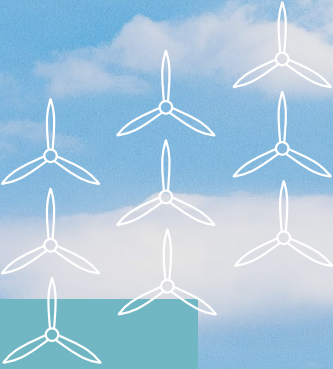
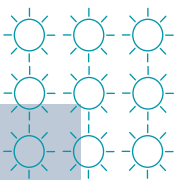


# Green Bond Reporting Criteria



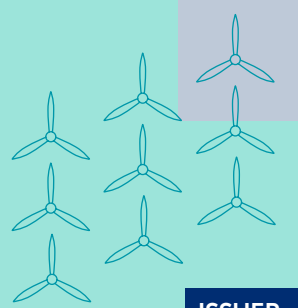


# Scope

This covers investment in Eligible Green Projects as detailed in SSE’s Green Bond Frameworks refinanced by the three Green Bonds issued by SSE plc: €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.

SSE plc has 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. Therefore SHET’s 2019 and 2021 Green Bonds will continue to be reported on a 100% basis.

ISSUER	Green Bond 2017 Green Bond 1	Green Bond 2018 Green Bond 2
	SSE plc	SSE plc
Currency	EURO	EURO
ISIN	XS1676952481	XS1875284702
Size	€600,000,000	€650,000,000
GBP:EUR conversion rate at settlement	1.09404	1.0990
GBP equivalent at settlement	£548,426,017.30	£591,446,676.80
Pricing date	30 August 2017	28 August 2018
Settlement date	6 September 2017	4 September 2018
Maturity date	6 September 2025	4 September 2027
Coupon	0.875%	1.375%
Green Bond Framework	<u>2017 Green Bond Framework</u>	<u>2017 Green Bond Framework</u>



ISSUER	Green Bond 2019 Green Bond 3	Green Bond 2021 Green Bond 4	Green Bond 2022 Green Bond 5
	SHET	SHET	SSE plc
Currency	GBP	GBP	EURO
ISIN	XS2057092236	XS2321663473/ XS2322933495	XS2510903862
Size	£350,000,000	£500,000,000 (Dual Tranche) (€250,000,000 per tranche)	€650,000,000
GBP:EUR conversion rate at settlement	N/A	N/A	1.1950
GBP equivalent at settlement	£350,000,000	£500,000,000	£543,933,054.39
Pricing date	20 September 2019	17 March 2021	25 July 2022
Settlement date	27 September 2019	24 March 2021	1 August 2022
Maturity date	27 September 2035	24 March 2028/ 24 March 2036	1 August 2029
Coupon	2.25%	1.5%/ 2.125%	2.875%
Green Bond Framework	<u>2019 Green Bond Framework</u>	<u>2021 Green Bond Framework</u>	<u>2021 Green Bond Framework</u>



# Green Bond Framework

Under SSE's Green Bond Framework, SSE committed to the following reporting:

## Allocation Reporting

Allocation reporting will be available to investors within one year from the date of each Green Bond settlement as specified in the Green Bond Framework. There will be one report after settlement, as the proceeds will be used for the refinancing of projects, thus the whole amount raised will be employed at settlement. Where SSE refinances its equity share within a joint venture it will be reported on an equity stake basis. Should there be any variance in the initial allocation reporting, such as divestments, SSE will update the allocation report in its Annual Green Bond Report on SSE's website. SSE's Annual Green Bond Report will be published prior to the Annual General Meeting (AGM) which takes place in July.

## Impact Reporting

SSE will provide investors with information in its Annual Green Bond Report on SSE's website regarding the environmental impact of the category of projects on an annual basis until the maturity of the Green Bond. This reporting will include relevant environment metrics related to the eligible Green Bond projects, for example the estimated qualifying carbon emissions avoided and qualifying renewable electricity capacity and output. These metrics will be on the basis of SSE's equity stake.

The environmental impact reporting for the Caithness-Moray transmission link and other SHET Eligible Green Projects connecting renewable generation to the network is reported qualitatively to reflect the nature of the projects.

