 4% higher than the base year (2019/20). Over 2022/23, SSE and CDP Supply Chain collaborated to deliver its first supplier webinar focusing on carbon reporting, which reached over 100 key suppliers and contributed to the highest supplier response rate SSE has had since beginning supply chain reporting.

Supplier emissions represent a significant portion of SSE's scope 3 emissions, meaning that urgent action is required if the company is to meet its net zero goal. Collaboration with its main suppliers will be driver to achieve this target. The Powering Net Zero Pact ("the Pact") is an initiative created by SSE with 10 other founding partners as a legacy of COP26 to achieve a fair and just energy transition to net zero. One of the five shared commitments is to work towards setting science-based carbon targets, aligned to 1.5 degrees by 2025 and to develop an understanding and quantification of scope 3 greenhouse gas emissions. By working together, SSE and its partners can cooperate in order to develop a net zero global power sector.

For SSE to achieve this target it will continue to engage with its supply chain in the coming years and will report its progress against this goal annually in its Sustainability Report.

Comment**Type of engagement**

Engagement & incentivization (changing supplier behavior)

Details of engagement

Run an engagement campaign to educate suppliers about climate change
Provide training, support, and best practices on how to make credible renewable energy usage claims
Provide training, support, and best practices on how to set science-based targets

% of suppliers by number

23

% total procurement spend (direct and indirect)

45

% of supplier-related Scope 3 emissions as reported in C6.5

100

Rationale for the coverage of your engagement

SSE has been a partner of the Supply Chain Sustainability School (SCSS) since 2020. Through this partnership, SSE provides its supply chain with information, resources and access to training on key climate topics. Over 2022/23, SSE improved its engagement and measurement with the SCSS to enable it to develop a plan to increase supplier participation in the training programs.

Impact of engagement, including measures of success

As of 31 March 2023, 192 of SSE's suppliers (45% of SSE's supply chain spend) have accessed sustainability resources through the SCSS. SSE has set a target to increase this to 55% by 31 March 2024, using learning pathways and SSE's Strategic Relationship Management meetings to stimulate engagement on the platform. Specifically, over 2022/23, SSE suppliers have completed 1,950 resources by 457 individuals which represents 202 CPD (Continued Professional Development) hours achieved. This is great work from our supply chain to support their employees' knowledge around climate change and carbon.

Comment

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Run a campaign to encourage innovation to reduce climate impacts on products and services
Collaborate with suppliers on innovative business models to source renewable energy

% of suppliers by number

2

% total procurement spend (direct and indirect)

48

% of supplier-related Scope 3 emissions as reported in C6.5

100

Rationale for the coverage of your engagement

With SSE's ambitious targets to achieve net zero across scope 1 and 2 emissions by 2040, it is anticipated that each business unit within the SSE group will be looking to utilise innovation to create business value and differentiated products and services. In turn, SSE's Procurement & Commercial function launched "Open Innovation" in January 2022.

SSE's Open Innovation capability utilises several external platforms to crowdsource a variety of new innovative ideas and solutions. It also facilitates supplier led innovation, presenting an opportunity for SME based businesses to engage in the SSE Procurement process. It enables suppliers to develop prototypes and bespoke solutions to help them grow their business and support SSE in addressing significant business challenges, specifically, challenges where there is no known internal solution or no known solution within the immediate supply chain.

Secondly, Open Innovation also supports SSE with any supply chain innovation events. In June 2022, SSE Renewables hosted an offshore wind innovation day in Dundee, Scotland, where 6 challenges were presented to seek innovative solutions. The event was attended by over 100 representatives from Scottish and UK based businesses and representatives from Scottish Enterprise, ORE Catapult, Innovate UK (KTN) and the Offshore Wind Growth Partnership were also at the event to speak to companies about the ways in which innovation can support Scotland's burgeoning offshore wind industry.

In November 2022, SSE Renewables' Hydro hosted a "Meet the Buyer" event in Aviemore, Scotland, for businesses to learn more about supply chain openings at Hydro operations across Scotland and how firms of all sizes can take part in the tendering process. During this event, Hydro operations also presented an innovation challenge to seek innovative solutions from the supply chain in attendance and to also open communication channels between suppliers and SSE.

Impact of engagement, including measures of success

Over the last 18 months, Open Innovation has supported SSE Renewables (Offshore & Hydro), SSEN Transmission and SSEN Distribution by launching 10 challenges in partnership with Innovate UK's Knowledge Transfer Network Programme. In doing so, SSE identified over 150 potential solutions from small-medium sized companies, start-ups, and universities across the UK and are now being progressed to potential pilots/trials.

These challenges include:

SSE Renewables – Offshore

- Remote diagnostics and digital twins challenge - addresses the need for smarter more advanced remote diagnostic tools for condition-based maintenance.
- Array cable monitoring challenge – seeking new methods of monitoring array cable condition on-load, locating a fault as soon as it has occurred and in time, pre-empting faults.
- Smart planning challenge – seeking new methods to optimise time on the wind turbine for planned and unscheduled maintenance visits.
- Heavy lifting challenge – seeking new methods to reducing reliance on jack-up vessels.
- Non-destructive testing (NDT) challenge – seeking new methods for NDT on offshore wind turbines at height and subsea, ensuring associated personnel do not need to access the most hazardous environments.
- Bolt torquing challenge – seeking new methods to identify loss of tension or failure of a bolt without the need for widespread bolt disturbance.

SSE Renewables – Hydro

- Vehicle Communications – seeking new technology to allow field-based staff connectivity within rural and remote areas of Hydro assets.

SSEN Transmission

- Low carbon fuel alternatives challenge – addresses the need to move away from diesel fuelled generators within substations and look for greener alternatives.
- Overhead line conductor sag measurement challenge – seeking an improved ice monitoring technology that can directly determine any issues of overhead conductor line sagging, eliminating the false alarms and need for interpretation.

SSEN Distribution

- Vegetation Management challenge – seeks to engage innovators who can provide mechanised hardware solutions for the management of vegetation near power distribution lines to maintain safety clearances and to avoid unplanned outages.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services
-------------------------------	---

% of customers by number

57

% of customer - related Scope 3 emissions as reported in C6.5

45

Please explain the rationale for selecting this group of customers and scope of engagement

Audience: SMEs

Purpose: After extensive primary and secondary market research, SSE Business Energy found that the majority of SMEs customers have not set targets to reduce their emissions, even though many acknowledge that they're concerned about their environmental impact. SSE Energy Customer Solutions customer represent 45% of SSE's total scope 3 emissions, therefore educating SMEs on how to reduce their emissions will in turn reduce SSE's scope 3 emissions and contribute to the Company's net zero target.

