



Energy for generations



# ESB GREEN BOND 2019: TRANSITION TO A LOW CARBON ENERGY FUTURE

ALLOCATION & IMPACT  
REPORT 2019/20

Since its establishment in 1927, ESB has been characterised by a commitment to create a brighter future for the customers and communities we serve. This is manifest in the scale and vision of the energy projects that we have delivered over the past 90 years to create an efficient and reliable energy system for Ireland and its citizens.

Understanding the enormous climate change challenge faced by the world, ESB is taking action by leading the transition to a low carbon energy future powered by a clean electricity system.

ESB's Strategy for a Brighter Future sets out ESB's ambition and roadmap for the period to 2030. Over this period, we will step up the pace of investment to further reduce the carbon intensity of our generation portfolio, increase the capacity of our electricity networks to support low carbon technologies and distributed energy resources, enable the widespread electrification of heating and transport, and create customer centric products and services to enable customers manage their energy more efficiently. These investments in the low carbon future will be underpinned and enabled by strong commercial propositions in the Republic of Ireland (ROI), Northern Ireland (NI) and Great Britain (GB) that maintain the financial strength of our business.

ESB recognises the importance of sustainable finance in today's financial markets and in June 2019 ESB successfully issued

Ireland's first corporate public Green Bond. This was followed most recently in February 2020 with the signing of a new EUR1.4bn five- year sustainability linked loan, in the form of a revolving credit facility, further demonstrating ESB's commitment to leading the transition to a low-carbon future while enabling banks and investors to direct increasing levels of capital into carbon action investments.













### ESB GREEN BOND 2019

ESB, through its financing entity, ESB Finance Designated Activity Company (DAC) issued a Green Bond in June 2019. The net proceeds, which amount to €498.5m, were used to finance eligible projects in the period since issuance in accordance with the ESB Green Bond Framework, published in May 2019. The Framework is aligned to the Green Bond Principles, 2018.<sup>1</sup>

Issuer:	ESB Finance DAC
Currency	EUR
ISIN	XS2009861480
Nominal Account	€500,000,000
Pricing Date	4 <sup>th</sup> June 2019
Settlement Date	11 <sup>th</sup> June 2019
Maturity Date	11 <sup>th</sup> June 2030
Coupon	1.125%
Proceeds to allocate	€498,500,000

### USE OF PROCEEDS

The net proceeds of the green bond, €498.5m, were used to finance or refinance eligible projects according to the 'ESB Green Bond Framework' and a summary is set out below:

ELIGIBLE GREEN PROJECT CATEGORY	PROJECTS	SUMMARY OF ALLOCATED FUNDING	RELEVANT SUSTAINABLE DEVELOPMENT GOALS
 Renewable Energy	Renewable wind farms	€381.5m	  
 Energy Efficiency	Smart Meter Roll Out	€50m	 
 Clean Transportation	Infrastructure to facilitate Electric Vehicle penetration	€6.2m	 
 Green Buildings	The Redevelopment of ESB'S Head Office, Lower Fitzwilliam Street, Dublin 2 A Green Certified Sustainable Building	€60.8m	

The proceeds of the Green Bond of €498.5m are now fully allocated. Of those proceeds approximately 70% was used to refinance projects which had funding in place on the issuance of the Green Bond with the remainder being used to finance projects subsequent to the issue.

<sup>1</sup> The Green Bond Principles (GBP) published by the International Capital Market Association (ICMA), updated as of June 2018, are voluntary process guidelines that recommend transparency and disclosure and promote integrity in the development of the Green Bond market by clarifying the approach for issuance of a Green Bond.

### EVALUATION AND SELECTION

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

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 and measurable environmental impact. The Committee also ensured that each selection 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'.

PROJECT NAME	ALLOCATED SPEND €'M	STATUS	GENERATION CAPACITY MW	QUALIFYING GENERATION CAPACITY MW	QUALIFYING ENERGY GENERATED OR FORECAST MWH	QUALIFYING TONNES OF CO2 EQUIVALENT AVOIDED	NON - WINDFARM PROJECT IMPACTS
Gallopier Wind Farm (Offshore)	130.9	Operational	44 MW	44 MW	177,230	42,710	
Neart na Gaoithe Wind Farm (Offshore)	23.7	In Construction	224 MW	22 MW	91,135	21,963	
Grousemount Wind Farm	154.7	In Construction	114 MW	88 MW	282,090	93,372	
Cappawhite Wind Farm	16.2	Operational	52 MW	10 MW	33,578	11,114	
Castlepook Wind Farm	56.0	Operational	34 MW	29 MW	78,105	25,853	
Smart Meter Roll-out	50.0	Ongoing project					15,086 new smart meters installed by December 19
Project Fitzwilliam - ESB's Head Office Redevelopment	60.8	In Construction					Designed and under construction in line with "BREEAM Excellent" Certified Building Standards
Electric Vehicle	6.2	Ongoing project					138 Fast Chargers 118 AC Charges Installed between July 17 and December 2019
TOTAL	498.5		468MW	193MW	662,138	195,012	

#### Notes on Reporting Criteria:

- All spend was incurred between 1 July 2017 and 31 March 2020.
- The equivalent carbon emissions 'displaced' for windfarms are calculated using the most recent 'carbon intensity' of the relevant national grid and the qualifying MWh of renewables generation. At the time of preparation these were:

	CO <sub>2</sub> intensity, Kg/kWh	Source
RoI	0.331	SEAI, 2019 provisional figure.
UK	0.241	National Grid, 2019 average.

