Progressing towards net zero

SSE plc Net Zero Transition Report 2023
About SSE

SSE is a leading generator of renewable electricity in the UK and Ireland and one of the largest electricity network companies in the UK. It is driven by a purpose to provide energy needed today while building a better world of energy for tomorrow. It develops, builds, operates, and invests in low-carbon electricity infrastructure in support of the transition to net zero, including onshore and offshore wind, hydro power, flexible thermal generation, electricity transmission and distribution networks, alongside providing energy products and services to customers. SSE’s ambitions for the development of renewable energy will extend beyond the British Isles to carefully selected international markets, including Asia-Pacific, Europe, and North America.

UK-listed and headquartered in Perth, SSE is a major contributor to the economies in the UK and Ireland. It employs around 12,000 people and is real Living Wage and Fair Tax Mark accredited.

About the report

This Net Zero Transition Report for the period 1 April 2022 to 31 March 2023 aims to support shareholders understand the progress SSE has made in pursuing the targets and actions established in its Net Zero Transition Plan. It has been designed to be read alongside SSE’s Annual Report 2023 and the Annual Report 2023. Both documents can be found on sse.com.

Feedback is encouraged and very welcome. Please get in touch by emailing sustainability@sse.com if you have any comments or queries relating to the content of this report.

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Net Zero Transition Report

Progressing towards net zero

SSE is committed to transparently reporting on its progress against both its emissions targets and the actions it is taking to achieve them. This transparency supports high-quality stakeholder engagement on climate-related issues.

Enhanced climate-related engagement

SSE believes Net Zero Transition Plans play a critical role in outlining Company pathways to net zero, supporting both delivery and accountability. With SSE’s opportunities for growth defined by the imperative to decarbonise power sectors at home and abroad, its Net Zero Transition Plan spells out how greenhouse gas emissions will be removed from its operations.

SSE’s Net Zero Transition Plan was first published in March 2022 and updated in October 2022 in response to shareholder and stakeholder feedback. The updated Net Zero Transition Plan outlines SSE’s net zero aligned targets and describes both the actions required to reduce material GHG emissions across scopes 1, 2 and 3 and actions on interdependencies, including a just transition and climate adaptation.

The Plan establishes both targets and actions that will support the achievement of it becoming a net zero business. In support of that plan, a process of scrutiny and accountability has been established through an annual shareholder ‘say on climate’ resolution (see Appendix A). SSE publishes this Net Zero Transition Report that is subject to a non-binding shareholder advisory vote at its AGM. The first such vote, in July 2022, attracted 98.92% of votes in favour.

A plan for a net zero transition

This is SSE’s second Net Zero Transition Report which summarises progress by reference to climate disclosures from SSE’s Annual Report 2023 and SSE’s Sustainability Report 2023. A non-binding advisory resolution to receive SSE’s Net Zero Transition Report is proposed in Resolution 17 at the 2023 SSE plc Annual General Meeting.

Developing and promoting transition planning

Given the importance of climate change to its strategy, SSE’s Net Zero Transition Plan was published before official frameworks for such plans were developed. Hence, SSE firmly supports the emergence of a common framework for economy-wide transition planning.

SSE’s transition plan builds on three principles: targets to set direction; actions to deliver targets; and integrity with the aim of being open and honest about the pathways to achieve net zero. This has led SSE to gain invaluable experience in the development and publication of transition plans and reports giving it an early insight and allowing the development of its arrangements for scrutiny and accountability through the annual shareholder vote.

With this experience and work on transition plans, SSE was invited to be involved in the UK Government’s Transition Plan Taskforce (TPT) which is tasked with the development of a ‘gold’ standard for private sector climate transition plans. SSE was initially involved in the UK Transition Plan Taskforce Implementation and Guidance Working Group, then supported the sandbox exercise which tested the Disclosures Framework and Implementation Guidance, and more recently as a member of the TPT Deliver Group.

With the development of new frameworks, regulatory requirements and as thinking matures and develops, SSE will consider these and reflect them in future iterations of its Net Zero Transition Plan and reports.
### Net Zero Transition Plan on a page

#### Short term (to 2025)
- **Target**
  - Engage with 50% of suppliers by spend to set an SBT by 2024.

#### Medium term (2025 - 2035)
- **Target**
  - Reduce the carbon intensity of scope 1 GHG emissions by 80% by 2030, from 2017/18 baseline.

- **Actions**
  - Reduce absolute scope 1 and 2 GHG emissions by 72.5% by 2030 from a 2017/18 base year.

- **Cross-cutting Actions**
  - 1. Reduce emissions from unabated gas generation
  - 2. Develop new low-carbon flexible generation
  - 3. Transparent advocacy
  - 4. Build a renewable energy portfolio of 13GW of capacity by 2031
  - 5. Reduce SSEN’s leakage and reliance on SF₆
  - 6. Switch vehicle fleet to EV in line with EV100 commitment
  - 7. Reduce reliance on SSEN’s Scottish Island back-up diesel generation
  - 8. Explore options for neutralising residual emissions

#### Long term (2035 - 2050)
- **Target**
  - Net zero for SSE’s scope 1 and 2 emissions by 2040.
  - Net zero for all SSE’s remaining scope 3 emissions by 2050.

- **Actions**
  - Reduce absolute GHG emissions from use of products sold by 50% by 2034 from a 2017/18 base year.

- **Just Transition actions**
  - 11. Support customers to fuel switch and consume less gas
  - 12. Align unabated gas power generation owned through joint ventures with a net zero pathway
  - 13. Advocate for a pathway for decarbonised heat
  - 14. Establish a framework for supplier collaboration on net zero action
  - 15. Partner with the CDP supply chain engagement programme

#### Summary Actions
- **Scope 1**
  - Reduce electrical losses from SSEN Distribution
  - Deliver a net zero property estate

- **Scope 2**
  - Support customers to fuel switch and consume less gas
  - Align unabated gas power generation owned through joint ventures with a net zero pathway
  - Advocate for a pathway for decarbonised heat
  - Establish a framework for supplier collaboration on net zero action
  - Partner with the CDP supply chain engagement programme

- **Scope 3**
  - Continuous review of adaptation plans at business unit level, whilst participating fully in national adaptation frameworks

- **Climate adaptation and resilience**
  - Net zero for all SSE’s remaining scope 3 emissions by 2050.

- **Just Transition actions**
  - 17. Publish annually, progress against the 20 Principles for a Just Transition, outlined in SSE’s Just Transition Strategy
**SSE’s performance against its Net zero Transition Plan**

**Short term (to 2025)**

- **Target:** Engage with 50% of suppliers by spend to set a science-based target by 2024.
- **Progress:**
  - **Base year (2017/18):** 0%
  - **This year’s progress:** 51%
    - (54% set science-based targets/ 17% committed to setting science-based targets)
  - **Achieved:**
    - 100%
      - This target has been achieved through SSE’s engagement with CDP supply chain and workshops with suppliers.

**Medium term (2025 - 2035)**

- **Target:**
  - Reduce the carbon intensity of scope 1 GHG emissions by 80% by 2030, from 2017/18 baseline.
  - Engage with 50% of suppliers by spend to set a science-based target by 2024.
  - Reduce absolute scope 1 and 2 GHG emissions by 72.5% by 2030 from a 2017/18 base year.
- **Goal:**
  - Reduce absolute GHG emissions from use of products sold by 50% by 2034 from a 2017/18 base year.
- **Progress:**
  - **Base year (2017/18):**
    - **2025:** 307
    - **2026:** 254
  - **This year’s progress:**
    - **2025:** 17% reduction
    - **2026:** 41% reduction
  - **Achieved:**
    - **2025:** 22%
      - This fall is due to a combination of factors, including a 10% increase in renewable generation output alongside a lesser increase in thermal generation output over this period.
    - **2026:** 57%
      - This reduction is largely a result of lower output from thermal power stations and the closure of SSE’s last coal-fired power plant in March 2020.