Impact of engagement, including measures of success

SSE Energy Customer Solutions launched a website content hub in 2022 to educate its SME customers, and wider UK business community, on how to reduce their carbon footprint and make their businesses more sustainable. The content on this hub includes long-form guides, guest blogs, listicles, videos, customer case studies and a carbon footprint calculator.

There have been over 15k visits to the online resources since the launch. And it is predicted that this number will increase as SSE continues to publish new content and update existing assets to ensure they're timely and accurate.

Resources like the 'Green grants and loans for small businesses' guide, which offers a list of funding options available to SMEs for sustainable projects, has proven particularly useful and has been viewed over 4k times. Similarly, SSE continues to share its free carbon footprint calculator for UK businesses on its socials (with a potential audience of 330k+ per month) and it can be easily found through organic search thanks to SEO optimisation, resulting in it being viewed 3k+ times.

Customer case study:

SSE has been working with its SME customers to produce written and video case studies. These productions allow customers to showcase their sustainability credentials, explain the positive impact that SSE's products and services have made, and share advice to inspire other SMEs to start their efforts in reducing emissions.

Courteenhall Farms: The family-run business was powered with 100% renewable electricity from SSE's own UK wind farms and hydro plants for six months on the SSE Protect tariff. After filming at their Northamptonshire farm, where they have 20-meter points and an impressive renewable generation portfolio, SSE produced a hero video featuring an interview with founder Johnny Wake and a supporting written case study. The case study is freely available on SSE's website and YouTube channel. In addition, the video has been shared across SSE's socials and the video has been viewed over 35,000 times on Facebook.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services
-------------------------------	---

% of customers by number

40

% of customer - related Scope 3 emissions as reported in C6.5

45

Please explain the rationale for selecting this group of customers and scope of engagement

Audience: SMEs, large enterprises and TPIs

Purpose: SSE's research show that its customers' perceptions of smart meter benefits were misjudged, with businesses not fully understanding the reasons why they should have a smart meter installed.

Smart meters help SSE's customers understand their energy consumption and the data provided is essential for the country to develop an intelligent, clean, and reactive energy grid. SSE's campaign aims to educate customers on the benefits of smart meters for their businesses and their role in the UK's transition to net zero. If SSE's customers can reduce their energy consumption, the Company can in turn reduce the emissions arising from the use of its sold products.

Impact of engagement, including measures of success

Smart meter engagement programme

Under the UK Government's Smart Programme, SSE has been promoting the benefits of a smart meter via direct campaigns and within its customer life cycle communications.

To engage these customers, SSE Energy Customer Solutions has now taken the smart meter story one step further to educate customers on the additional benefits of smart for the UK. Through blogs, animations, social media campaigns, internal promotions, podcasts, and attendance at national events, SSE is developing a narrative that puts smart meters at the heart of the net zero story.

Podcast – 'Smart meters: the answer to energy savings?': SSE Energy Customer Solutions Head of Metering, Kerry Maisey, sat down with Kiran Bose of Future Net Zero for a podcast which delves into the reasons why smart meters could solve the problems of high energy prices and reduced consumption. Kerry offers her expert insights into how smart meters are critical for the country's net zero efforts and how they can benefit households and businesses.

Podcast – 'Smart meters: why your business should upgrade now': In this podcast, Future Net Zero's Founder Sumit Bose speaks with Kerry Maisey, Head of Metering at SSE Energy Customer Solutions, about all things surrounding smart meters and why they are the right choice for business and for the UK.

Thought leadership – London Business Matters Magazine: Nikki Flanders, Managing Director of SSE Energy Customer Solutions, wrote a piece for the London Chamber of Commerce's bimonthly magazine which is available online and in print. In this piece, Nikki describes smart meters as the simplest and most overlooked step that businesses can take on their net zero journey. When businesses install a smart meter, Nikki tells the London Business Magazine that it opens up a whole new world of data to help businesses reduce waste.

Social media campaign

Since the start of 2023, SSE has been running several smart meter social media campaigns to educate on the benefits and promote installations among its customer base. Through varied media including animations, videos and infographics, SSE has delivered over 3m impression and 200k clicks across its channel on smart meter content.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services
-------------------------------	---

% of customers by number

20

% of customer - related Scope 3 emissions as reported in C6.5

45

Please explain the rationale for selecting this group of customers and scope of engagement

Audience: SMEs, large enterprise, public sector, TPIs, industry bodies, government officials.

Purpose: To share expertise with wider audiences of businesses and TPIs, positioning SSE Energy Customer Solutions as the partner of choice to help organisations on their journey to net zero.

Impact of engagement, including measures of success

Taking place in the Coventry Building Society Arena, over 3k people attended Future Net Zero's 2023 Big Zero Show, which many delegates described as the energy event of the year. As Premier Sponsors, SSE had several opportunities to engage, inform and inspire those in attendance.

SSE's immersive event stand meant delegates could talk to SSE's in-house experts about how the Company can support their net zero ambitions. In Addition, hundreds entered SSE's competition to win a sustainable team building day.

Leanne Broadbent, SSE Energy Customer Solutions commercial manager, had a key speaker slot at the event. Entitled 'Pathway to Net Zero', Leanne discussed the ever more stringent annual renewable energy procurement targets for businesses and the options available to take the first steps on their net zero journey.

SSE's three-page spread in the Big Zero Report, with detail of SSE's Net Zero Acceleration Programme and why businesses should feel empowered to go green, was sent out to all event attendees and has been promoted on Future Net Zero's social channels.

Beyond its sponsorship and attendance, SSE created video content during the event and used its own social channels to spread the message wider, securing over 12k impressions and nearly 5k video views in couple of weeks.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services
-------------------------------	---

% of customers by number

20

% of customer - related Scope 3 emissions as reported in C6.5

45

Please explain the rationale for selecting this group of customers and scope of engagement

Audience: Primary school pupils and teachers, as well as the wider school community

Purpose: SSE Climate Connect aimed to:

Educate young people about climate change and the importance of net zero carbon emissions.

Promote renewable energy, environmental problem-solving, communication and STEM skills.