- Generation capacity represents the 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. Furthermore, in the case of Neart na Gaoithe where only €23.7m of ESB's total investment to date of €234m has been allocated to the Green Bond, the qualifying generation capacity and associated emissions has been similarly proportioned (i.e. 10% of the 50% ESB stake)

The Group set up a project register and put internal controls in place to monitor and track the allocation to selected projects. An amount equal to, or greater than, the unallocated funds raised, was held by the Group as cash.

During the life of the Green Bond (11 years from 11th June 2019), should a selected project be sold, cease to fulfil eligibility criteria or otherwise be determined to be incompatible with the environmental objectives of the Green Bond Framework, those allocated proceeds will be reallocated to a different project which complies with the eligibility criteria as soon as is reasonably possible.

- All onshore windfarms are fully owned and funded by ESB. Impact metrics are apportioned based on the proportion of allocated spend to total project capital spend.
- Forecast impact metrics are included for those windfarms which have not had a full year's operation.
- ESB Networks has installed 15,086 meters as at the end December 2019 as part of its Smart Meter Programme. The €50m allocated to the Green Bond represents a portion of the spend to 31 December 2019 on the project. The overall project has involved a significant level of upfront IT spend which will benefit the full smart meter roll out of over 2 million meters. The full programme is expected to cost approximately €1.2bn and result in significant benefits as documented by the Commission for Regulation of Utilities in its cost benefit analysis (see www.cru.ie) of the programme. This includes a change in the patterns of electricity usage by residential households, most notably a reduction in overall energy consumption of c 2.86% for standard customers and SMEs and a movement of demand away from peak times (over 8%).
- In relation to Electric Vehicle Infrastructure, the spend was incurred in the period 1 July 2017 to 31 December 2019, contributions of €0.3m were received from other funding sources in relation to the charge points installed in the period July 2017 to December 2019 included above.

### GALLOPER WIND FARM

Gallopier Wind Farm is a 353MW development, featuring 56 Siemens-Gamesa turbines, 30 km off the coast of Suffolk in the United Kingdom. Gallopier is expected to generate, on average each year, enough green power to meet the annual electricity needs of more than 380,000 households. Gallopier is owned by Innogy SE (25%), Siemens Financial Services (25%), Sumitomo Corp (12.5%), ESB (12.5%) & a consortium managed by Green Investment Group and Macquarie Infrastructure and Real Assets (25%).



### NEART NA GAOITHE WIND FARM

Near na Gaoithe is a windfarm currently under development off the East Coast of Scotland. In November 2019 ESB bought a 50% stake in the project from EDF Renewables, ESB's joint venture partner in the development. The windfarm is expected to be approximately 448MW in capacity, enough to power around 375,000 Scottish homes a year, and construction is expected to get underway in 2020 with commissioning to follow in 2023.



### GROUSEMOUNT WIND FARM

The site is located in south east Kerry in the Republic of Ireland. Grousemount Wind Farm began construction in the summer of 2017. The wind farm when finalised will comprise 38 wind turbines, which will be used to harness the natural energy of the wind to generate electricity and provide enough renewable power for approximately 70,000 homes. Turbines will have maximum overall dimensions of 126 metres which will result in up to 114MW of renewable electricity being generated on site. It is ESB's largest on-shore farm.

### SMART METERS

ESB Networks is in the middle of the rollout of Phase 1 of a National Smart Meter Programme in the Republic of Ireland. Phase 1 will see major IT investment and up to 250,000 meters installed. Over 2 million meters are due to be installed by 2025, over the three phases of the programme.



### CAPPAWHITE WIND FARM

Cappawhite Wind Farm is located at the southern most extent of the mountain range known as the Hollyford Hills in Tipperary in the Republic of Ireland. It was completed in 2017, features 17 turbines and a production capacity of 52MW—enough renewable electricity to power around 32,500 households a year.



### PROJECT FITZWILLIAM

The redevelopment of ESB's Fitzwilliam Street Head Office site in Dublin 2 in the Republic of Ireland began in June 2017. The project involves the removal of the existing buildings, the retention and refurbishment of a number of protected Georgian structures and the construction of two new office blocks on site. One of these blocks, Fitzwilliam 27, is to be retained by ESB as its Head Office. The building is being designed and fitted to BREEAM Excellent Standard. BREEAM is the world's leading sustainability assessment method for master planning projects, infrastructure and buildings. It recognises and reflects the value in higher performing assets across the built environment lifecycle.



### CASTLEPOOK WIND FARM

Castlepook Wind Farm is located in Castlepook forest, Ballyhoura, Co. Cork, Ireland. It features 14 turbines with a total capacity of 34MW—enough renewable electricity to power around 17,000 households a year. It was initially developed by ESB as a joint venture with another partner with project finance. It is now fully owned by ESB and was refinanced using Green Bond funds.

### ELECTRIC VEHICLE INFRASTRUCTURE

ESB eCars builds, owns and operates electric vehicle charging networks for public use across the Republic of Ireland, Northern Ireland and Great Britain. As at December 2019 this network contains over 1,100 charge points on the island of Ireland, as well as over 100 charge points in Great Britain.



## AN EXTERNAL OPINION – SUSTAINALYTICS

ESB's Green Bond Framework (May 2019) was reviewed by Sustainalytics in terms of its alignment with relevant industry standards and its robustness and credibility in the meaning of Green Bond Principles ("GBP") 2018.

ESB also engaged Sustainalytics to conduct a review confirming the proceeds were allocated to projects which meet the Eligibility Criteria defined in ESB's Green Bond Framework.

A copy of the final review can be found at <https://www.esb.ie/investor-relations/green-bond>

### CONTACTS

If you have any further questions, comments or enquires relating to this report please contact us as per below:

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