



Energy for
generations

ESB GREEN BOND REPORTING 2023



Invested in a Sustainable Future

ESB's strategy 'Driven to Make a Difference: Net Zero by 2040' is anchored in the UN's Sustainable Development goals and is an ambition to make a difference. It aims to deliver a brighter future by creating and connecting sustainable, reliable, affordable energy, and is grounded in ESB's enduring purpose to support the customers and communities ESB serve to achieve net zero. It aims to achieve this by decarbonising electricity, connecting the renewable generation needed, making its networks smarter to enable the electrification of heat and transport and providing the solutions to support its customers in making their own transition. This will be done in a way that will ensure that ESB continues to grow as a successful business while maintaining the financial strength to invest in a low-carbon future at the necessary pace and scale. Since its establishment in 1927, ESB has been characterised by a commitment to enabling society and creating opportunities for the communities it serves. The challenge for ESB today is to be a leader in the transition to reliable, affordable, low-carbon energy and to serve its customers better and achieve sustainable growth.

In 2023 clear progress was made in delivering on our sustainable agenda. As at the end of 2023, a total of 8 GW (6.2GW in ROI and 1.8GW in NI) of low-carbon energy has been connected to our networks in Ireland and Northern Ireland. ESB Networks installed in excess of 1.5 million smart meters by the end of 2023. We are continuing to work with partners to increase our renewable capacity, with the 83MW onshore wind JV with Bord na Mona, Oweninny Phase 2, becoming operational during 2023 and strong progress on Inch Cape offshore windfarm, Neart na Gaoithe offshore windfarm, and Timahoe North Solar Farm with our joint venture partners. We continued to develop a number of large-scale energy storage projects, supporting energy security in Ireland. ESB remains committed to developing a pipeline of low-carbon generation options, investing in electricity transmission and distribution networks, and supporting the customers and communities we serve.








ESB Green Bond

ESB, through its financing entity, ESB Finance DAC had issued €1.2 billion in Green Bonds as at 31 December 2022. The net proceeds which amount to €1,196.4 million, were used to finance eligible projects in accordance with ESB's first Green Bond Framework, published in May 2019. The Framework aligned to the Green Bond Principles (2018). The proceeds of both bonds were fully allocated by 31 December 2022.

In October 2023, ESB issued a further €500m Green bond, of which €369.8 million of the €493.3 million net proceeds was allocated by 31 December 2023. The net proceeds allocated were used to finance eligible projects in accordance with the latest ESB Green Bond Framework published in September 2023.

Use of Proceeds (continued)

The net proceeds of green bonds issued were used to finance eligible projects according to ESB's Green Bond Frameworks published in 2019 & 2023 and a summary of the allocation to date is set out below:

Eligible Green Project Category	Projects	Summary of Allocated Funding	Summary of Allocated Funding	Summary of Allocated Funding	Total Allocated	Relevant SDG
		XS2009861480	XS2432544349	XS2697970536	Funding	
 Renewable Energy	Renewable wind farms / solar farms	€581.0m	€320.1m	€10.3m	€911.4m	
 Electricity Networks	Smart Meter Roll Out	€50.0m	€178.3m	€127.5m	€355.8m	
 Energy Efficiency	Battery Storage	-	-	€232.0m	€232.0m	
 Clean Transportation	Infrastructure to facilitate Electric Vehicle penetration	€6.2m	-	-	€6.2m	
 Green Buildings	The Redevelopment of ESB'S Head Office, Lower Fitzwilliam Street, Dublin 2. A Green Certified Sustainable Building	€60.8m	-	-	€60.8m	
Total allocated		€698.0m	€498.4m	€369.8m	€1,566.2m	
Unallocated		-	-	€123.5m	€123.5m	