Create educational, young-person-led learning materials linking with 'sustainability and climate change strategy' for education.

Impact of engagement, including measures of success

SSE Climate Connect in partnership with Rewise Learning

The transition to clean energy brings opportunities for young people who'll need the skills to build and operate green infrastructure. That's why SSE teamed up with award-winning education company, Rewise Learning, to deliver a new programme, free to all participating schools.

When schools signed up to SSE Climate Connect, they received free and unlimited access to its learning resources, which included:

- Animations covering themes of climate change, renewable energy, biodiversity and more.
- Fun and educational learning songs.
- Online lessons, blogs, interactive quizzes, and information sheets.
- News on how the energy industry is helping to tackle climate change and move towards net zero carbon.

In 2022-23, SSE delivered nine workshops across seven schools in Perth, Cardiff and Reading. After the workshops, SSE conducted feedback surveys to measure the overall impact. The feedback can be see below:

- 100% said they know more about green jobs and green education.
- 83% understand what the word biodiversity means and why it's important to the planet.
- 95% know more about climate change, what is causing it, and its impacts.
- 93% now understand about renewable energy sources, such as wind, and how wind power can be harnessed to generate electricity.

One pupil in a Cardiff school said: "I learned about what turbines do and the disadvantages and advantages of them. Learning about biodiversity and why it is good. I feel more confident around the topic of climate change and STEM skills."

A teacher from the same school commented: "The music workshop with SSE Climate Connect and Rewise was such an amazing experience for our children. They learned so much about renewable energy sources and climate change... They enjoyed the day so much and all wanted to do it again the next week."

Nathan John, CEO of Rewise Learning said: "We see first-hand that workshops like this have a profound effect on the confidence of pupils, and how they see their own role in creating a better world. For many pupils, workshops like this with SSE Energy Solutions could give them the boost they need to consider a career in the renewable energy sector."

Type of engagement & Details of engagement

Collaboration & innovation	Other, please specify (Share information about your products and relevant certification schemes)
----------------------------	---

% of customers by number

10

% of customer - related Scope 3 emissions as reported in C6.5

45

Please explain the rationale for selecting this group of customers and scope of engagement

Audience: SMEs, local authorities and regional bodies.

Purpose: When it comes to tackling sustainability, a lack of understanding – not enthusiasm – is stopping SMEs making changes. Local authorities and regional bodies are struggling to help them break this inertia.

Impact of engagement, including measures of success

Zellar partnership

In 2022-23, SSE Energy Customer Solutions partnered with Zellar to help local authorities and SMEs kickstart the journey to net zero. The Sustainable Business Communities project aims to help SMEs offset carbon and save on energy costs, as well as provide local authorities with insightful data so they can report on sustainability progress in their region.

The scheme is driven by funding from SSE Energy Solutions for annual subscriptions to Zellar; a sustainability digital tool for SMEs, focused on community climate action.

Zellar's online sustainability platform helps SMEs take their first steps towards creating a sustainable business. It provides regular, positive ongoing actions that encourage them to offset the environmental impact of their businesses. Driven by a simple, tailored and measurable climate action plan, and a live score – Zellar benchmarks progress and enables SMEs to compare against similar businesses within their sector and communities.

Local authorities signing up to SSE Energy Customer Solutions' Sustainable Business Communities initiative are also granted access to data insights and case studies available within the platform, enabling them to measure, benchmark and showcase their progress.

Since the partnership launch, Cheltenham Borough Council, Greater Manchester Chamber and North Kesteven have received funding from the project. And there are discussions happening which will lead to more local authorities signing up in the near future.

293 SMEs have redeemed a Zellar licence funded by SSE Energy Solutions. Those 293 SMEs have then gone on to complete 1,003 sustainability actions on the platform. These actions include: emissions calculations, energy checks, offsetting projects, biodiversity projects, sustainability tips, and signing up to volunteering schemes.

Type of engagement & Details of engagement

Collaboration & innovation	Other, please specify (Share information about your products and relevant certification schemes)
----------------------------	---

% of customers by number

100

% of customer - related Scope 3 emissions as reported in C6.5

45

Please explain the rationale for selecting this group of customers and scope of engagement

Audience: SMEs, large enterprises, TPis

Purpose: To engage our customers and give them confidence that the renewable electricity and gas they purchase from SSE Energy Customer Solutions has been independently verified by a credible third party.

Impact of engagement, including measures of success

EcoAct verification

In 2023, SSE received its 6th EcoAct verification in as many years. EcoAct is an international climate consultancy and a CDP Accredited Provider. As part of a rigorous assurance process, EcoAct assessed the environmental claims of SSE's Green Electricity and Green Gas products against the GHG Protocol reporting and quality criteria. Mark Keeling, SSE Energy Solutions Sales Director said: 'Having an independent verification from a respected third party like EcoAct means we can help our customers display their environmental credentials with real conviction.'

How SSE engages with its customers regarding its EcoAct certification:

Green certificates: Every customer on one of SSE Energy Customer Solutions' Green Electricity or Gas plans receive a certificate confirming this status. The customers use these certificates to promote their sustainability credentials to customers, prospects and investors.

Blog: SSE published a blog on its website that explains what the EcoAct verification is and what it means for its customers reporting Scope 2 emissions. This was shared across all social channels to encourage engagement, resulting in thousands of impressions.

PR: SSE's PR and media strategy surrounding its EcoAct certification secured coverage in national publications.

Type of engagement & Details of engagement

Collaboration & innovation	Run a campaign to encourage innovation to reduce climate change impacts
----------------------------	---

% of customers by number

10

% of customer - related Scope 3 emissions as reported in C6.5

45

Please explain the rationale for selecting this group of customers and scope of engagement

Audience: SMEs, large enterprises, TPIs.

Purpose: Digital technologies will be key to the net-zero transition. They enable decarbonisation with their ability to process data more effectively, identify problems faster, and test solutions virtually.

Impact of engagement, including measures of success

After months of development and planning, SSE launched a new commerce section of its website in October 2022. This allows businesses to browse energy tariffs online and then make a purchase if they meet the eligibility criteria. In a digital age, having this online proposition is key to engage a wider customer base and encourage more people to switch to a renewable provider. From October 2022 – April 2023, over 1.5k quotes were generated online.