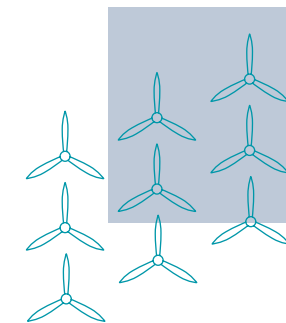
## Methodology Statement of Proceeds

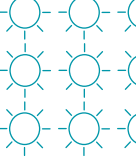
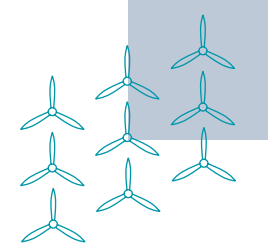
For each Green Bond all proceeds were fully employed at settlement. This is confirmed by taking the total capital expenditure on the Eligible Green Projects and comparing this with the proceeds of the Green Bond. The total values of each Green Bond's proceeds are sourced from SSE's project accounting system, TM1.

**Table 1 in Annex 1** details the allocation of proceeds of the Green Bonds issued on 6 September 2017 (Green Bond 1), 4 September 2018 (Green Bond 2) and 1 August 2022 (Green Bond 5).

**Table 2 in Annex 1** lists the Eligible Green Projects and confirms the proceeds of the Green Bond that was allocated to the eligible projects issued on 27 September 2019 (Green Bond 3).

**Table 3 in Annex 1** lists the Eligible Green Projects and confirms the proceeds of the Green Bond that was allocated to the eligible projects issued on 24 March 2021 (Green Bond 4).





## Green Bonds 1 & 2

For Green Bonds 1 and 2, the majority of the onshore wind farms listed are 100% owned by SSE. Table 1 in Annex 1 details the reallocation of proceeds and total capital spend arising from the sale of equity stakes in these wind farms:

- SSE sold a 49.9% stake in the Dunmaglass wind farm on 31 March 2019, with £85.5m reallocated from Dunmaglass to Bhlaraidh wind farm.
- As at 31 March 2019 SSE's equity stake was 50.1% in Clyde Extension<sup>1</sup>, Stronelairg and Dunmaglass<sup>2</sup> wind farms.
- As at 31 March 2020 SSE no longer had an equity stake in Slieve Divena 2 wind farm with the completion of the sale of the wind farm in March 2020.

All projects were complete as at 31 August 2018 apart from Stronelairg wind farm and the Caithness-Moray Transmission Link. For Stronelairg capital expenditure at 31 August 2018 was £177.6m (based on 100% ownership), the project completed in December 2018. On 11 January 2019 SSE confirmed the completion<sup>3</sup> of the Caithness-Moray high-voltage direct current (HVDC) connection which is listed on page 56 of the 2017/18 Annual Report. For Caithness-Moray capital expenditure was £943m. For Caithness-Moray total capital expenditure was £1,020m up to March 2021.

Details of SSE's equity holdings for each wind farm are provided in SSE's annual and interim statements. Strathy North is listed as a SSE wind farm on page 28 of the 15/16 Interim Statement, the other wind farms are all listed on page 25 of SSE's 17/18 Interim Statement. Comhlacht Gaoith Teoranta is part of the Galway Wind Park and 100% owned by SSE.

<sup>1</sup> For the Clyde Extension, SSE's equity stake had been reduced to 65%, as was announced in RNS Number 6396M on 1 August 2017, the joint venture partners then exercised their right to purchase a further 14.9% equity stake on 30 May 2018, as noted on page 70 of the 18/19 Interim Statement.

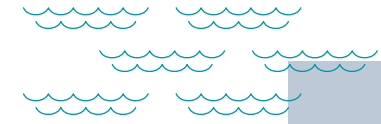
<sup>2</sup> On 1 February 2019 in RNS Number 8013O it was announced that an agreement had been reached to sell a 49.9% stake in Stronelairg and Dunmaglass wind farms, the transaction completed on 31 March 2019.

<sup>3</sup> RNS 8966M confirms the completion of the Caithness-Moray high-voltage direct current connection, which is 100% owned by SSE Networks Limited a 100% subsidiary of SSE plc.

## Green Bond 5

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. Details of each project's status is provided below.

