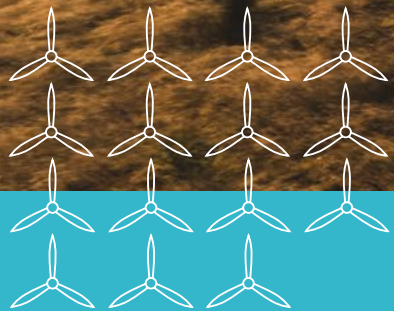




SSE's Green Bond reporting

SSE's Green Bond Report 2023



SSE's Green Bond reporting

SSE has issued five green bonds, three with SSE plc as the issuer: €650m in July 2022, €650m Green Bond issued in September 2018 and its inaugural €600m Green Bond issued in September 2017 and two with Scottish Hydro Electric Transmission plc ("SHET") as the issuer: £500m in March 2021 and £350m in September 2019. This means that SSE continues to be one of the largest issuers of Green Bonds in the UK corporate sector.

SSE plc disposed 25% of its equity share in SHET to Ontario Teachers' Pension Plan Board on 30 September 2022. Considering SSE plc is still a majority shareholder this report captures SHET on a 100% basis. This approach matches how SHET's debt is reported in the SSE plc Group Annual Accounts and has been discussed and agreed with SSE's legal and finance advisors.

This report constitutes SSE's sixth annual Green Bond update to investors and covers the allocation of proceeds and

environmental impact from SSE's five Green Bonds in accordance with its Green Bond Frameworks 2017 and 2019 and the most recently updated version in March 2021. These frameworks can be found at <https://www.sse.com/greenbond>.

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

Directors' Statement on SSE plc Selected Green Bond Information

As the Directors of SSE plc "SSE" we confirm that we are solely responsible for the preparation of SSE's Selected Green Bond Information including this Directors' Statement and for reporting the Selected Green Bond Information in accordance with the reporting criteria set out on [sse.com/greenbond](https://www.sse.com/greenbond).

We confirm, to the best of our knowledge and belief, that we have:

- designed, implemented and maintained internal controls and processes over information relevant to the measurement, evaluation and preparation of Selected Green Bond Information that is free from material misstatement, whether due to fraud or error;
- established objective reporting criteria for preparing and presenting the Selected Green Bond Information, including clear definition of the entity's organisational boundaries, and applied them consistently;
- presented information, including the reporting criteria, in a manner that provides relevant, complete, reliable, unbiased/neutral, comparable and understandable information;
- reported the Selected Green Bond Information in accordance with the reporting criteria.

Rachel McEwen,
Chief Sustainability Officer

For and on behalf of the Board of Directors of SSE plc.
5 July 2023.



Allocation of proceeds

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.

Table 1 provides the details of SSE's five Green Bonds, including the total value allocated to eligible green projects in Sterling.

The proceeds of Green Bond 1 (issued in 2017) and Green Bond 2 (issued in 2018) have been allocated to refinancing of part of SSE's £1.3bn portfolio of eligible projects of onshore wind farms in the UK and Ireland and the Caithness-Moray HVDC (High Voltage Direct Current) connection which is part of SHET's large capital investment programme, as listed in SSE's Green Bond Framework 2017.

The proceeds of Green Bond 3 and Green Bond 4 have been allocated to refinancing part of SHET's large capital investment programme of eligible transmission network projects in the UK. The latest investments in transmission networks in the north of Scotland are primarily required to provide energy transportation between Scottish renewable generation supply and the UK electricity customer demand. On 30 September 2022, SSE completed a 25% minority interest disposal of the SSEN Transmission business to Ontario Teachers' Pension Plan Board. The reported actual capex and qualifying capacity has been disclosed at 100% considering SSE's majority shareholding.

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.

It is SSE's intention, where possible, to maintain a ratio of 1.2 to 1 of eligible green projects to total Green Bonds outstanding to ensure there is sufficient capacity for any future reallocation of proceeds in the event of an equity sale of an eligible green project.