Online virtual assistant: Meet N-ero:

In April 2023, SSE launched a new virtual assistant on its online customer account space. N-ero, short for net zero, has been designed to answer customer queries quickly and efficiently. Since launch, 1.5k customers have asked over 60k questions. SSE has been monitoring the questions its customers ask most often and deploy new Q&A batches in two-week sprints.

The customer question data from N-ero will help improve customer service and operational processes. Plus, it will inform the Company on the questions that customers have on sustainability and climate change, allowing SSE to develop new content and resources to educate and inspire.

Type of engagement & Details of engagement

Collaboration & innovation	Run a campaign to encourage innovation to reduce climate change impacts
----------------------------	---

% of customers by number

13

% of customer - related Scope 3 emissions as reported in C6.5

45

Please explain the rationale for selecting this group of customers and scope of engagement

Audience: As part of the commitment to deliver an additional 30,000 retrofits in 10 years, 82 units and residents of 53 residential units who were identified as some of the community's most vulnerable and fuel poor.

Part of the Climate Bill includes a national retrofit program aiming to see 500,000 homes, one-third of Ireland's housing stock, retrofitted to a B2 building energy rating by 2030. SSE Airtricity Energy Services (SSE AES) is supporting the retrofit of an additional 30,000 homes in Ireland over the next 10 years, with around 4,000 upgrades already completed. These works will drastically reduce the emissions of thousands of homes, saving millions on energy costs for consumers and making their homes warmer, healthier, and safer. Once delivered, this will equal approximately €20 million in reduced energy costs every year.

Impact of engagement, including measures of success

As part of the DLR 2022 Local Authorities Energy Efficiency Retrofit program, SSE Airtricity and Dún Laoghaire-Rathdown County Council partnered to upgrade 82 units. With a focus on sustainability, 58 residential units, including a day care center and kitchens were upgraded from an average BER E1 to an average A3 rating.

This was a comprehensive retrofit which involved the installation of an innovative heating design solution using solar PV and a unique cascade heat pump, coupled with fabric first upgrades including new windows and doors, external wall insulation, attic insulation, mechanical ventilation, LED lighting, and heating controls. These upgrades achieved a reduction of up to 80% in total energy usage, or 463,900 kWh saved per annum.

This project will have long lasting benefits for residents, with 48 out of 58 units receiving an A3 energy rating and the remaining 10 receiving a B1 rating after the upgrade. Our efforts not only cut the energy usage of the buildings by up to 80%, increased indoor air quality and lifted the residents' living standards but residents are now able to comfortably control their own heating and have reduced electricity bills from the excess electricity produced from the Solar PV.

This retrofit initiative dramatically improved the lives and living conditions of Ireland's most deserving. It ensured Beaufort residents benefitted from the highest standards of energy efficiency, reduced costs, improved living standards and resulted in a significant energy reduction of up to 80% on the energy consumed per unit, per year.

Type of engagement & Details of engagement

Collaboration & innovation	Run a campaign to encourage innovation to reduce climate change impacts
----------------------------	---

% of customers by number

13

% of customer - related Scope 3 emissions as reported in C6.5

45

Please explain the rationale for selecting this group of customers and scope of engagement

Targeting

National targeting with additional geotargeting towards areas profiled based on age of home, BER rating and increased propensity; energy efficiency, cost saving, comfort, and importantly sustainability and climate impact.

Scope of Engagement:

SSE Airtricity is the first nationally accredited one-stop-shop (OSS) for home energy upgrades registered with the Sustainable Energy Authority of Ireland (SEAI). A Marketing campaign and integrated plan was executed to increase awareness of the benefits of home upgrades and their climate change impacts, drive consideration and ultimately build a pipeline of leads to retrofit homes to a better BER rating for energy efficiency and reduce climate change impacts.

The integrated campaign included national and regional radio, digital display, search, social media, media partnerships, door drops, as well as events such as The Ideal Home Show.

Sponsorship of DIY SOS The Big Build Ireland provided the opportunity to deliver home retrofit expertise, retrofit solutions for worthy participating families and achieve

prominent product placement to a highly engaged prime time TV audience.

Prospective customers had the opportunity to engage with our BERWOW Home Upgrade Calculator to assess potential home upgrade measures, get an estimate, and see their potential BER and how they can reduce their carbon footprint.

Impact of engagement, including measures of success

To date, 4,000 upgrades have been completed, including in 2022/23: 230 retrofits were completed, consisting 379 individual measures (1.6 / project).

RTE Digital Display Media Partnership :
An audience of 1.1 million impressions.

National & regional Radio:
An audience of 1.1 million listens

Door Drop example:
Target audience of 48,400.

DIYSOS The Big Build :
TV Series Average: 342,000 audience x 4 episodes.
Media partnerships: Over 4.3 million impressions.
YouTube: Overall number of impressions 2.1 million impressions.
Social media: 3.4 million impressions.

Ideal Home Show :
The target audience of 28,122 visitors.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to education customers about your climate change performance and strategy
-------------------------------	--

% of customers by number

64

% of customer - related Scope 3 emissions as reported in C6.5

45

Please explain the rationale for selecting this group of customers and scope of engagement

Audience:

Customers and non-customers. All domestic, ROI SSE Airtricity customers that are opted into marketing contact. (1 18,000 customers), SSE Reward loyalty base, social media audiences, and visitors to Dublin Zoo.

Purpose:

This engagement campaign aimed to grow brand awareness, association, and credibility on the topic of sustainability and in turn, climate change. As the proud sustainability partner of Dublin Zoo since 2017, SSE Airtricity continued the evolution of the Eco Explorers club in 2022/23. The partnership with Dublin Zoo is aligned to SSE's sponsorship pillars – to retain, and reward customers, while driving engagement with its sustainability and net zero strategies.

As part of the Sustainability Partnership, SSE Airtricity will continue to supply all facilities at the 28-hectare park in the heart of Dublin city with cleaner, greener electricity. The energy supply deal builds on Dublin Zoo and SSE Airtricity's commitment to encourage zoo visitors to learn more about the positive impact of sustainability on our climate.

- To drive and maintain high levels of brand consideration.
- To engagement of our base with sustainability topics with unique access experiences at Dublin Zoo, tapping into a captive reward base and wider staycation audience post-Covid.
- To extend our reach and increase engagement with our prime target audience of young families. Fostering the trust and public's love of Dublin Zoo. Dublin ranks number one in NSI top ten sponsorship properties and the largest family tourist attraction in Ireland.

