



Energy for
generations

BRIGHTER
TOGETHER



ESB Green Bond Report 2020/21:
**TRANSITION TO A LOW
CARBON ENERGY FUTURE**

BRIGHTER TOGETHER

ESB is making a stand for Ireland's future, a future powered by clean, sustainable electricity. We are committed to leading the transition to a reliable, affordable, low-carbon energy future, a future that protects our customers and the economy by maintaining the security and affordability of energy. We are investing and innovating across our business to make this a reality. We are developing new renewable sources of generation and flexible, low-carbon backup generation. We are also reinforcing and enhancing our network to accommodate unprecedented volumes of distributed energy resources and developing customer led solutions that will empower everyone in society to live cleaner, more sustainable lives, powered by electricity.

While 2020 was of course a year like no other and ESB's primary focus for 2020 in the face of the COVID-19 related challenges was on the provision of safe, secure and reliable electricity for all, we were still guided by our purpose to create a brighter future by leading the transition to secure, affordable, low-carbon energy. We made clear progress in delivering strategic initiatives, from growing our position in renewable generation through investments in the 1GW Inch Cape (UK) offshore wind farm project and commissioning Grousemount (ROI) wind farm, Ireland's largest onshore wind farm, to undertaking major network upgrades and installing over 224,000 smart meters. The closure of ESB's peat stations in the Irish Midlands in December was both a milestone in the delivery of our strategy and the end of an era for generations of employees and communities who contributed to Ireland's energy security over seven decades. Our strategic focus is now firmly fixed on low carbon and renewable generation and we are well positioned to support the green agenda.

ESB continues to recognise the importance of green finance in today's financial markets. In 2020, ESB carried out a €200m tap of its 2019 Green Bond, Ireland's first corporate public Green Bond.

ESB also signed a new €1.4bn five-year sustainability linked loan, 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 positive investments.

ESB GREEN BOND

ESB, through its financing entity, ESB Finance DAC, issued a Green Bond in June 2019. This bond was subsequently tapped in July 2020, increasing the bond size by €200m to €700m. The net proceeds of both issuances which amount to €698m, 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).

Issuer:	ESB Finance DAC
Currency	EUR
ISIN	XS2009861480
Bond Value:	€500,000,000
Pricing Date:	4 th June 2019
Settlement Date	11 th June 2019
Tap Value:	€200,000,000
Pricing Date:	15 th July 2020
Settlement Date:	22 nd July 2020
Maturity Date	11 th June 2030
Coupon	1.125%
Proceeds to allocate	€697,950,000

USE OF PROCEEDS

The net proceeds of the green bond, €698m, were used to finance 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	€581m	  
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	

EVALUATION AND SELECTION

A dedicated Green Finance Committee was created to ensure compliance with ESB's 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 ESB's 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'.

A project register and internal controls have been put in place to monitor and track the allocation of proceeds 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 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.

ALLOCATION OF GREEN BOND FUNDING AND IMPACTS

PROJECT NAME	ALLOCATED SPEND (€'M)	STATUS	GENERATION CAPACITY (MW)	QUALIFYING GENERATION CAPACITY (MW)	QUALIFYING ENERGY GENERATED OR FORECAST (MWh)	QUALIFYING TONNES OF CO ₂ EQUIVALENT AVOIDED	NON - WINDFARM PROJECT IMPACTS METRICS
Neart na Gaoithe Wind Farm (Offshore)	223.2	In Construction	224 MW	206 MW	853,878	154,552	
Galoper Wind Farm (Offshore)	130.9	Operational	44 MW	44 MW	197,637	35,772	
Grousemount Wind Farm (Offshore)	154.7	Operational	123 MW	95 MW	215,316	69,762	
Cappawhite Wind Farm	16.2	Operational	57 MW	11 MW	33,898	10,983	
Castlepook Wind Farm	56.0	Operational	35 MW	30 MW	76,857	24,902	
Smart Meter Roll-Out	50.0	Ongoing Project					More than 239,000 total new smart meters were installed on overall project to end December 2020. This was partially funded by ESB's Green Bond
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 over period of spend
TOTAL	698.0		483MW	386MW	1,377,586	295,971	

Notes on Reporting Criteria:

- All spend was incurred between 1 July 2017 and 31 March 2021.
- The equivalent carbon emissions 'displaced' for wind farms 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 ₂ intensity, Kg/kWh	Source
RoI	0.324	SEAI, 2019 carbon intensity of electricity
UK	0.181	National Grid, 2020 average carbon intensity of electricity

- 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 wind farms, impact metrics are calculated based on ESB's equity stake in the wind farm. This is proportioned further when the allocated spend does not represent ESB's full equity investment in the wind farm.

- All onshore wind farms are fully owned and funded by ESB. Impact metrics are apportioned based on the proportion of allocated proceeds to total project capital spend.
- Forecast impact metrics are included for those wind farms which have not had a full year's operation.
- ESB Networks has installed over 239,000 smart meters as at the end December 2020 as part of its Smart Meter Programme. The €50m allocated to the Green Bond represents only a portion of the spend to date on the project. The full programme is expected to cost approximately €1.2bn and involve the roll out of over 2 million meters and a significant level of IT spend. It will 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 (138 Fast Chargers and 118 AC Charges) installed in the period July 2017 to December 2019.

NEART NA GAOITHE WIND FARM

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

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 57MW—enough renewable electricity to power around 32,500 households each year.

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 RWE Renewables UK (previously 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%).

CASTLEPOOK WIND FARM

Castlepook Wind Farm is located in Castlepook forest, Ballyhoura, Co.Cork, Ireland. It features 14 turbines with a total capacity of 35MW—enough renewable electricity to power around 17,000 households each 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.

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 and was finalised in mid- 2020. The wind farm comprises 38 wind turbines, which are used to harness the natural energy of the wind to generate electricity and provide enough renewable power for approximately 70,000 homes. Turbines have maximum overall dimensions of 126 metres which will result in up to 123MW of renewable electricity being generated on site. It is ESB's largest onshore farm.

SMART METERS

ESB Networks has completed the rollout out of Phase 1 of a National Smart Meter Programme in the Republic of Ireland. Phase 1 included a major IT investment that has enabled Suppliers offer new time of use tariffs since the end of February 2021. Over 239,000 meters installed were installed by the end of 2020. Phase 2 of the project has started that will see further IT enhancements delivered by the end of 2022. Over 2 million meters are due to be installed by 2025, over the three phases of the programme.

ELECTRIC VEHICLE INFRASTRUCTURE

ESB eCars builds, owns and operates electric vehicles (EV) charging networks for public use across ROI, NI and GB. This network contains over 1,100 chargers on the island of Ireland, as well as over 140 chargers in Great Britain.

PROJECT FITZWILLIAM

The redevelopment of ESB's Fitzwilliam Street Head Office site in Dublin 2 in the Republic of Ireland began in June 2017 and is due to be completed in 2021, having been delayed somewhat due to COVID 19 related restrictions. 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.



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 green bond 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

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