- Seagreen 1 (527MW, 49% SSE), which will be the world's deepest, fixed-bottom offshore wind farm is expected to be energised by late Summer 2023.
- Viking (443MW, 100% SSE) an onshore wind farm currently under construction on the Shetland Islands, is expected to be complete by Summer 2024.
- Gordonbush Extension (38MW, 100% SSE) an onshore wind farm was commissioned and moved to full operation in August 2021.



## Capacity Reporting (MW – megawatts), wind farm projects

For the purposes of reporting capacity for onshore wind farm projects, the capacity is taken from the total installed capacity. This is calculated using the sum of the number of operational turbines installed within each wind farm multiplied by their given turbine rating.

## Capacity Reporting (MW – megawatts, and MVA – megavolt amperes), Transmission projects

The primary reason for transmission projects in the SHET network region is to support the expected increase in renewable generation connecting to the transmission network. Transmission projects can involve the construction of new transmission assets or the upgrade or reinforcement of existing infrastructure to support new renewable connections. These different types of transmission projects are classified by Ofgem in accordance with their project classification criteria.

The capacity of new renewable generation connection projects is reported in MW and the capacity of new or upgraded transmission assets on the Alternating Current (AC) system is reported as MVA; which represents the new or increased power rating of the asset needed to enable the power from additional renewable energy to flow through the existing AC system.

For the purposes of reporting, the MW capacity of generation projects is taken from the total installed capacity as detailed by the wind farm owner and as reported in the Transmission Entry Capacity (TEC) register and Embedded Register by the electricity system operator (ESO).

For HVDC systems, there is only the transfer of active power (in MW) rather than in Alternating Current (AC) systems which transfers both active and reactive power (in MVA). For HVDC systems the power rating of the new assets is therefore reported in MW. For new or upgraded transmission assets on the Alternating Current (AC) system, the new or increased asset power rating is therefore reported in MVA which describes the physical limit of the asset considering both MW and MVA transfer.

## Output Reporting (GWh - gigawatt hours), wind farm projects

Output (or volume) is taken from the 1 April to 31 March of the reporting year. The output reporting is based on SSE's equity stake during the Green Bond reporting period (for example 50.1% for Clyde Extension, Stronelairg and Dunmaglass). The output volumes include projects that are operational. For projects that move from construction to operation during the reporting period, output data is taken from the date of commissioning.

The output refers to the generation from the wind turbines at the Notional Balancing Point. This is where demand is managed and is comparable across the industry for trading and monitoring.

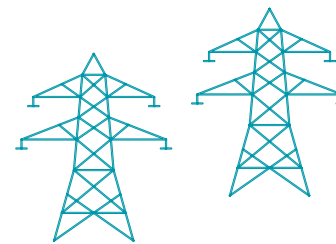
For the Clyde Extension the output is estimated based on the Renewable Obligation Certificate banding to determine the split of the total output relevant to the Clyde Extension from the wind farm which was an extension of an already existing wind farm (Clyde).

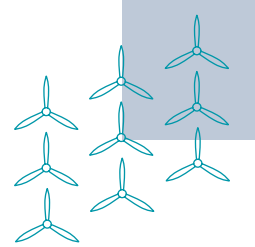
Output data is based on meter points at the Notional Balancing Point. This data is collected by Elexon, stored on SONET (an external database that stores electricity settlement data) and managed through an internal finance management system by business finance at SSE.

## Environmental impact reporting (tCO<sub>2</sub>e – tonnes of carbon dioxide equivalent) for wind generation projects

The carbon emissions associated with the production of electricity at a wind farm are assumed to be zero.

The GHG standard project protocol states that for wind power projects the primary effect of these projects is to reduce the combustion emissions from generating grid-connected electricity. For these projects the baseline (or counterfactual) is estimated from the GHG emission rates of existing sources of production that will be displaced or reduced.





SSE's methodology calculates the estimated qualifying emissions avoided as a result of the renewable energy project by comparing its likely emissions to those of a marginal grid electricity mix, using the UK government's Greenhouse Gas (GHG) reporting guidance and conversion factors. To do this the financial year (1 April 2022 to 31 March 2023) output for each wind farm is taken and multiplied by the UK electricity scope 2 emission conversion factor and the transmission and distribution scope 3 conversion factor (as stated by UK government GHG conversion factors, updated May 2023). The electricity generated conversion factor represents the average emissions associated with the UK electricity supplied to the grid that is purchased by organisations and the UK transmission and distribution factor accounts for the grid losses (the energy losses that occur getting the electricity from the power plant to the organisations that purchase it).

The environmental impact report is based on SSE's equity stake during the Green Bond reporting period (for example 50.1% for Clyde Extension, Stronelaig and Dunmaglass).

## Green Bonds 3 & 4

### Scottish Hydro Electric Transmission plc (SHET) transmission projects connecting renewable generation to the network capacity (MW and MVA)

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.

The transmission networks project that features in Green Bonds 1, 2, 3 and 4, Caithness-Moray, is a HVDC technology that is 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 green impact refers to the 1,200MW<sup>4</sup> of capacity to transmit power from the north of Scotland across the UK. The project has already facilitated the connection of 985MW of renewable generation

<sup>4</sup> For this transmission link, the actual electricity transmitted is controlled by the Electricity System Operator.

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).

For the SHET projects used to allocate proceeds from Green Bond 3 and Green Bond 4, the green impact relates to 7,067.9MW (including Caithness-Moray transmission link 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 Stronelaig (228MW), Dorenell (117MW) and Kyllachy (48.5 MW) onshore wind farms and the Aberdeen Offshore wind farm (99MW).

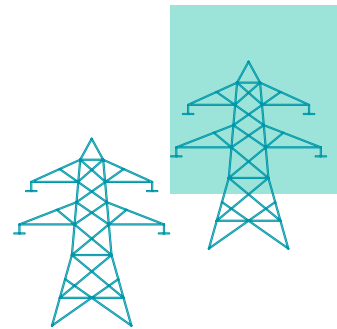
## Adjustments

For any adjustments to previously reported data, due to change in measurement methodology or reorganisation of the SSE Group, which result in a change greater than 5%, these will be stated in the following year end reporting to 31 March.

The financial and environmental data associated with any divestments is removed from the current year to ensure relevant comparisons and consistent performance towards the green bonds.

## References

- [SSE Green Bond Framework 2021](#)
- [SSE Green Bond Framework 2019](#)
- [SSE Green Bond Framework 2017](#)
- [GHG Protocol for Project Accounting](#)
- [UK government GHG reporting guidance and conversion factors](#)



## Annex 1: Asset Register for Green Bonds

**Table 1:** List of Eligible Green Projects refinanced by proceeds from Green Bond 1 (2017), Green Bond 2 (2018) and Green Bond 5 (2022) at 31 March 2023 (details of qualifying criteria are outlined in the Green Bond Framework)

Eligible Green Projects	Total Actual Capex Spend (£m) <sup>1</sup>	Qualifying Project Capacity in MW <sup>2</sup>	Date Fully Operational	Allocation of Green Bond 1 Proceeds (£m)	Allocation of Green Bond 2 Proceeds (£m)	Allocation of Green Bond 5 Proceeds (£m)
Strathy North	102.9	67	Nov 2015	102.9	NIL	NIL
Tievenameenta	42.9	34	Feb 2017	41.5	NIL	NIL
Comhlach Gaoithe Teoranta (Galway Wind Park)	85.6	66	Jun 2017	81.9	NIL	NIL
Dunmaglass (50.1%)	88.9	47	Aug 2017	88.9	NIL	NIL
Clyde Extension (50.1%)	100.3	87	Sept 2017	100.1	NIL	NIL
Bhlaraidh	117.1	108	Oct 2017	106.6	NIL	NIL
Leanamore	30.8	18	Feb 2018	NIL	30.8	NIL
Stronelairg (50.1%)	147.6	114	Dec 2018	NIL	147.6	NIL
Caithness-Moray Link <sub>3</sub> *	1,020.0	1,200	Jan 2019	26.5	413.0	NIL
Viking	166.0	443	Due Aug 2024	NIL	NIL	166.0
Gordonbush	37.2	38	Aug 2021	NIL	NIL	37.2
Seagreen 1 (49.0%)	477.2	527	Due Apr 2023	NIL	NIL	340.7
<b>Total</b>	<b>2,416.5</b>	<b>2,749</b>		<b>548.4</b>	<b>591.4</b>	<b>543.9</b>

<sup>1</sup> Where SSE holds a partial stake, the capex spend reported represents SSE portion only, actual capex spend to 31 March 2022.

<sup>2</sup> Project capacity in MW reflects SSE's equity stake as at 31 March 2023.

<sup>3</sup> Slieve Divena 2 Wind Farm was sold in March 2020, proceeds from the 2017 Green Bond have been reallocated to the Caithness-Moray Link project.

\*Caithness-Moray Link project features in three Green Bonds (2017, 2018 and 2019). The total capex spend for this project is included in both this table and table 2 below.



**Table 2:** List of Eligible Green Projects refinanced by proceeds from Green Bond 3 (2019) at 31 March 2023 (details of qualifying criteria are outlined in the Green Bond Framework)

SHET Eligible Green Projects	Energised <sup>1</sup>	Total Actual Capex Spend (£m) <sup>2</sup>	Qualifying Project Capacity <sup>3 4</sup>	Allocation of Green Bond 3 Proceeds (£m)
Caithness-Moray Link*	Jan 2019	1,020.0	1,200 MW	107.0
<b>Connecting offshore transmission company projects</b>				
Moray Firth OTFO connection (New Deer)	May 2021	4.8	900MW	3.1
<b>Connecting distribution projects</b>				
Rannoch GSP (Corrour Hydro)	Aug 2017 <sup>(5)</sup>	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
<b>Connecting onshore renewable projects</b>				
Aberdeen Offshore wind farm	May 2018	14.1	99MW	9.2
Dornell wind farm	Aug 2018	28.2	117MW	28.2
Stronelaig wind farm	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)	Oct 2019	43.5	220MVA	23.8
Fort William GSP Infrastructure	Oct 2018	1.7	See Fort William GSP above	1.7
<b>Total</b>		<b>1,361.9</b>	<b>2,695.3MW/ 2,939.0MVA</b>	<b>350.0</b>

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 (on- and off-shore 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 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 Rannoch GSP was energised in August 2017, however there was minor construction work ongoing until May 2021 and therefore the completion date of the project was May 2021.

\* Caithness-Moray Link project features in three Green Bonds (2017, 2018 and 2019). The total capex spend for this project is included in both this table and table 1 above.

**Table 3:** List of Eligible Green Projects refinanced by proceeds from Green Bond 4 (2021) at 31 March 2023 (details of qualifying criteria are outlined in the Green Bond Framework)

SHET eligible green projects	Construction/Energised <sup>1</sup>	Total actual capex spend (£m) <sup>2</sup>	Qualifying project capacity <sup>3 4</sup>	Allocation of Green Bond 4 proceeds (£m)
<b>Connecting offshore transmission company projects</b> Moray Firth OTFO connection (New Deer)	May 2021	32.7	900MW	32.7
<b>Connecting distribution projects</b> Rothienorman GSP (Rothmaisie)	June 2021	8.6	90.1MW	8.6
<b>Connecting onshore renewable projects</b>				
Dorenell windfarm	Aug 2018	0.4	117MW	0.4
Stronelairg windfarm	Mar 2018	16.2	228MW	16.2
Beauly – Tomatin (Boat of Garten Reconductoring)	Dec 2019	29.7	782MVA	29.7
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)	Oct 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
<b>Connecting offshore renewable projects</b>				
Tealing 275kV Busbar East Coast	Dec 2021	33.4	1,075MVA	33.4
Shetland HVDC	Due July 2024	125.7	600MW	125.7
<b>Connecting onshore/ offshore renewable projects</b>				
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
<b>Total</b>		<b>500.0</b>	<b>5,707.7MW/ 5,073.0MVA</b>	<b>500.0</b>

<sup>1</sup> 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.

<sup>2</sup> Actual Capex Spend from 1 April 2019 to 31 March 2021.

<sup>3</sup> MW refers to the total installed capacity of new renewable (on- and off-shore 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).

<sup>4</sup> 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.