Aoife Davey, Head of Marketing at Dublin Zoo, said:

"At Dublin Zoo we are thrilled to continue our long-term partnership with SSE Airtricity. As part of our ten-year vision, we look forward to working closely with SSE to achieve our goal of becoming a sustainable visitor attraction and to reduce our environmental impact. Conservation and education are at the heart of all we do at Dublin Zoo, and through the brand-new Eco Explorers Trail, Discovery Carts and hosting SSE Airtricity's Eco Explorers Weekend, we are excited to achieve even further environmental improvements and raise awareness on the importance of sustainability to everyone who visits Dublin Zoo."

Impact of engagement, including measures of success

Dublin Zoo Hub

The online educational hub was designed to support primary school children and their parents, allowing them to continue their sustainability education from their own homes. Featuring multiple lessons given in a range of engaging formats across the subject areas of biodiversity, pollution, conservation, energy, and climate.

The Eco Explorers Club has been one of the most inspiring campaigns for our team to work on in recent years. To witness first-hand the benefit this hub has for families across the country and to hear their stories is deeply rewarding. Customers have been engaged online, at the Eco Explorers weekends in Dublin Zoo, through online reviews, and through our reward base has been overwhelmingly positive. The Eco Explorers Club has also yielded hugely positive results in terms of internal engagement at SSE Airtricity.

Some measures of success include:

- SSE Airtricity created a 10 stop Eco Explorers Trail in Dublin Zoo focusing on key sustainability messages such as recycling, rain harvesting and biodiversity.
- The Eco Explorers Trail story is told by Pookie, a child from the woodlands, who is at a child from the woodlands, who is at one with the world and connected to nature. Pookie will help children and families learn about the importance of sustainability.
- For the June 2023 weekend there were 9620 attendees across the weekend and 4000 Eco-Explorer passports handed out

- The 'Eco-explorer's Club' playlist on YouTube has gained over 300K views on videos to date.
- Increase of 30,000 plus website visits
- Conversion on website increased by 18%
- Installed water stations in Dublin Zoo to reduce plastic.
- Positive google reviews and comments on social media posts
- SSE Reward Dublin Zoo E-Zine (July 22) sent to 32,469 recipients in the ROI Reward base with OR of 52% and CTR of 40%. There were 23,593 recipients in the NI Reward base with OR of 39% and CTR of 41%
- The SSE Reward Dublin Zoo E-zine (July 22) generated 6,056 competition entries for Roar & Snore and 4,718 entries for Family Day Out at Dublin Zoo
- The social post made for Roar & Snore had a reach of 21,424 with 46,094 impressions and 327 link clicks.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services
-------------------------------	---

% of customers by number

64

% of customer - related Scope 3 emissions as reported in C6.5

45

Please explain the rationale for selecting this group of customers and scope of engagement

Audience: All domestic, ROI SSE Airtricity customers that are opted into marketing contact. (118,000 customers)

Purpose:

At a time of increased energy costs and confusion around energy pricing Green Goals was created to educate customers in 3 key areas. This three-part series gave customers useful information about where their energy comes from, their household energy usage and tips to help reduce their bills. As part of the campaign, SSE created three short one-minute videos that told the individual stories in a uniquely visual way. Each video was hosted on a bespoke landing page that featured questions relating to the videos.

Each month for three months SSE Airtricity emailed its customers inviting them to take part. The customers that completed the quiz and answered the questions correctly were presented with a badge marking their success, they were also entered into a draw to win a selection of smart products.

The monthly email subjects were the below:

- The Irish Energy Market: This content explained to customers why SSE Airtricity's energy prices (in Single Energy Market) are impacted by wholesale costs when we supply renewable energy.
- Your Appliances – The video explained the impacts various household appliances have on customers utility bills and how they can reduce their use.
- Your home – This content helped customers in understanding their homes Building Energy Rating (BER) and advised on their options in terms of how to make improvements.

Impact of engagement, including measures of success

The campaign proved a success with open rates as high as 48.5% and click through rates as high as 22%. In total across all three campaigns 30,000 badges were awarded for the successful completion of the Green Goals Quizzes.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, climate-related requirements are included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Complying with regulatory requirements

Description of this climate related requirement

SSE expects all suppliers and contractors to comply with local laws and regulations. Where relevant and appropriate, it also expects the values and standards outlined in its Sustainable Procurement Code to be shared by its supply chain. Whilst SSE does not have a set of determined climate-related requirements for all its suppliers, these will be determined by the contract size and nature, and clearly outlined when tendering for work with SSE.

Whilst not a requirement, suppliers and contractors are encouraged to:

- Actively reduce carbon emissions across the whole life cycle and offer low-carbon design alternatives when possible; and are expected to quantify the embodied carbon.
- Report annually on scope 1 and 2 GHG emissions in line with recognised frameworks and standards.
- Have carbon data externally validated to recognised standards (such as ISO14064 and ISAE3000).
- Complete the annual CDP Climate Change Programme, if requested.
- Provide carbon reporting for SSE sites, if requested
- Have a net zero carbon reduction strategy and associated commitment or target in place, in line with climate science.
- Have validated science-based carbon reduction targets with an external validation body (such as SBTi) or equivalent. For contracts of a significant value, this will be a requirement. In these cases, SSE will work with suppliers and contractors to support the setting of science-based targets.

% suppliers by procurement spend that have to comply with this climate-related requirement

90

% suppliers by procurement spend in compliance with this climate-related requirement

70

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
Off-site third-party verification

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Setting a science-based emissions reduction target

Description of this climate related requirement

As a minimum, SSE expects all suppliers and contractors to comply with local laws and regulations. Where relevant and appropriate, it also expects the values and standards outlined in its Sustainable Procurement Code to be shared by those working in its supply chain.

SSE's Sustainable Procurement Code provides information to suppliers and contractors on how to meet the sustainability requirements and expectations outlined in the Code. The Code also explains how SSE intends to work with suppliers to monitor and improve performance. Whilst SSE does not have a set of determined climate-related requirements for all its suppliers, requirements on suppliers and contractors will be determined by the contract size and nature, and clearly outlined when tendering for work with SSE.

Whilst not a requirement, suppliers and contractors are encouraged to:

- Have validated science-based carbon reduction targets with an external validation body (such as Science Based Targets initiative (SBTi)) or equivalent. Where contracts with SSE are of a significant value, this will be a requirement. In these cases, SSE will work with suppliers and contractors to support the setting of science-based targets.