**Long term (2035 - 2050)**

- **Target:**
  - Net zero for SSE’s scope 1 and 2 emissions by 2040.
  - Net zero for all SSE’s remaining scope 3 emissions by 2050.
- **Goal:**
  - Reduce absolute GHG emissions from use of products sold by 50% by 2034 from a 2017/18 base year.
- **Progress:**
  - **Base year (2017/18):**
    - **2035:** 2.54
    - **2036:** 2.16
  - **This year’s progress:**
    - **2035:** 15% reduction
    - **2036:** 30%
  - **Achieved:**
    - **2035:** 30%
      - This change reflects lower market demand due to increased market prices.
    - **2036:**

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*S 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 2022, 51% of its emissions (aligned with equity ownership) will be accounted for within scope 3.*
**Net Zero Transition Report**

**The Net Zero Transition Report in summary**

SSE understands that net zero targets are only credible when backed up by a clear plan of action. SSE’s Net Zero Transition Plan was designed to provide this clarity for its stakeholders. It outlines 17 key actions 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 remaining emissions, at the same time as recognising the cross cutting issues of social impact and climate resilience. This following summary provides updates on the actions taken, in financial year 2022/23.

### Scope 1

#### Actions

<table>
<thead>
<tr>
<th>Action</th>
<th>Key progress in 2022/23</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reduce emissions from unabated gas generation</td>
<td>SSE purchased 100% of its electricity for use in its facility managed offices from renewable sources, backed by renewable guarantees.</td>
</tr>
<tr>
<td>2. Develop new low-carbon flexible generation</td>
<td>SSE advanced various measures to decarbonise its thermal portfolio, including the development of carbon capture and storage technologies, with projects at Peterhead and Keadby as well as hydrogen options at its Aaldhruir site and elsewhere. Its large scale pumped hydro project at Coire Glas is progressing with £100m committed to advanced site investigation works.</td>
</tr>
<tr>
<td>3. Transparent advocacy in favour of enhanced policy</td>
<td>SSE continued to advocate for more ambitious - and practical - climate change policy to achieve net zero focussing on the acceleration of renewables deployment, and the decarbonisation of thermal generation.</td>
</tr>
<tr>
<td>4. Build a renewable energy portfolio of 15GW of capacity by 2030</td>
<td>With the NZAP Plus, SSE’s ambition has now increased to build a renewable energy portfolio, including battery storage, of over 15GW of capacity by 2032.</td>
</tr>
<tr>
<td>5. Reduce SSEN’s leakage and reliance on SHB</td>
<td>SSEN Transmission continued to migrate to SF6 alternatives in substations, where appropriate, as well as manage SF6 leakage in the networks.</td>
</tr>
<tr>
<td>6. Switch vehicle fleet to EV in line with EV100 commitment</td>
<td>SSE made good progress towards its EV100 commitment with over 57% of its light vehicle fleet now fully electric, with 33% of the total committed fleet already transitioned to EVs.</td>
</tr>
<tr>
<td>7. Reduce reliance on SSEN’s Scottish Island backup diesel generation</td>
<td>SSEN Distribution continued to work towards reduced reliance on backup diesel generation. 2022/23 saw a 4% decrease in the volume of fuel combustion from standby stations compared to the previous reporting period mostly due to fewer subsea cable faults.</td>
</tr>
<tr>
<td>8. Explore options for neutralising residual emissions</td>
<td>SSE: Thermal engaged on emerging policy to deliver a market for greenhouse gas removals by responding to UK Government consultations on negative emissions. SSEN Distribution secured funding from Ofgem to develop nature-based solutions to help tackle residual emissions and helping to set a precedent for others.</td>
</tr>
</tbody>
</table>

### Scope 2

#### Actions

<table>
<thead>
<tr>
<th>Action</th>
<th>Key progress in 2022/23</th>
</tr>
</thead>
<tbody>
<tr>
<td>9. Reduce electrical losses from SSEN Distribution</td>
<td>SSE announced a loss and revenue strategy for the period 2023-2028 with an ongoing commitment to technical losses reduction.</td>
</tr>
<tr>
<td>10. Deliver a net zero property estate</td>
<td>Energy consumed in SSEN’s offices, depots and data centers fell by 5% compared to the previous year, driven by continued investments in energy efficiency measures. SSE purchased 100% of its electricity for use in its facility managed offices from renewable sources, backed by renewable guarantees.</td>
</tr>
</tbody>
</table>

### Scope 3

#### Actions

<table>
<thead>
<tr>
<th>Action</th>
<th>Key progress in 2022/23</th>
</tr>
</thead>
<tbody>
<tr>
<td>11. Support customers to fuel switch and consume less gas</td>
<td>SSE actively implemented energy efficiency projects that delivered 8.79GW of energy savings with its domestic customers in 2022/23.</td>
</tr>
<tr>
<td>12. Align unabated gas power generation owned through joint ventures with a net zero pathway</td>
<td>SSE is working closely with its Joint Venture partners to put in place Net Zero Transition Plans for each power station.</td>
</tr>
<tr>
<td>13. Advocate for a pathway for decarbonised heat</td>
<td>SSE advocated for solutions to decarbonise heat networks and low carbon heat incentives through responses to government consultations and activity through its trade associations.</td>
</tr>
<tr>
<td>14. Establish a framework for supplier collaboration on net zero action</td>
<td>SSE continued to engage with its supply chain on climate matters through its partnership with the Supply Chain Sustainability School and its involvement with a carbon working group as part of its Powering Net Zero Pact.</td>
</tr>
<tr>
<td>15. Partner with the CDP supply chain engagement programme</td>
<td>SSE continued to collaborate with CDP Supply Chain expanding the number of suppliers requested to respond to CDP to 237 and a supplier response rate of 56%. SSE was awarded an ‘A’ in the CDP Supplier Engagement Rating assessment in 2023.</td>
</tr>
</tbody>
</table>

### Cross cutting actions

<table>
<thead>
<tr>
<th>Action</th>
<th>Key progress in 2022/23</th>
</tr>
</thead>
<tbody>
<tr>
<td>16. Continuous review of adaptation plans at business unit level, whilst participating fully in national adaptation frameworks</td>
<td>SSE published progress reports against previous risk assessments of a changed climate on critical infrastructure and further work was completed to reassess the impact of physical risks of climate change and update mitigation measures where required. SSE also responded to the UK Government’s consultation on national adaptation planning framework through its businesses and associated trade associations.</td>
</tr>
<tr>
<td>17. Publish annually, progress against the 20 Principles for a Just Transition, outlined in SSE’s Just Transition Strategy</td>
<td>In April 2023, SSE published a just transition report detailing its progress against its 20 Principles for a Just Transition.</td>
</tr>
</tbody>
</table>
### Governance and accountability

The framework, approved by SSE's shareholders, for reporting progress against its Net Zero Transition Plan commits SSE to update annually on the key measures and information relating to its performance in meeting its climate objectives. A summary of progress against those key measures is provided in the table.

<table>
<thead>
<tr>
<th>Key measure to disclose</th>
<th>2022/23 progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>The measures the company uses to evaluate the consistency of its economic activity with the Net Zero Transition Plan</td>
<td>SSE ensures that its economic activity is aligned with net zero and a 1.5°C pathway through its Net Zero Acceleration Programme Plus – a fully-funded £18bn strategic capital investment plan to 2027. In 2022/23 SSE completed a best-efforts approach to consider the EU Taxonomy and assess its economic activities and their compliance with the EU Taxonomy.</td>
</tr>
<tr>
<td>The measures the company uses to align its public policy engagement and external communications with the Net Zero Transition plan</td>
<td>SSE proactively advocates for more ambitious climate change policy to achieve net zero and conducts advocacy in line with the goals of the Paris Agreement and its own net zero strategy. In 2022/23 SSE’s climate advocacy was focused on the acceleration of renewables deployment to deliver net zero and avoid future cost-of-living crises. The importance of progress on decarbonising thermal generation, heat, and transport has also been an advocacy priority for the Group in 2022/23. In addition, SSE reviews its trade association membership annually to ensure that the organisations of which it is a member also advocate in line with the ambitions of the Paris Agreement.</td>
</tr>
<tr>
<td>Information regarding the governance of the Net Zero Transition Plan and any link between the company’s targets and executive remuneration</td>
<td>SSE’s approach to Executive Director 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 until 2021/22. The updated Directors’ Remuneration Policy, approved by shareholders at the 2022 AGM, has seen performance against these Goals now linked to the longer-term Performance Share Plan, which will vest for the first time in 2025.</td>
</tr>
<tr>
<td>How the company has evaluated and mitigated the impact of the net zero transition on the company’s employees, communities in which it operates and other stakeholders in the context of a just transition to being a net zero business</td>
<td>SSE’s Just Transition Strategy outlines 20 principles for a just transition to help ensure that the impacts from the decisions it takes are fair and that it maximises the opportunities for communities to benefit from net zero.</td>
</tr>
</tbody>
</table>
Appendix A

