



# Powering tomorrow the right way

Sustainability summary for the year to 31 March 2023



# Providing solutions for people and planet

SSE integrates the principles of long-term sustainability within its business strategy. Factoring in environmental and social considerations within business activities is central to creating and sharing value with stakeholders, and for ensuring the continued success of the Company.

Stakeholders are vested in SSE's sustainability impacts, and SSE is committed to providing comprehensive and transparent non-financial disclosures. This short report provides a summary of SSE's sustainability impacts over 2022/23. More information about SSE's sustainability performance can be found at [sse.com/sustainability](https://sse.com/sustainability) and in its Annual Report 2023 and Sustainability Report 2023, which will be published on 16 June 2023.

SSE welcomes and encourages feedback on this statement and its approach to sustainability. You can get in touch with feedback and comments by emailing [sustainability@sse.com](mailto:sustainability@sse.com).

## SUSTAINABLE DEVELOPMENT GOALS

Since 2019, SSE has aligned its business strategy to the UN's Sustainable Development Goals (SDGs), which provide the framework to guide the creation of shared value. Within this framework SSE has identified four SDGs which are highly material to the business, and to which it has linked its four core 2030 Goals.

### A year of strong delivery again SSE's 2030 Goals

SSE's 2030 Goals are focused on addressing the challenge of climate change, while ensuring this is done in a just and fair way that creates and shares value with stakeholders. The Goals provide important milestones on the journey to net zero and place sustainability firmly at the heart of its business strategy. With updated 2030 Goals in early 2022 reflecting an accelerated decarbonisation pathway, financial year 2022/23 was marked as a year of delivery.

Reinforcing SSE's commitment to the achievement of its 2030 Goals, performance against them is linked to the long-term incentive element of executive remuneration. 2022/23 is the first year progress is measured against SSE's new, more stretching 2030 Goals announced in February 2022.

Earlier in 2022, SSE undertook a double materiality assessment, supported by a third-party, with the objective of confirming the environmental, social and governance (ESG) issues most material to its business activities. The results of the assessment reinforce the highly material nature of UN Sustainable Development Goals 13, 7, 9 and 8. More information will be published in SSE's Sustainability Report 2023 due to be published on 16 June 2023.

### SSE's 2030 Goals

 <b>Cut carbon intensity by 80%</b>	 <b>Increase Renewable energy output fivefold</b>	 <b>Enable low-carbon generation and demand</b>	 <b>Champion a fair and just energy transition</b>
<p>Reduce Scope 1 carbon intensity by 80% by 2030, compared to 2017/18 levels to 61gCO<sub>2</sub>e/kWh</p>	<p>Build a renewable energy portfolio that generates at least 50TWh of renewable electricity a year by 2030.</p>	<p>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.</p>	<p>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.</p>
			

# Accelerating climate action

## Enhancing SSE's Net Zero Transition Plan

SSE's Net Zero Transition Plan sets out for stakeholders the key actions SSE will take to drive progress towards its net zero ambitions and its interim science-based targets aligned to a 1.5°C pathway. In November 2022, SSE updated this plan, to take account of feedback from shareholders and other stakeholders. Changes involved the inclusion of SSE's joint acquisition of Triton Power, alongside further explanations on the role of neutralisation technologies in achieving net zero. SSE also added cross-cutting issues to recognise the interdependencies of climate adaptation and a just transition in achieving net zero. Progress against this Plan will be published in SSE's Net Zero Transition Report 2023, which will be published in June 2023 and will be subject to shareholder vote at SSE's July 2023 Annual General Meeting. These can be found at [sse.com/sustainability](https://sse.com/sustainability).

## Scope 1 GHG intensity performance

In 2022/23 SSE's scope 1 GHG intensity fell to 254gCO<sub>2</sub>e/kWh from 259gCO<sub>2</sub>e/kWh the previous year, representing a 2% decrease and the lowest intensity since SSE's records began. The proportion of renewable and thermal generation that made up SSE's total generation output remained similar to the previous year, however a slight decrease in scope 1 GHG intensity was seen due to SSE's thermal generation output being less carbon

intensive compared to the previous year. This was a result of reduction in output from the most carbon intensive generating plant in SSE's portfolio, including from carbon intensive oil-fuelled peaking plant in Ireland which had experienced increased demand over 2021/22 as a result of the need to balance the grid and provide security of supply in periods of constraint.

SSE's 2022/23 scope 1 GHG intensity represents a 17% decrease from the 2017/18 base year, and it remains on track towards science-based target to reduce scope 1 GHG emissions intensity by 80% by 2030.

# 17%

**Reduction in the carbon intensity of electricity generated from 2017/18 baseline**

## Absolute carbon emissions performance

SSE's total GHG emissions (scope 1, 2 and 3) increased from 9.93 MtCO<sub>2</sub>e in 2021/22 to 11.33 MtCO<sub>2</sub>e in 2022/23. This increase was driven by a 6% increase in SSE's scope 1 emissions and a 30% increase in SSE's scope 3 emissions. The increase in scope 1 GHG emissions was largely down to increased output from SSE's thermal generation plant due to market conditions and the reinstatement



**13 CLIMATE ACTION**

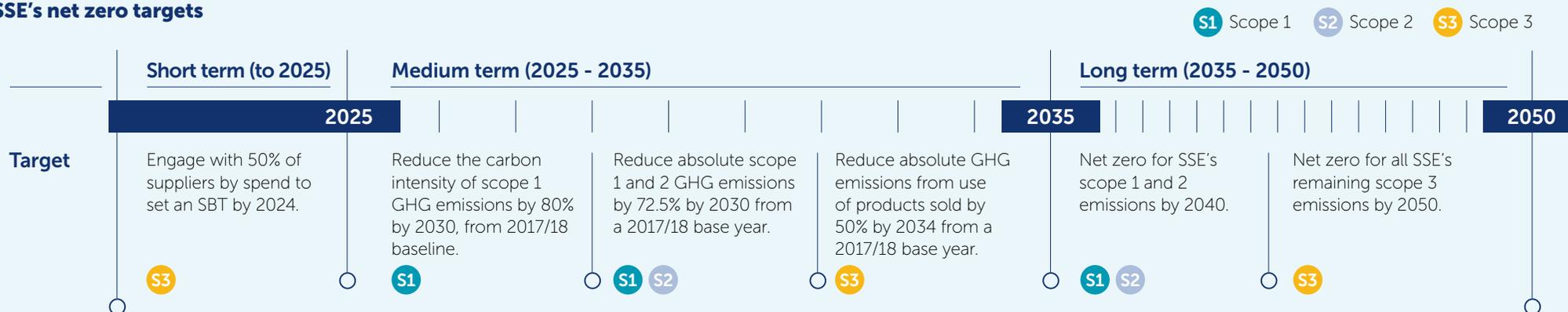
## Cut carbon intensity by 80%



While the GHG emissions from SSE's generated electricity increased by 6% between 2021/22 and 2022/23, the scope 1 GHG intensity of electricity generated remained relatively stable, falling by 2% over the same period.

of operations following outages the previous year. SSE's scope 3 GHG emissions increased significantly as a result of SSE's 50% purchase of Triton Power in September 2022, which includes Saltend gas-fired power station, and a full 12 months of GHG emissions data from SSE's 50% equity share in Seabank gas-fired power station following the end of SSE's power purchase agreement in September 2021. Prior to September 2021, 100% of Seabank GHG emissions were accounted in SSE's scope 1 emissions according to the GHG Protocol

## SSE's net zero targets



# Providing affordable and clean energy

## Increased renewable generation output

Output from SSE's renewable generation portfolio (inc. pumped storage and biomass and constrained off wind in GB) increased to 10.2TWh in 2022/23, from 9.5TWh the previous year. This was driven by increased output having experienced exceptionally still and dry weather conditions the previous year, as well as output from the operational turbines at Seagreen offshore wind farm.

## 10.2TWh\*

Total renewable generation output in 2022/23

## Progressing key offshore and onshore wind projects

While SSE experienced project delays with the 1,075MW Seagreen offshore wind farm (49% SSE stake), which contributed to renewable generation output plan being behind schedule for 2022/23, first power was achieved at the site and 84 turbines have been installed, with 53 turbines exporting power to the grid as of 18 April 2023. Progress was also made on all three phases of Dogger Bank offshore wind farm (3,600MW, 40% SSE stake), with Dogger Bank A still expecting to achieve first power during Summer 2023, assuming normal weather. Onshore, the 443MW Viking wind farm was successful in securing a Contract for Difference (CfD) in July 2022, with construction progressing well.

## 2.6GW

Renewable energy capacity in construction\*\*

## Financing the net zero transition

To support its own developments, SSE has pursued a strategy of issuing Green Bonds, when appropriate, to fund its investments. In July 2022, SSE issued a €650m seven-year Green Bond, the proceeds of which were allocated to help fund SSE Renewables'

flagship onshore and offshore wind projects which are currently under construction or recently completed. This marks SSE's fifth Green Bond in six years and reaffirms its status as one of the largest issuers of Green Bonds from the UK corporate sector. It remains the only UK corporate to offer multiple Green Bonds and this latest issuance brings SSE's total outstanding green bonds to over £2.5bn. More information can be found at [sse.com/greenbond](https://sse.com/greenbond).

## Supporting customers through exceptional times

SSE recognises the hugely challenging circumstances faced by energy consumers throughout 2022/23. In response to the cost-of-living crisis, SSE Airtricity provided a holistic range of practical measures up to the value of €25m, including targeting families who are struggling financially. The package included: holding energy costs at June 2022 levels until the end of March 2023 for up to 60,000 financially vulnerable customers; a €1m discretionary fund created to provide direct support to customers in difficulty; delivering home energy upgrades for up to 600 vulnerable households at no cost; and, a €2.5m donation to not-for-profit organisation EnergyCloud, which will help divert surplus renewable energy to up to 10,000 fuel poor homes across Ireland.

In addition, SSE Airtricity donated £2.8m to trusted charity partners to support households in need of financial assistance across the island of Ireland, regardless of who their supplier is.

SSE Airtricity is providing a customer support scheme on the island of Ireland worth up to

## €25m



### Increase renewable energy output fivefold



SSE's renewable generation output in 2022/23, while impacted by lower levels of wind resource, rose by 730GWh compared to 201/22.

## Powering domestic solar installations

SSE Airtricity has a 50% ownership share in Activ8 Solar Energies which carried out over 1,500 domestic solar installations in 2022/23, with further plans to deliver up to 40,000 installations over the next 10 years. This activity is also helping to support local jobs, with the creation of 200 highly skilled green jobs over the next two years announced by Activ8 in 2022, supporting a just transition towards net zero.

## > 1,500

domestic solar installations carried out by Activ8 Solar Energies in 2022/23

\* Total includes pumped storage, biomass and constrained-off wind in Great Britain

\*\* Based on SSE equity stake at 31 March 2023

# Investing in industry, innovation and infrastructure

## Accelerating capital investment plans to deliver net zero

In May 2023, 18 months after its initial launch, SSE's Net Zero Acceleration Programme (NZAP) was revised to reflect the increased opportunities created as the world pursues net zero. The new 'NZAP Plus' includes investment of £18bn between now and 2027, compared to £12.5bn over the five years to 2025/26 through the original NZAP, as well as a reallocation of capital investment and expenditure across the Group with an increased weighting on networks and flexible generation. The added investment means SSE's total capital expenditure equates to more than £10m a day spent on critical national infrastructure.

With around 90% of the NZAP Plus expected to be invested in either renewables or networks, the substantial majority of the investment plan is focused on climate solutions to achieve SSE's interim 2030 Goals which are linked to the UN SDGs most material to the business which, in themselves, are linked to a 1.5°C science based pathway, and is aligned to the Technical Screening Criteria of the EU Taxonomy.

## £18bn

**Planned capital investment to 2026/27 through SSE's enhanced NZAP Plus**

## Connecting renewable generation in the north of Scotland

At 31 March 2023, SSEN Transmission had just over 9GW of renewable generation capacity connected to its network in the north of Scotland, up from 7.8GW the previous year. It continued to make good progress on key projects such as the Shetland High Voltage Direct Current (HVDC) transmission link, which will see Shetland connected to the GB transmission system for the first time, and the increase to the capacity of the North East transmission network to 400kV. These strategic investments in new and upgraded infrastructure are key to help enable the continued growth in renewable electricity generation across

the north of Scotland and, factoring in the forecast growth in renewables in the remaining years of the RIIO-T2 business plan period, SSEN Transmission remains well on track to meeting, and likely exceeding, its goal to transport the renewable electricity that powers 10 million homes.

## c. 9GW

**Installed renewable capacity connected to SSEN Transmission's electricity network in the north of Scotland**

## Building thermal assets for a net zero world

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. In March, SSE Thermal confirmed that the Heavy Fuel Oil Power Station at Tarbert would close by the end of 2023, in line with environmental requirements, having provided power to Ireland for more than fifty years. In the very short-term, SSE is supporting the Irish authorities by providing temporary and emergency generation on the site but a focus on repurposing existing sites for a net zero world and supporting a just transition in Ireland, SSE Thermal is developing a new power station at the site, which would initially run on sustainable biofuel with the potential to convert to low-carbon hydrogen in the future. SSE Thermal has also progressed plans at its Aldbrough site in East Yorkshire, seeking to unite low-carbon hydrogen production, hydrogen storage and 100% hydrogen-fired power generation by the middle of the decade, bringing a first-of-a-kind value chain to the UK. Alongside this, Keadby 2 entered full commercial operation as Europe's most efficient CCGT, able to displace higher carbon generation on the system, and Keadby Carbon Capture Power Station became the first power station of its kind in the UK to achieve planning consent. These represent the next steps in



**Enable low-carbon generation and demand**



SSEN Transmission connected an additional over 1GW of additional renewable generation capacity to its network, in 2022/23, while SSEN Distribution progressed with work to support flexible markets and the adoption of low-carbon technologies.

securing power generation and employment at the Keadby site, which has moved from coal to gas over the past seventy years, with a focus now on low carbon flexible generation.

## Creating new standards in equal EV access

To ensure there is comprehensive access to the benefits of smart grids and widespread electrification, SSEN Distribution published a just transition plan in March 2023. A key component is a project called 'Equal EV', a collaboration with Disabled Motoring UK (DMUK) to identify the unique enablers and barriers faced by drivers with vulnerabilities adopting electric vehicles (EVs) and the role of technologies and Distribution Network Operators in removing barriers. In 2022, the Equal EV project fed into the creation of the British Standard Institution PAS 1899, a new specification on accessible public charge points for EVs covering the design of charge points, including the location spacing and surrounding environment, as well as the appropriate information, signals and indicators to be provided. In addition, DMUK launched a parking standard called which signposts off-street car parks that are accessible to disabled people and will soon include a dedicated section on EV charge point provision.

# Delivering decent work and economic growth

## Creating and sharing economic value

The payment of taxes, supporting good jobs and contributing to GDP continue to be the foundation of SSE's social impact. Every year SSE commissions an independent assessment of the value it adds to GDP and the jobs it supports across the UK, Scottish and Irish economies. Over 2022/23, SSE contributed an estimated £6.04bn to UK and €429m to Irish GDP. This represented a slight increase compared to 2021/22 figures, which were £5.98bn and €417m respectively (adjusted for current prices). Jobs supported in these countries fell from 47,130 in 2021/22 to 42,370 in 2022/23, due to a reduction in supply chain spend. More detail on SSE's contribution to GDP and jobs supported in 2022/23 can be found in SSE's Sustainability Report 2023.

## Paying a fair share of tax

SSE considers the responsible payment of tax a core element of how it shares value with society. SSE was the first FTSE100 company to be Fair Tax accredited in 2014, and in 2022/23 it became the first company to transition from the Fair Tax Foundation's UK HQ Multinational accreditation to its new Global Multinational Business Standard, demonstrating an ongoing commitment to uphold the principles of fair tax as it expands internationally. Furthermore, with its long-standing commitment to fair tax, and in the context of the UK's Energy Generator Levy, SSE recognises that taxing extraordinary profits is reasonable where those profits occur. It does believe, however, that a greater contribution can be made if those profits are reinvested in home-grown energy.

Over 2022/23, SSE's total tax contribution was £1.3bn, consisting of £549m taxes paid (including £217m corporation tax) and £764m taxes collected. More information will be available in SSE's Sustainability Report 2023, to be published on 16 June 2023, and SSE's Talking Tax Report due to be published later in the year.



Champion a fair and just energy transition



SSE continued its thought leadership position around the just transition, publishing a report detailing progress against the 20 principles of its Just Transition strategy. SSE also became the first company to transition from the Fair Tax Foundation's UK HQ Multinational accreditation to the Foundation's new Global Multinational Business Standard.

### SSE's UK and Irish GDP contribution, jobs supported and taxes paid for 2022/23

UK contribution to GDP

**£6.04bn**

2021/22: £5.98bn

UK jobs supported

**39,940**

2021/22: 45,290

UK taxes paid

**£502m**

2021/22: £335m

Ireland contribution to GDP

**€429m**

2021/22: €417m

Ireland jobs supported

**2,430**

2021/22: 1,840

Ireland taxes paid

**€53.8m**

2021/22: €46.4m

2021/22 contribution to GDP figures have been adjusted to current prices.



## Delivering decent work and economic growth cont.

### Leading on a just transition

In April 2023, SSE sought to maintain its thought leadership around the just transition, hosting a multi-stakeholder event in London which aimed to normalise the just transition within corporate climate discourse, enhancing accountability and bringing the just transition from concept to action. SSE's Just transition: measuring progress report was launched at the event, details progress against the 20 principles of SSE's Just Transition Strategy. In addition, a short documentary, first released in March 2023, was aired at the event, which features voices of SSE employees with the lived experience of transitioning from high- to low-carbon work, supplemented by the perspectives of the Prospect trade union and environmental NGO WWF, bringing the notion of a just transition to life. The report and the short documentary can be found at [sse.com/sustainability/just-transition](https://sse.com/sustainability/just-transition).



### A welcome and positive trend in gender pay gap performance

Between 2021/22 and 2022/23, SSE saw a positive trend in its headline UK gender pay gap statistics. SSE's UK median gender pay gap reduced from 18.0% at 5 April 2022 to 15.3% at 5 April 2023. This reduction was driven by three main factors:

- An interim cost-of-living pay increase, with a higher percentage paid to those on lower salaries who are most affected by the rise in living costs. At SSE representation of women is highest in the lower and lower-middle pay quartiles, resulting in a higher percentage of female employees receiving the highest award. The full impact of the 2022/23 pay award on SSE's gender pay gap will not be fully understood until the second part of the award is made for full year in the first quarter of 2023/24 (backdated to 1 April 2023).
- SSE introduced a new skill-based Pay Progression model in 2021, which saw employees' salaries being mapped according to their skill-level. This resulted in many employees receiving salary

uplifts, mainly those in the lower pay quartile. As SSE has higher female representation in this quartile, this meant a high number of women received a pay increase. Over 2022/23, the positive impact of this new pay model on the gender pay gap has continued with a slightly higher proportion of female employees progressing through the pay progression framework.

- An increase in women represented in high-paid roles, classed as those earning over £100,000 per year, which exceeded the increase of men represented in these roles over the same period.

More detail can be found in SSE's Sustainability Report 2023 and Inclusion and Diversity Report 2023, to be published on 16 June 2023.

### Sharing value directly with local communities

Achieving a just transition depends, in part, in the ability to share the benefits of new low carbon infrastructure, where possible. During 2022/23, SSE invested around £16.5m in communities across the UK and Ireland. This included £10m awarded through SSE Renewables community funds, £1.4m awarded through SSEN's Resilient Communities Fund, and around £5m of donations made directly to charitable groups by SSE Airtricity to support with the cost-of-living crisis (see page 3), alongside smaller contributions from employee-led initiatives.

### SSE's investment in communities across the UK and Ireland over 2022/23

**£16.5m**

\*Contribution to GDP and jobs supported information from PwC analysis, which can be found at [sse.com/sustainability](https://sse.com/sustainability)



# Protecting the natural environment

## A strategic approach to environmental protection

SSE recognises that while reducing GHG emissions is the most material environmental impact it must make, it also must consider the wider impacts on the natural environment. Reducing nature loss impacts and providing opportunities to enhance biodiversity will support SSE to meet its wider net zero ambitions. SSE's Environment Strategy is centred around three environmentally focussed SDGs: Life Below Water (SDG14), Life Above Land (SDG15) and Responsible Consumption & Production (SDG12); and is supported by policies and procedures that guide SSE's day-to-day operations. SSE operates an environmental management system which sets the controls, processes and procedures, and following a number of SSE's Business Units achieving all ISO14001, all of SSE's operational businesses are now accredited.

Further detail around SSE's approach to managing environmental impacts, including information on its ISO14001 certification, can be found in SSE's **Sustainability Report 2023**.

## Developing tools to ensure Biodiversity Net Gain

Biodiversity Net Gain (BNG) is an approach to development that aims enhance the natural environment, leaving it in a better state than it was to support diverse ecosystems. It involves measuring the initial level of biodiversity, then taking steps to restore or reinforce the natural environment, to create a net positive impact.

In 2022/23, for onshore Large Capital Projects, all of SSE's Business Units have committed to delivering no 'net loss' in biodiversity on those consented from 2023 onwards and 'net gain' in biodiversity on those consented from 2025 onwards.

SSE is committed to deliver **Biodiversity Net Gain by 2025** On all onshore Large Capital Projects in the UK and Ireland

Following the publication of SSEN Transmission's site optioneering toolkit in 2020, in 2022, SSE Renewables launched its optioneering toolkits and project biodiversity net gain metric at COP27, which has adapted the SSEN Transmission site optioneering toolkit and the Defra Biodiversity Metric 3.1. SSE Renewables developed these with input from several stakeholders, including environmental experts, regulators, and peers, and seeks to enable the development of a consistent methodology for quantifying BNG across the energy sector. More information can be found at [www.sserenewables.com/sustainability/biodiversity-net-gain](http://www.sserenewables.com/sustainability/biodiversity-net-gain).

## Circular economy and waste

Circularity is a growing area of focus for SSE as it aims to promote sustainability, efficiency, and resilience by recycling and repurposing materials.

SSE continues to improve its policies and practices around waste management. In 2022/23, SSE managed a total of 6,063 tonnes of waste, 14.7% increase compared to the previous year. This increase was due to SSE widening the scope and improving the accuracy of its waste data. In 2022/23, SSE recycled 65% (including 3% composted) of total waste produced, up from 60% (including 1% composted) the previous year. Waste sent to landfill more than halved compared to 2021/22, with just 5% of waste being processed in this way. More than a quarter of waste was processed as energy from waste.

was a result of improved recycling processes and waste data collection implemented at sites. Further details will be published in the **Sustainability Report 2023** on 16 June 2023.

## Managing water use

Water plays a significant role in SSE's operations, being used in the energy production process including as a coolant in power stations and a source for power generation in hydroelectric generators. In 2022/23, SSE abstracted a total of 23,353 million m<sup>3</sup> water, 2.3% less than in 2021/22. This decrease was largely due to lower rainfall levels resulting in less water available to pass through the hydro generation plant, which accounts for the majority (97%) of SSE's water abstraction. SSE's total water abstracted excluding hydro operations also fell slightly over this period, from 779 million m<sup>3</sup> in 2021/22 to 731 million m<sup>3</sup> in 2022/23. This was predominantly due to an unplanned outage at a thermal power station that uses a once through (direct) cooling water system. Such assets have higher abstraction rates than stations with cooling tower systems.

You can read more about what SSE is doing to manage its environmental impacts and resource use, including air emissions and energy consumption, in the **Sustainability Report 2023**.

## A coalition for circularity in the wind sector

To support the acceleration of a circular economy for the UK wind sector, this year SSE Renewables, the University of Strathclyde and Scottish-based SME Renewable Parts Ltd joined forces to launch CWIC, the Coalition for Wind Industry Circularity. CWIC aims to stimulate collaboration between industry peers, suppliers, and government agencies to unlock and deliver economic, social, and environmental opportunities. There are immediate opportunities in the repair and maintenance of existing wind assets, and a longer-term prize through the design of future wind technology both onshore and offshore.

Total water abstracted by SSE (excluding hydro generation) (million m<sup>3</sup>)