% suppliers by procurement spend that have to comply with this climate-related requirement

90

% suppliers by procurement spend in compliance with this climate-related requirement

51

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
Off-site third-party verification

Response to supplier non-compliance with this climate-related requirement

Retain and engage

Climate-related requirement

Climate-related disclosure through a public platform

Description of this climate related requirement

SSE is on its third year of the CDP Supply Chain Program, whilst not a requirement, suppliers and contractors are encouraged to sign up and disclose their emissions.

By requesting information and providing supplier support webinars 112 suppliers, accounting for over 65% of spend, provided information to SSE through the CDP Supply Chain module in 2020/21. This was the highest number of responses since SSE began its partnership with CDP in 2018. This engagement has been recognised by CDP as it awarded SSE an 'A' in its Supplier Engagement Rating assessment in 2023. Over 11,400 companies were assessed, and SSE featured in the top 8%. This year the submission has not been finalised, but we currently have 452 suppliers invited with 75% of suppliers by spend currently as active or have already submitted their response. Therefore, our CDP Supply Chain Engagement program should see a large increase in supply chain participation.

% suppliers by procurement spend that have to comply with this climate-related requirement

9

% suppliers by procurement spend in compliance with this climate-related requirement

91

Mechanisms for monitoring compliance with this climate-related requirement

Supplier self-assessment
Supplier scorecard or rating

Response to supplier non-compliance with this climate-related requirement

Retain and engage

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

SSE Group Climate Change Policy

SSE Climate Change Policy 2023.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

SSE works to embed policies and processes that support the delivery of climate action in line with clear principles aligned to the Paris Agreement and a 1.5oC pathway.

During 2022/23, SSE continued to advocate for accelerated climate action with focus on increasing deployment of renewable generation and decarbonisation of thermal generation, heat and transport.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Cluster sequencing for carbon capture, usage and storage (CCUS) deployment.

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Low-carbon, non-renewable energy generation

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

United Kingdom of Great Britain and Northern Ireland

Your organization's position on the policy, law, or regulation

Support with no exceptions

Description of engagement with policy makers

SSE engaged with the Department for Business, Energy and Industrial Strategy (BEIS) on the UK Government's Cluster Sequencing Process. In March the UK Government announced the first carbon capture projects to be supported by government-backed contracts – this included project located in Teesside and the northwest of England. Although no power CCS projects in the Humber or Scotland were taken forward in the first phase of the UK's cluster sequencing process, in March the Government launched processes for both a track one expansion and track two, meaning there will be further opportunities ahead.

As a Humber-based project, Keadby 3 has not progressed to the final stage of negotiations for a Dispatchable Power Agreement. The UK Government has instead identified the Humber as a region to be supported through subsequent phases of its cluster sequencing process by 2030 at the latest. There are opportunities for Keadby 3 to access CO2 storage in either the Endurance store (a Track-1 CO2 transport and storage system) or Viking (identified as a minded-to Track-2 CO2 transport and storage system)

The UK Government also set out further detail for Track-2 clusters. Acorn was identified as a 'minded-to' Track-2 CO2 transport and storage system, alongside Viking, for deployment by 2030. Acorn would provide CO2 storage for Peterhead Carbon Capture Power Station. Further expressions of interest for Track-2 clusters are being accepted by the UK Government ahead of next steps being communicated later in 2023.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

<Not Applicable>

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Yes, this policy is central to the achievement of SSE's climate transition plan. One of SSE's key actions in its Net Zero Transition Plan is to 'Develop new low-carbon flexible generation'. To be able to develop a CCS such as Keadby 3 or Peterhead 2, UK Government support, through such cluster sequencing processes will be essential.

Specify the policy, law, or regulation on which your organization is engaging with policy makers

Ofgem's Accelerated Strategic Investment framework

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Other, please specify (Electricity grid access for renewables)

Policy, law, or regulation geographic coverage

National

Country/area/region the policy, law, or regulation applies to

United Kingdom of Great Britain and Northern Ireland

Your organization's position on the policy, law, or regulation

Support with minor exceptions

Description of engagement with policy makers

The Electricity System Operator (ESO), the national authority for planning the electricity network, published in July 2022 the Holistic Network Design (HND) calling for an integrated approach that lay the foundation for the UK Government ambition for 50GW of offshore wind by 2030.

Following this, Ofgem released the Accelerated Strategic Transmission Investment (ASTI) framework to both assess and fund large strategic onshore electricity transmission projects, allowing for the development of the network to connect significant levels of offshore wind.

SSE responded to Ofgem's consultation on ASTI, advocating for the development of a regulatory framework that ultimately accelerates the delivery of electricity transmission infrastructure required to meet our future energy ambitions.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

SSE engaged with Ofgem through its consultation on the ASTI framework, SSE engaged on the framework supporting the overall ASTI framework and advocated for:

- Additional projects covered in the HND which were not proposed to be included in the ASTI framework, be included, these were: i) 1.8GW link to the Western Isles; ii) upgrading the Beaully-Denny line from 275kv to 400kv; iii) creation of a multi-terminal HVDC switching station at Peterhead to facilitate the development of the offshore network.
- Confirmation that the certainty of need for these projects is agreed so that SSE Transmission can engage critical suppliers to ensure a cost effective solution is secured given global supply chain pressure.
- A policy environment that continues to mature to address barriers, such as planning and consenting issues.
- Pre-construction funding from Ofgem to allow the progress of critical project development activities to accelerate the delivery of the projects.
- Analysis of carbon benefits and carbon displacement be considered as part of the approvals process.

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

Yes, this policy is central to the achievement of SSE's climate transition plan. One of SSE's key actions in its Net Zero Transition Plan is to 'build a renewable energy portfolio of 13GW of capacity by 2031'. The ASTI enables SSE Transmission to take forward the electricity transmission projects identified by the Electricity System Operator to enable the UK to meet its 2030 offshore wind targets with confirmation that SSE Transmission projects identified would be taken forward as part of the ASTI framework.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify (Energy Networks Association)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

SSE works closely with trade associations and seeks to ensure that its principles on climate change aligns with those of the trade associations of which it is a member. SSE assessed Energy Networks Association (ENA)'s position on climate change and compared it against its own five key principles:

- Acknowledges the serious threat of climate change
- Supports the goals of the Paris Agreement
- Supports a strong carbon price
- Promotes innovation
- Seeks a just transition to net zero

SSE found that Energy Networks Association (ENA) was aligned to its position on climate change. More details can be found in SSE's Trade Associations Climate Review 2021/22 and the accompanying scope and methodology paper.