Net Zero Transition Report

Framework for annual 'say on climate' shareholder resolutions: approved July 2021

Resolution 19: Net Zero Transition report Resolution 19: that, on an advisory basis and not to diminish the role and responsibilities of the Board of Directors, shareholders accept and approve the Company’s proposal to adopt a plan to become a net zero business in its scope 1, 2 and 3 greenhouse gas emission by 2050 or sooner, consistent with limiting the average global temperature increase to 1.5°C with low or no overshoot, in line with the goals of the Paris Agreement (“Paris Goals”).

That, the Company shall hereafter:
(a) propose a resolution at each Annual General Meeting of the Company for shareholders to receive, consider and express non-binding advisory approval of SSE’s Net Zero Transition report.
(b) report annually within the Company’s annual Sustainability Report (or such other place as any or all of this information may be required by applicable rules or laws) on the terms and implementation of the Net Zero Transition plan, and in accordance with the Final Recommendations of the Task Force on Climate-related Financial Disclosures (the “Net Zero Transition report”).
(c) using the latest developments in scientific understanding, regularly update the Company’s interim greenhouse gas emission reduction targets (including scopes 1, 2 and 3) to ensure ongoing alignment with the Paris Goals.

Notes to Resolution 19: Net Zero Transition report

SSE believes that both the Company and its shareholders will benefit from enhanced engagement on climate-related issues. Having worked closely with the investor group Climate Action 100+, SSE is therefore proposing an enabling resolution to its AGM 2021 that will establish a framework for annual votes on its Net Zero Transition report at future AGMs.

It is intended that the Net Zero Transition report contemplated by the proposed resolution will include the following information, with the scope to be updated and revised from time to time in accordance with any mandatory requirements and best practice:

(a) the measures the Company uses to evaluate the consistency of its economic activity with the Net Zero Transition plan;
(b) the measures the Company uses to align its public policy engagement and external communications with the Net Zero Transition plan;
(c) information regarding the governance of the Net Zero Transition plan and any link between the Company’s targets and executive remuneration;
(d) how the Company has evaluated and mitigated the impact of the net zero transition on the Company’s employees, communities in which it operates and other stakeholders in the context of a just transition to being a net zero business;
(e) confirmation of the extent to which the Company’s overall climate risk reporting is consistent with the Final Recommendations of the Task Force on Climate-related Financial Disclosures;
(f) any applicable updates to the frameworks, relevant methodologies, timescales for goals and targets and core assumptions used in relation to the Net Zero Transition plan; and
(g) the Company’s progress on the implementation of matters the subject of the reporting requirements set out in paragraphs (a) to (g), above.

By consulting shareholders annually on its Net Zero Transition report SSE’s objective is that both the Company and its shareholders benefit from enhanced climate-related engagement.

Given that shareholders may have multiple motives when voting on such a matter, the Company wishes to clarify that if there is a significant vote against, it would hold discussions with shareholders through its Investor Relations and Environmental, Social and Governance (ESG) engagement programme and seek information from them about why they did not support the proposed resolution, inform all shareholders about the results of that process and announce its intended measures aimed at taking them into account.

* Omitting commercially confidential or competitively sensitive information, and at reasonable cost.
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