Table 1: SSE plc's Green Bonds

	Green Bond 1	Green Bond 2	Green Bond 3	Green Bond 4	Green Bond 5
Issuer	SSE plc	SSE plc	SHET	SHET	SSE plc
Currency	EURO	EURO	GBP	GBP	EURO
ISIN	XS1676952481	XS1875284702	XS2057092236	XS2321663473/XS2322933495	XS2510903862
Size	€600,000,000	€650,000,000	£350,000,000	£500,000,000 (Dual Tranche) (£250,000,000 per tranche)	€650,000,000
GBP:EUR conversion rate at settlement	1.09404	1.0990	N/A	N/A	1.1950
GBP equivalent at settlement	£548,426,017.30	£591,446,676.80	£350,000,000	£500,000,000 (Dual Tranche)	£543,933,054.39
Pricing date	30 August 2017	28 August 2018	20 September 2019	17 March 2021	25 July 2022
Settlement date	6 September 2017	4 September 2018	27 September 2019	24 March 2021	1 August 2022
Maturity date	6 September 2025	4 September 2027	27 September 2035	24 March 2028/24 March 2036	1 August 2029
Coupon	0.875%	1.375%	2.25%	1.50%/2.125%	2.875%

Environmental impact of SSE's Green Bonds

To report the environmental impact of the Green Bonds, SSE considers the impacts outlined below in relation to its onshore wind farm projects and transmission networks projects.

Onshore and offshore wind farm green projects: The emissions associated with the production of electricity at a wind farm are assumed to be zero. The GHG Protocol for Project Accounting¹ states that for wind generation projects the primary effect of these projects is to reduce the combustion emissions from generating grid-connected electricity and that this should be used as the baseline or counterfactual. Therefore, SSE calculates the estimated qualifying emissions avoided by taking the financial year output (MWh) and multiplies this by the UK grid carbon equivalent emission conversion factors to report the environmental impact of the projects. The criteria for Green Bond reporting is described at sse.com/greenbond.

Transmission networks, Caithness-Moray: Caithness-Moray is a HVDC technology used to transmit power through 113km

of subsea cable beneath the Moray Firth seabed between the new converter stations at Spittal in Caithness and Blackhillock in Moray. For the Caithness-Moray transmission link, the environmental impact of the project refers to the 1,200MW² of capacity installed to transmit renewable power from the north of Scotland across the UK. The project has already facilitated the connection of 985MW of renewable generation to connect to the national grid. This includes turbines from Beatrice offshore wind farm (588MW capacity) and Dorenell onshore wind farm (117MW capacity on completion).

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

Transmission networks, Scottish Hydro Electric Transmission plc (SHET) projects: For the eligible transmission network projects used for allocating proceeds from Green Bond 3 and Green Bond 4, the environmental impact of the projects relates to 7,067.9MW (including

Caithness-Moray and Shetland transmission links) of capacity for renewable generation connections with a further 5,073.0MVA of new or upgraded transmission infrastructure to accept additional power from new renewable projects and to transmit that power from the north of Scotland to the appropriate regions in the UK.

These transmission projects will for example connect turbines from Stronelairg (228MW), Dorenell (117MW) and Kyllachy (48.5 MW) onshore wind farms and the Aberdeen Offshore wind farm (99MW).

Tables 2 to 6 detail the environmental impact from the green projects which the Green Bond proceeds were allocated to.

For all five Green Bonds, allocation of bond proceeds and environmental impact metrics were subject to external independent limited assurance by PricewaterhouseCoopers LLP ('PwC'). The assurance statement and the criteria used for reporting can be found at sse.com/greenbond.

¹ GHG Protocol for Project Accounting: https://ghgprotocol.org/sites/default/files/standards/ghg_project_accounting.pdf

² For this transmission link, the actual electricity transmitted is controlled by National Grid Electricity System Operator.

Green Bond 1 issued 2017

Table 2: Allocation of Green Bond proceeds and green project impact to refinancing eligible green projects for Green Bond 1.

Type of eligible green project	Eligible green project	Total actual capex spend (£m) **	Capacity fully operational (MW) */ Qualifying capacity (MW) **	Date fully operational	Allocation of Green Bond 1 proceeds (£m)	Qualifying output (GWh) ^{(1) (2)}	Estimated qualifying emissions avoided (tCO ₂ e) ^{(1) (2)}
Onshore wind farm	Strathy North	102.9	67/67	Nov 2015	102.9	117.7	22,761.2
Onshore wind farm	Tievenameenta	42.9	34/34	Feb 2017	41.5	96.7	18,708.2
Onshore wind farm	Comhlach Gaoithe Teoranta (Galway Wind Park)	85.6	66/66	Jun 2017	81.9	164.3	31,778.5
Onshore wind farm	Dunmaglass	88.9	94/47	Aug 2017	88.9	151.3	29,257.2
Onshore wind farm	Clyde Extension (part of Clyde Windfarm (Scotland) Limited)	100.3	173/87	Sep 2017	100.1	203.5	39,351.5
Onshore wind farm	Bhlaraidh	117.1	108/108	Oct 2017	106.6	203.8	39,412.1
Total contribution	Onshore wind farm project	537.7	542/409		521.9	937.4	181,268.7
HDVC transmission connection ⁽³⁾	Caithness-Moray transmission link ⁽⁴⁾	1,020.0	1,200/1,200	Jan 2019	26.5	-	-
Total contribution	Onshore wind farms and Caithness-Moray transmission link	1,557.7^(A)	1,742^(A) /1,609^(A)		548.4^(A)	937.4^(A)	181,268.7^(A)

*Capacity fully operational reflects the total capacity of the project in MW.

**Reported actual capex and qualifying capacity reflect SSE's 50.1% ownership in Clyde Windfarm (Scotland) Limited and Dunmaglass wind farms.

(1) Reported qualifying output and estimated qualifying emissions avoided reflects SSE's 50.1% ownership in Dunmaglass and Clyde Windfarm (Scotland) Limited wind farms.

(2) Green Bond 1 qualifying output (GWh) and estimated qualifying emissions avoided (tCO₂e) for reporting period 1 April 2022 to 31 March 2023.

(3) For this transmission link, the actual electricity transmitted is controlled by National Grid Electricity System Operator.

(4) Caithness-Moray transmission link features in Green Bonds 1, 2 and 3 so the total capex spend for this project is included in tables 2, 3 and 4. The green impact of Caithness-Moray refers to the 1,200MW of capacity that transmits power from the north of Scotland across the UK. The project has already facilitated the connection of renewable generation to connect to the national grid. This includes the Beatrice offshore wind farm (588MW capacity on completion) and Dorenell onshore wind farm (117MW capacity on completion). The project supports the additional connection of onshore renewable generation on the mainland as well as the Scottish Islands of the Western Isles, Orkney and Shetland.

(A) This data was subject to external independent limited assurance by the UK firm of PricewaterhouseCoopers LLP ('PwC'). For the results of that assurance, see PwC's assurance report and SSE's Green Bond Reporting Criteria at [sse.com/greenbond](https://www.sse.com/greenbond).

Green Bond 2 issued 2018

Table 3: Allocation of Green Bond proceeds and green project impact to refinancing eligible green projects for Green Bond 2.

Type of eligible green project	Eligible green project	Total actual capex spend (£m) **	Capacity fully operational (MW) */ Qualifying capacity (MW) **	Date fully operational	Allocation Green Bond 2 proceeds (£m)	Qualifying output (GWh) ^{(1) (2)}	Estimated qualifying emissions avoided (tCO ₂ e) ^{(1) (2)}
Onshore wind farm	Leanamore	30.8	18/18	Feb 2018	30.8	56.0	10,830.6
Onshore wind farm	Stronelairg	147.6	228/114	Dec 2018	147.6	338.3	65,421.5
Total contribution	Onshore wind farm project	178.4	246/132		178.4	394.3	76,252.1
HDVC Transmission connection ⁽³⁾	Caithness-Moray transmission link ⁽⁴⁾	1,020.0	1,200/1,200	Jan 2019	413.0	-	-
Total contribution	Onshore wind farms and Caithness-Moray transmission link	1,198.4^(A)	1,446^(A) / 1,332^(A)		591.4^(A)	394.3^(A)	76,252.1^(A)

*Capacity fully operational reflects the total capacity of the project in MW.