Energy Networks Association (ENA) represents the companies which operate the electricity wires, gas pipes and energy system in the UK and Ireland. The ENA recognises climate change as the defining issue of our time and that energy networks will be required to play a vital role in delivering the UK's 2050 and 2045 net-zero emissions targets.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

350000

Describe the aim of your organization's funding

This is the annual membership fee SSE paid for the year 2021/22.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify (Energy UK)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

SSE works closely with trade associations and seeks to ensure that its principles on climate change align with those of the trade associations of which it is a member. SSE assessed Energy UK's position on climate change and compared it against its own five key principles:

- Acknowledges the serious threat of climate change
- Supports the goals of the Paris Agreement
- Supports a strong carbon price
- Promotes innovation
- Seeks a just transition to net zero

SSE found that Energy UK was aligned to its position on climate change. More details can be found in SSE's Trade Associations Climate Review 2021/22 and the accompanying scope and methodology paper.

Energy UK is the trade association for the energy industry with over 100 members spanning every aspect of the energy sector. Energy UK, on behalf of the energy industry, reaffirms its commitment to tackling climate change, and taking action to support wider society and other sectors of the economy to move towards net zero emissions. The trade association encourages the energy industry to invest capital in order to transform the energy system with the ambition of reaching a net zero power system in the 2030s

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

120000

Describe the aim of your organization's funding

This is the annual membership fee SSE paid for the year 2021/22.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify (RenewableUK)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

SSE works closely with trade associations and seeks to ensure that its principles on climate change aligns with those of the trade associations of which it is a member. SSE assessed Renewable UK's position on climate change and compared it against its own five key principles:

- Acknowledges the serious threat of climate change
- Net zero ambitions by 2050 at the latest
- Supports a strong carbon price
- Promotes innovation
- Seeks a just transition to net zero

SSE found that Renewable UK was aligned to its position on climate change. More details can be found in SSE's Trade Associations Climate Review 2021/22 and the accompanying scope and methodology paper.

RenewableUK seeks to encourage the building of a future energy system, powered by clean electricity. It aims to ensure increasing amounts of renewable electricity are deployed across the UK and access markets to export all over the world. RenewableUK believes that delivering on climate change commitments must be put right at the heart of every Government department as a matter of urgency, with more ambitious targets for renewable energy required in order to reach net zero.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

50000

Describe the aim of your organization's funding

This is the annual membership fee SSE paid for the year 2021/22.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify (Scottish Renewables)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

SSE works closely with trade associations and seeks to ensure that its principles on climate change aligns with those of the trade associations of which it is a member. SSE assessed Scottish Renewables position on climate change and compared it against its own five key principles:

- Acknowledges the serious threat of climate change
- Supports the goals of the Paris Agreement
- Supports a strong carbon price
- Promotes innovation
- Seeks a just transition to net zero

SSE found that Scottish Renewables was aligned to its position on climate change. More details can be found in SSE's Trade Associations Climate Review 2021/22 and the accompanying scope and methodology paper.

Scottish Renewables acts as the voice of Scotland's renewable energy industry in leading the debate in how the growth of renewable energy can help sustainably heat and power Scotland's homes and businesses. Scottish Renewables recognise that Scotland is in the grips of a climate emergency and that reform to Scotland's planning system to enable renewable energy developments is essential if net-zero is to be achieved. The trade association aims to grow Scotland's renewable energy sector and sustain its position at the forefront of the global clean energy industry.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

35000

Describe the aim of your organization's funding

This is the annual membership fee SSE paid for the year 2021/22.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify (Electricity Association of Ireland)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

SSE works closely with trade associations and seeks to ensure that its principles on climate change aligns with those of the trade associations of which it is a member. SSE assessed Electricity Association of Ireland position on climate change and compared it against its own five key principles:

- Acknowledges the serious threat of climate change
- Supports the goals of the Paris Agreement
- Supports a strong carbon price
- Promotes innovation
- Seeks a just transition to net zero

SSE found that Electricity Association of Ireland was aligned to its position on climate change. More details can be found in SSE's Trade Associations Climate Review 2021/22 and the accompanying scope and methodology paper.

The Electricity Association of Ireland (EAI) is the representative body for the electricity industry and gas retail sector operating within the Single Electricity Market (SEM) on the Island of Ireland. Additionally, EAI represents the Irish electricity industry in Eurelectric, the representative body for the European electricity industry, and helps shape the broader European response to developing policy and legislative initiative. EAI recognise the science underpinning the Paris Climate Change Agreement and support the goal of limiting the temperature increase to 1.5°C above pre-industrial levels. EAI acknowledge the important role that a decarbonised electricity sector will play as a vector for clean energy but also as the backbone to a resilient and secure energy future

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

30000

Describe the aim of your organization's funding

This is the annual membership fee SSE paid for the year 2021/22.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify (Wind Energy Ireland)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

SSE works closely with trade associations and seeks to ensure that its principles on climate change aligns with those of the trade associations of which it is a member. SSE assessed Wind Energy Ireland position on climate change and compared it against its own five key principles:

- Acknowledges the serious threat of climate change
- Supports the goals of the Paris Agreement
- Supports a strong carbon price
- Promotes innovation
- Seeks a just transition to net zero

SSE found that Wind Energy Ireland was aligned to its position on climate change. More details can be found in SSE's Trade Associations Climate Review 2021/22 and the accompanying scope and methodology paper.

Wind Energy Ireland (WEI) is the representative body for the Irish wind industry, working to promote wind energy as an essential, economical and environmentally friendly part of the country's low-carbon energy future. WEI's purpose is to help create jobs, invest in communities, reduce emissions and work to end Ireland's reliance on foreign fossil fuels. WEI acknowledges that climate change is causing enormous disruptions, and list storms, droughts, floods, heatwaves, and biodiversity loss as consequences of planetary warming. The trade associations recognise that phasing out fossil fuels will be required to limit this warming to 2°C Celsius and pursue efforts to limit the temperature increase to 1.5°C. In response to the climate emergency, WEI aims to develop onshore and offshore wind to deliver a zero-carbon Ireland while creating sustainable jobs, attracting green investment and building stronger communities.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

25000

Describe the aim of your organization's funding

This is the annual membership fee SSE paid for the year 2021/22.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

Trade association

Other, please specify (RenewableNI)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

SSE works closely with trade associations and seeks to ensure that its principles on climate change aligns with those of the trade associations of which it is a member. SSE assessed Wind Energy Ireland position on climate change and compared it against its own five key principles:

- Acknowledges the serious threat of climate change
- Supports the goals of the Paris Agreement
- Supports a strong carbon price
- Promotes innovation
- Seeks a just transition to net zero

SSE found that Wind Energy Ireland was aligned to its position on climate change. More details can be found in SSE's Trade Associations Climate Review 2021/22 and the accompanying scope and methodology paper.