Use of Proceeds ESB's Green Bonds

	Green Bond 1	Green Bond 2	Green Bond 3
Issuer:	ESB Finance DAC	ESB Finance DAC	ESB Finance DAC
Currency:	EUR	EUR	EUR
ISIN:	XS2009861480	XS2432544349	XS2697970536
Bond Value:	€500,000,000	€500,000,000	€500,000,000
Pricing Date:	4th June 2019	12th January 2022	26th September 2023
Settlement Date:	11th June 2019	19th January 2022	3rd October 2023
Tap Value:	€200,000,000	n/a	n/a
Pricing Date:	15th July 2020	n/a	n/a
Settlement Date:	22nd July 2020	n/a	n/a
Maturity Date:	11th June 2030	19th July 2034	3rd March 2036
Coupon:	1.125%	1.000%	4.25%
Proceeds to allocate:	€697,950,000	€498,375,000	€493,250,000

Evaluation and Selection

A dedicated Green Finance Committee ('Committee') was created to ensure compliance with the Green Bond Framework and oversee the entire issuance process. The Committee is composed of the Heads of ESB's Treasury, Sustainability and Strategy Areas.

The Committee reviewed proposed projects with respect to the eligibility criteria set out in the Green Bond Framework to ensure each project showed a clear positive environmental impact. The Committee also ensured that each project selected

was aligned with ESB's strategic intent of meeting 'customer energy needs by bringing the best of its capabilities together to deliver innovative and value-driven solutions for a low-carbon world'.

The Group setup a project register to monitor and track the allocation to selected projects. An amount equal to, or greater than, the unallocated funds raised, were held by the Group as cash.

During the life of the Green Bonds, if the selected projects are sold, cease to fulfil the eligibility criteria or otherwise be determined to be incompatible with the environmental objectives of the relevant Green Bond Framework, those allocated proceeds will be reallocated to replacement eligible projects that comply with the eligibility criteria as soon as is reasonably practicable.

There were no such reallocations in the current year.

Allocation of Green Bond Funding and Impacts

Green Bond 1 – issued in 2019 (with tap in 2020)

Green Bond XS2009861480 was fully allocated in the 2021 Green Bond Report. All spend associated with this Green Bond was incurred between July 2017 and March 2021 and was allocated under the Green Bond Framework 2019.

Project Name	Allocated Spend (€ m)	Status	Generation Capacity (MW)	Qualifying Generation Capacity (MW)	Qualifying energy Generated (MWh)	Estimated Qualifying Tonnes of CO ₂ Equivalent Avoided	Non-windfarm - Project Impact Metrics
Offshore Windfarm: Neart na Gaoithe	223.2	In Construction	224	89	-	-	
Offshore Windfarm: Galloper	130.9	Operational	44	44	195,690	40,527	
Onshore Windfarm: Grousemount	154.7	Operational	123	100	272,071	62,549	
Onshore Windfarm: Cappawhite	16.2	Operational	57	11	30,906	7,105	
Onshore Windfarm: Castlepook	56.0	Operational	35	30	68,171	15,672	
Smart Meter Roll-Out	50.0	Ongoing Project					More than 1.5 million smart meters were installed on the overall project to end December 2023. This Green Bond Issuance funded approximately 0.12 million (8%) of these smart meters.
Project Fitzwilliam – ESB's Head Office Redevelopment	60.8	Complete					"BREEAM Excellent" Certified Building
Electric Vehicle	6.2	Operational					138 Fast Chargers & 118 AC Charges Installed
Total	698.0		483	274	566,838	125,853	

Allocation of Green Bond Funding and Impacts (continued)

Green Bond 2 – issued in 2022

Green Bond XS2432544349 was fully allocated in the 2022 Green Bond Report. All spend associated with this Green Bond was incurred between January 2020 and December 2022 and was allocated under the Green Bond Framework 2019.

Project Name	Allocated Spend (€ m)	Status	Generation Capacity (MW)	Qualifying Generation Capacity (MW)	Qualifying energy Generated (MWh)	Estimated Qualifying Tonnes of CO ₂ Equivalent Avoided	Non-windfarm - Project Impact Metrics
Offshore Windfarm: Neart na Gaoithe	320.1	In Construction	224	128	-	-	
Smart Meter Roll-Out	178.3	Ongoing Project					More than 1.5 million smart meters were installed on the overall project to end December 2023. This Green Bond Issuance funded approximately 0.42 million (28%) of these smart meters.
Total	498.4		224	128	-	-	

Green Bond 3 – issued in 2023

Green Bond XS2697970536 has been partially allocated in 2023. All spend associated with this Green Bond was incurred between October 2021 and December 2023 and was allocated under the Green Bond Framework 2023.

Type of Project & Project Name	Allocated Spend (€ m)	Status	Generation Capacity (MW)	Qualifying Generation Capacity (MW)	Qualifying energy Generated (MWh)	Estimated Qualifying Tonnes of CO ₂ Equivalent Avoided	Non-solar farm - Project Impact Metrics
Solar Farm: Drombeg	7.3	In Construction	50	42	-	-	
Solar Farm: Bullstown	0.8	In Construction	8	6	-	-	
Solar Farm: Middleton House	2.2	In Construction	57	55	-	-	
Battery Storage: Aghada 1 BESS	9.4	Operational					19MW Capacity
Battery Storage: Aghada 2 BESS	125.6	In Construction					150MW Capacity
Battery Storage: Inchicore BESS	16.3	Operational					30MW Capacity
Battery Storage: Poolbeg BESS	54.2	Operational					75MW Capacity
Battery Storage: Southwall BESS	26.5	In Construction					30MW Capacity
Smart Meter Roll-Out	127.5	Ongoing Project					More than 1.5 million smart meters were installed on the overall project to end December 2023. This Green Bond Issuance funded approximately 0.30 million (20%) of these smart meters.
Total	369.8		115	103	-	-	

Allocation of Green Bond Funding and Impacts (continued)

Notes on Reporting Criteria:

- The equivalent carbon emissions 'displaced' for renewable generation assets are calculated using the most recent 'carbon intensity' of the relevant national grid and the qualifying MWh of renewables generation. The conversion factors used are for electricity only (scope 2 under the GHG Protocol). At the time of preparation these were as follows for 2023:

	CO ₂ intensity, Kg/kWh	Source
Ireland	0.2299	Sustainable Energy Authority of Ireland
UK	0.2071	UK Government

- Generation capacity represents the current or forecast capacity of the windfarm apportioned based on ESB's equity stake in the project.
- In respect of offshore windfarms, impact metrics are calculated based on ESB's equity stake in the windfarm. This is proportioned further when the allocated spend does not represent the full equity investment made in the windfarm up to 31 December 2023.
- All onshore windfarms and solar farms are fully owned and funded by ESB. Impact metrics are apportioned based on the proportion of allocated spend to total project capital spend up to 31 December 2023.
- The 'Qualifying energy Generated (MWh)' and 'Estimated Qualifying Tonnes of CO₂ Equivalent Avoided' impact metrics are only included for those wind farms or solar farm projects which are fully operational.
- ESB Networks has installed over 1.5 million meters as at the end December 2023 as part of its Smart Meter Programme. Amounts allocated to this programme under ESB's Green Bonds represent only a portion of the spend to date on the project. The total amount allocated to smart meter roll out represents approximately 0.83 million (56%) of the total number of smart meters install up to the end of December 2023.

An External Opinion – Sustainalytics

ESB commissioned Sustainalytics to conduct an external review of its Green Bond Framework (Sept 2023) and issue a Second Party Opinion on the Framework's environmental credentials and its alignment with the Green Bond Principles (2021) and the EU Taxonomy.

ESB also engaged Sustainalytics to conduct a review confirming the proceeds were allocated to projects which meet the Eligibility Criteria defined in the relevant ESB Green Bond Framework for each of its Green Bond Reports published to date.

Copies of the Green Bond Reports and final reviews can be found at www.esb.ie/investors/green-financing

Contacts

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Poolbeg Battery Energy Storage System (BESS) - 75MW (150MWh) project, located at ESB's Poolbeg Energy Hub, is one of the largest sites of its kind in commercial operation in Ireland



At the end of 2023, over 1.5 million smart meters have been rolled out in ROI, improving the efficiency of the network and giving customers access to smart technologies that will enable them to manage their energy use more sustainably

Bullstown Solar Farm – installation of solar panels in progress on 8MW solar project in Co Meath



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