**Reported actual capex and qualifying capacity reflect SSE's 50.1% ownership in Stronelairg wind farm.

(1) Reported qualifying output and estimated qualifying emissions avoided reflects SSE's 50.1% ownership in Stronelairg wind farm.

(2) Green Bond 2 qualifying output (GWh) and estimated qualifying emissions avoided (tCO₂e) for reporting period 1 April 2022 to 31 March 2023.

(3) For this transmission link, the actual electricity transmitted is controlled by National Grid Electricity System Operator.

(4) Caithness-Moray transmission link features in Green Bonds 1, 2 and 3 so the total capex spend for this project is included in tables 2, 3 and 4. The green impact of Caithness-Moray refers to the 1,200MW of capacity that transmits power from the north of Scotland across the UK. The project has already facilitated the connection of renewable generation to connect to the national grid. This includes the Beatrice offshore wind farm (588MW capacity on completion) and Dorenell onshore wind farm (117MW capacity on completion). The project supports the additional connection of onshore renewable generation on the mainland as well as the Scottish Islands of the Western Isles, Orkney and Shetland.

(A) This data was subject to external independent limited assurance by the UK firm of PricewaterhouseCoopers LLP ('PwC'). For the results of that assurance, see PwC's assurance report and SSE's Green Bond Reporting Criteria at [sse.com/greenbond](https://www.sse.com/greenbond).

Green Bond 3 issued 2019

Table 4: Allocation of Green Bond proceeds and green project impact to refinancing eligible green projects for Green Bond 3.

SHET eligible green projects*	Energised ⁽¹⁾	Total actual capex spend (£m) ⁽²⁾	Qualifying project capacity ^{(3) (4)}	Allocation of Green Bond 3 proceeds (£m)
Caithness-Moray transmission link ⁽⁵⁾	Jan 2019	1,020.0	1,200 MW	107.0
Connecting offshore transmission company projects				
Moray Firth OTFO connection (New Deer)	May 2021	4.8	900MW	3.1
Connecting distribution projects				
Rannoch GSP (Corrour Hydro)	Aug 2017 ⁽⁶⁾	5.1	5.5MW	5.1
Coupar Angus GSP (Tullymurdoch & Welton of Creuchies)	Aug 2017	9.4	31.7MW	9.4
Rothienorman GSP (Rothmaisie)	June 2021	0.2	90.1MW	0.2
Fort William GSP	Oct 2018	7.1	24MW	7.1
Connecting onshore renewable projects				
Aberdeen Offshore wind farm	May 2018	14.1	99MW	9.2
Dorenell windfarm	Aug 2018	28.2	117MW	28.2
Stronelaig windfarm	Mar 2018	114.1	228MW	90.2
Beauly – Tomatin				
Beauly – Tomatin (Boat of Garten Reconductoring)	Dec 2019	86.1	782MVA	38.0
Beauly to Keith OHL Replacement	June 2021	13.6	230MVA	13.0
Loch Buidhe to Dounreay 275kV	May 2020	3.9	167MVA	3.9
Rothienorman Substation & Rothienorman – Kintore Reconductoring	Aug 2021	4.0	580MVA	4.0
Fort Augustus 400/132kV	May 2022	6.1	960MVA	6.1
Fort William to Fort Augustus (FFE/FFW)	Sep 2019	43.5	220MVA	23.8
Fort William GSP Infrastructure	Oct 2018	1.7	See Fort William GSP above	1.7
Total		1,361.9 ^(A)	2,695.3MW ^(A) / 2,939.0MVA ^(A)	350.0 ^(A)

(1) Refers to the status of the project. Energised means the project is completed and a date of completion is provided.

(2) Actual capex spend to 31 March 2019.

(3) MW refers to the total installed capacity of new renewable (onshore and offshore renewable energy) generation projects that are connecting to the transmission network, and the power rating of new HVDC transmission systems (in this case the Caithness-Moray transmission link).

(4) MVA refers to the new or increased power rating of the new or upgraded transmission infrastructure needed to enable the power from new additional renewable energy to flow through the existing alternating current (AC) system. This infrastructure is not attributable to specific renewable energy projects.

(5) Caithness-Moray transmission link project features in Green Bonds 1, 2 and 3 so the total capex spend for this project is included in tables 2, 3 and 4. The green impact of Caithness-Moray refers to the 1,200MW of capacity that transmits power from the north of Scotland across the UK. The project has already facilitated the connection of renewable generation to connect to the national grid. This includes the recently connected turbines from Beatrice offshore wind farm (588MW capacity on completion) and Dorenell onshore wind farm (117MW capacity on completion). The project supports the additional connection of onshore renewable generation on the mainland as well as the Scottish Islands of the Western Isles, Orkney and Shetland.

(6) Rannoch GSP was energised in August 2017, there was minor construction work ongoing until March 2019 and therefore the completion date of the project was March 2019.

* For the pipeline of SHET projects, the green impact for this report relates to 2,695.3MW (including Caithness-Moray transmission link) of capacity for renewable generation connections with a further 2,939.0MVA of new or upgraded transmission infrastructure to accept additional power from new renewable projects and to transmit that power from the north of Scotland to the appropriate regions in the UK. These transmission projects will for example connect turbines from Dorenell onshore wind farm (117MW capacity on completion), Stronelaig onshore wind farm (228MW capacity) and Aberdeen Offshore wind farm (99MW).

(A) This data was subject to external independent limited assurance by the UK firm of PricewaterhouseCoopers LLP ('PwC'). For the results of that assurance, see PwC's assurance report and SSE's Green Bond Reporting Criteria at [sse.com/greenbond](https://www.sse.com/greenbond).

Green Bond 4 issued 2021

Table 5: Allocation of Green Bond proceeds and green project impact to refinancing eligible green projects for Green Bond 4.

SHET eligible green projects*	Construction/ Energised ⁽¹⁾	Total actual capex spend (£m) ⁽²⁾	Qualifying project capacity ^{(3) (4)}	Allocation of Green Bond 4 proceeds (£m)
Connecting offshore transmission company projects				
Moray Firth OTFO connection (New Deer)	May 2021	32.7	900MW	32.7
Connecting distribution projects				
Rothienorman GSP (Rothmaisie)	June 2021	8.6	90.1MW	8.6
Connecting onshore renewable projects				
Dorenell windfarm	Aug 2018	0.4	117MW	0.4
Stronelairg windfarm	Mar 2018	16.2	228MW	16.2
Beauly – Tomatin	Dec 2019	29.7	782MVA	29.7
Beauly – Tomatin (Boat of Garten Reconductoring)				
Beauly to Keith OHL Replacement	June 2021	17.3	230MVA	17.3
Loch Buidhe to Dounreay 275kV	May 2020	17.7	167MVA	17.7
Rothienorman Substation & Rothienorman – Kintore Reconductoring	Aug 2021	60.4	580MVA	60.4
Fort Augustus 400/132kV	May 2022	51.5	960MVA	51.5
Fort William to Fort Augustus (FFE/FFW)	Sep 2019	17.0	220MVA	17.0
Kyllachy windfarm (transformer and OHL infrastructure (TCA and H1)	April 2021	6.1	48.5MW	6.1
Lairg to Loch Buidhe OHL	June 2022	27.9	607MVA	27.9
Carradale GSP reinforcement (TCA)	Oct 2022	8.3	39.1MW	8.3
Keith to Blackhillock 132kV	Oct 2020	15.8	87MVA	15.8
Connecting offshore renewable projects				
Tealing 275kV Busbar East Coast	Dec 2021	33.4	1,075MW	33.4
Shetland HVDC	Due July 2024	125.7	600MW	125.7
Connecting onshore/ offshore renewable projects				
Tealing PST (ECU2)	Due Oct 2023	4.3	610MW	4.3
Alyth	Due Oct 2023	5.3		5.3
NE400 upgrades	Due Oct 2023	19.4	1,440MVA	19.4
Eastern subsea HVDC link	Due Oct 2029	2.3	2,000MW	2.3
Total		500.0^(A)	5,707.7MW ^(A) / 5,073.0MVA ^(A)	500.0^(A)

- (1) Refers to the status of the project. Construction means the project is still in construction and a due date for project completion is given and energised means the project is completed and a date of completion is provided.
- (2) Actual capex spend from 1 April 2020 to 31 March 2021.
- (3) MW refers to the total installed capacity of new renewable (onshore and offshore renewable energy) generation projects that are connecting to the transmission network, and the power rating of new HVDC transmission systems (in this case the Eastern subsea HVDC link).
- (4) MVA refers to the new or increased power rating of the new or upgraded transmission infrastructure needed to enable the power from new additional renewable energy to flow through the existing alternating current (AC) system. This infrastructure is not attributable to specific renewable energy projects.

* For the pipeline of SHET projects, the green impact for this report relates to 5,707.7MW (including Shetland transmission link) of capacity for renewable generation connections with a further 5,073.0MVA of new or upgraded transmission infrastructure to accept additional power from new renewable projects and to transmit that power from the north of Scotland to the appropriate regions in the UK. These transmission projects will for example connect turbines from Kyllachy (48.5 MW) and Stronelaig (228MW) onshore wind farms.

(A) This data was subject to external independent limited assurance by the UK firm of PricewaterhouseCoopers LLP ('PwC'). For the results of that assurance, see PwC's assurance report and SSE's Green Bond Reporting Criteria at [sse.com/greenbond](https://www.sse.com/greenbond).



Green Bond 5 issued 2022

Table 6: Allocation of Green Bond proceeds and green project impact to refinancing eligible green projects for Green Bond 5.

Type of eligible green project	Eligible green project	Total actual capex spend (£m) ⁽³⁾	Capacity fully operational (MW) */ Qualifying capacity (MW) **	Date fully operational	Allocation Green Bond 5 proceeds (£m)	Qualifying output (GWh) ^{(1) (2)}	Estimated qualifying emissions avoided (tCO ₂ e) ^{(1) (2)}
Onshore wind farm	Viking	166.0	443/ 443	Due Aug 2024	166.0	0.0	0.0
Onshore wind farm	Gordonbush Extension	37.2	38/ 38	Aug 2021	37.2	64.3	12,430.1
Offshore wind farm	Seagreen 1 (49.0%)	477.2	1,075/ 527	Due Aug 2023	340.7	345.3	66,768.7
Total contribution	Onshore and offshore wind farm project	680.4 ^(A)	1,556 ^(A) / 1,008 ^(A)		543.9 ^(A)	409.6 ^(A)	79,198.8 ^(A)

*Capacity fully operational reflects the total capacity of the project in MW.

**Reported actual capex and qualifying capacity reflecting SSE's 49.0% ownership in Seagreen 1 wind farm.

(1) Reported qualifying output and estimated qualifying emissions avoided reflects SSE's 49.0% ownership in Seagreen 1 wind farm.

(2) Green Bond 5 qualifying output (GWh) and estimated qualifying emissions avoided (tCO₂e) for reporting period 1 April 2022 to 31 March 2023.

(3) Actual capex spend from 1 April 2020 to 31 March 2022.

(A) This data was subject to external independent limited assurance by the UK firm of PricewaterhouseCoopers LLP ('PwC'). For the results of that assurance, see PwC's assurance report and SSE's Green Bond Reporting Criteria at [sse.com/greenbond](https://www.sse.com/greenbond).

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