RenewableNI represents businesses across the renewable sector in Northern Ireland, fostering knowledge exchange, policy development, support and consensus on best practice between stakeholders. RenewableNI is a collaboration between Wind Energy Ireland and RenewableUK, working closely with both trade bodies on issues impacting the renewable electricity industry across the UK and Ireland. RenewableNI recognises that the Climate Emergency requires Northern Ireland to rapidly reduce its emissions. RenewableNI acknowledges that Northern Ireland must play its part in meeting the UK requirement for Net Zero Greenhouse Gases by 2050, and as a part of the Single Electricity Market (SEM), its journey to zero-carbon is also inextricably linked with that of the Republic of Ireland.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

2000

Describe the aim of your organization's funding

This is the annual membership fee SSE paid for the year 2021/22.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

Yes, we have evaluated, and it is aligned

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports, incorporating the TCFD recommendations

Status

Complete

Attach the document

SSE Annual Report 2023.pdf
SSE Sustainability Report 2023.pdf

Page/Section reference

Environment (Annual Report 2023, pages 22 to 23, 52 to 55; Sustainability Report 2023, pages 81 to 86)
Labour (Annual Report 2023, pages 56 to 66, 134 to 136, 137 to 138, 162 to 165; Sustainability Report 2023, pages 61 to 75)
Human Rights and Anti-Corruption (Annual Report 2023, pages 58 to 59, 137 to 138; Sustainability Report, pages 61 to 66)
TCFD (Annual Report 2023, pages 36 to 51)
Enhanced Climate Action (Sustainability Report 2023, pages 17 to 28)

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Climate Action 100+ Task Force on Climate-related Financial Disclosures (TCFD) Transition Pathway Initiative UN Global Compact Other, please specify	<p>In the UK, The Financial Conduct Authority (FCA) requires organisations to report against the TCFD recommendations, recommended disclosures and the Annex and guidance (published 2021) in annual reports. SSE believes that whilst it is compliant with the listing rule there is still opportunity for increasing maturity across all TCFD disclosure requirements. SSE continues to actively seek feedback from shareholders and stakeholders on best practice on TCFD disclosures.</p> <p>UN Global Compact – SSE has been a signatory since 2018 and is aligned to the Compact's ten principles for corporate sustainability</p> <p>A4S – SSE's CFO is a member of the Accounting for Sustainability (A4S) CFO Leadership Network.</p> <p>Transition Plan Taskforce - SSE supported the Transition Plan Taskforce preparers and users working group to develop guidance on Transition Plans and is now a member of the TPT's Delivery Group after involvement with the TPT sandbox (testing) exercise.</p> <p>SSE is also a focus company for the Climate Action 100+ and Transition Pathway Initiative.</p>

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, both board-level oversight and executive management-level responsibility	<p>SSE's Group Environment Policy details the company's commitment to protect the environment, prevent pollution and to operate in a sustainable way. The purpose of the policy is to identify and mitigate material impacts, manage environmental risks and engage positively with key stakeholders to improve the environmental impact of SSE's business activities.</p> <p>The Group Environment Policy commits SSE to manage, protect and enhance the biodiversity by:</p> <ul style="list-style-type: none"> • Working towards Biodiversity Net Gain for new major projects after 2025. We recognise that some habitat types will prove problematic to replace. • Assessing and mitigating impacts of major projects on Biodiversity. • Monitoring the impacts on Biodiversity of operational assets located in sensitive environments, and to take measures to reduce those impacts where practical. • Collaborating with relevant organisations that protect and enhance biodiversity <p>The SSE plc Board and Group Executive Committee are responsible for the oversight of the Environment Policy including the approval of any changes to the Policy. This Policy is reviewed annually as part of an evaluation process.</p> <p>The Safety, Health and Environment Committee (SHEC) supports the Policy Owner and makes sure that the policy is adhered to through awareness, training and monitoring of policy implementation. Governance for the implementation of the Policy and for the continual improvement in performance is provided by the SHE Committee at Group-level, the Safety, Sustainability, Health and Environment Advisory Committee (SSHEAC) at Board level, and at local level by Local SHE Communities (LSC).</p>	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	<p>Commitment to Net Positive Gain</p> <p>Commitment to No Net Loss</p> <p>Adoption of the mitigation hierarchy approach</p> <p>Commitment to respect legally designated protected areas</p> <p>Commitment to avoidance of negative impacts on threatened and protected species</p>	SDG

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

Value chain stage(s) covered

<Not Applicable>

Portfolio activity

<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity

<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

<Not Applicable>

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

Value chain stage(s) covered

<Not Applicable>

Portfolio activity

<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity

<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

<Not Applicable>

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?

Not assessed

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Land/water management Species management Education & awareness Law & policy Livelihood, economic & other incentives

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Pressure indicators Response indicators

C15.7

(C15.7) Have you published information about your organization’s response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments	Annual Report 2023 SSE Annual Report 2023.pdf
In mainstream financial reports	Content of biodiversity-related policies or commitments Governance Impacts on biodiversity Details on biodiversity indicators Influence on public policy and lobbying Biodiversity strategy	Sustainability Report 2023 Biodiversity Report 2022 SSE Biodiversity Report 2022.pdf SSE Sustainability Report 2023.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Financial Officer	Chief Financial Officer (CFO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company’s annual revenue for the stated reporting period?

	Annual Revenue
Row 1	

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Customer base is too large and diverse to accurately track emissions to the customer level	The knowledge of sustainability data and information tends to be managed in different areas to the management of contracts and relationships. With large and diverse numbers of customers it is difficult to understand data requirements and then respond appropriately.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

Strong links between customer facing teams and sustainability teams are already being created. The next step is to understand customer requirements and then allocate resources to help provide this information and data.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms