Ecological Impact Report

1.SUMMARY AND OVERVIEW

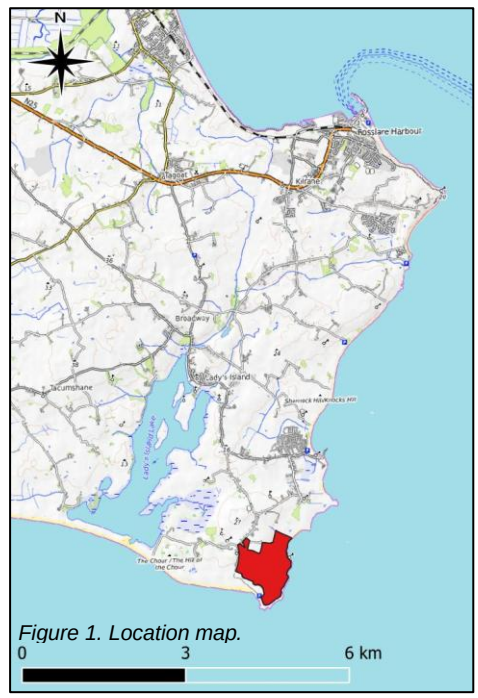

Figure 1. Location map.

This report outlines the proposed Carnsore Biodiversity and Heritage Trail project at the Electricity Supply Board's (ESB) 80.9ha property at Carnsore Point (Figure 1, red fill) in relation to the ecological resources of the receiving environment. Jim Hurley, SWC Promotions, compiled this report at the request of the ESB for a pre-planning meeting with staff of the Planning Authority of Wexford County Council (WCC) held on Wednesday 11 December 2024.

2.PROJECT BACKGROUND

In association with the Trinity College Dublin's (TCD) Nature + initiative (for details see Appendix 1), the ESB proposes to enhance the biodiversity of the onshore Carnsore Wind Farm site on its property at Carnsore Point, support the provision of public walking trails in collaboration with Wexford County Council (WCC) and the local community, and provide interpretative signage (see Appendix 2). The existing wind farm comprises 14 wind turbines, and is operated by Hibernian Wind Power Ltd, a subsidiary of the ESB. The wind farm site is flat, is divided into several fields crisscrossed by low, wind-swept hedgerows, and is leased to a local farmer for grazing bovids. On its sea side, the wind farm is adjoined by part of the existing 7.6km-long Carnsore Point Trail that starts and finishes at Carne Pier (https://wexfordwalkingtrail.ie/Trails/carne-trails-carnsore-point-trail/).

3. THE PROPOSED DEVELOPMENT

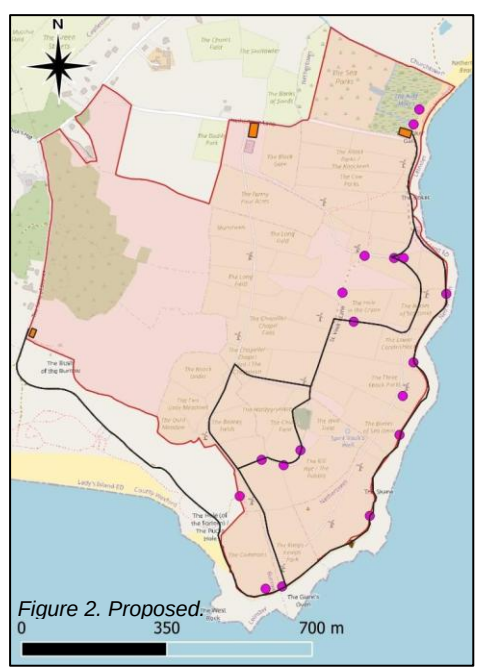

Figure 2. Proposed.

In association with WCC, the ESB proposed to upgrade the existing Carnsore Point Trail adjoining its property (Figure 2, pink fill with red boundary) by conducting minor repairs and drainage works where necessary, to develop looped walks through the wind farm off the existing walking trail (Figure 2, black lines), to erect stock-proof fencing, and to install interpretative signage (Figure 2, magenta dots) for the information of those using the amenity. These proposed developments are entirely within the boundaries of two townlands: Nethertown and St Vogue's and comprise Phase I of three proposed phases (Figure 3). Phases II and III envisage the development of car parking facilities at three locations (Figure 2, orange rectangles), turbine blade painting, and an outdoor classroom to promote the natural and other heritage values of the area.

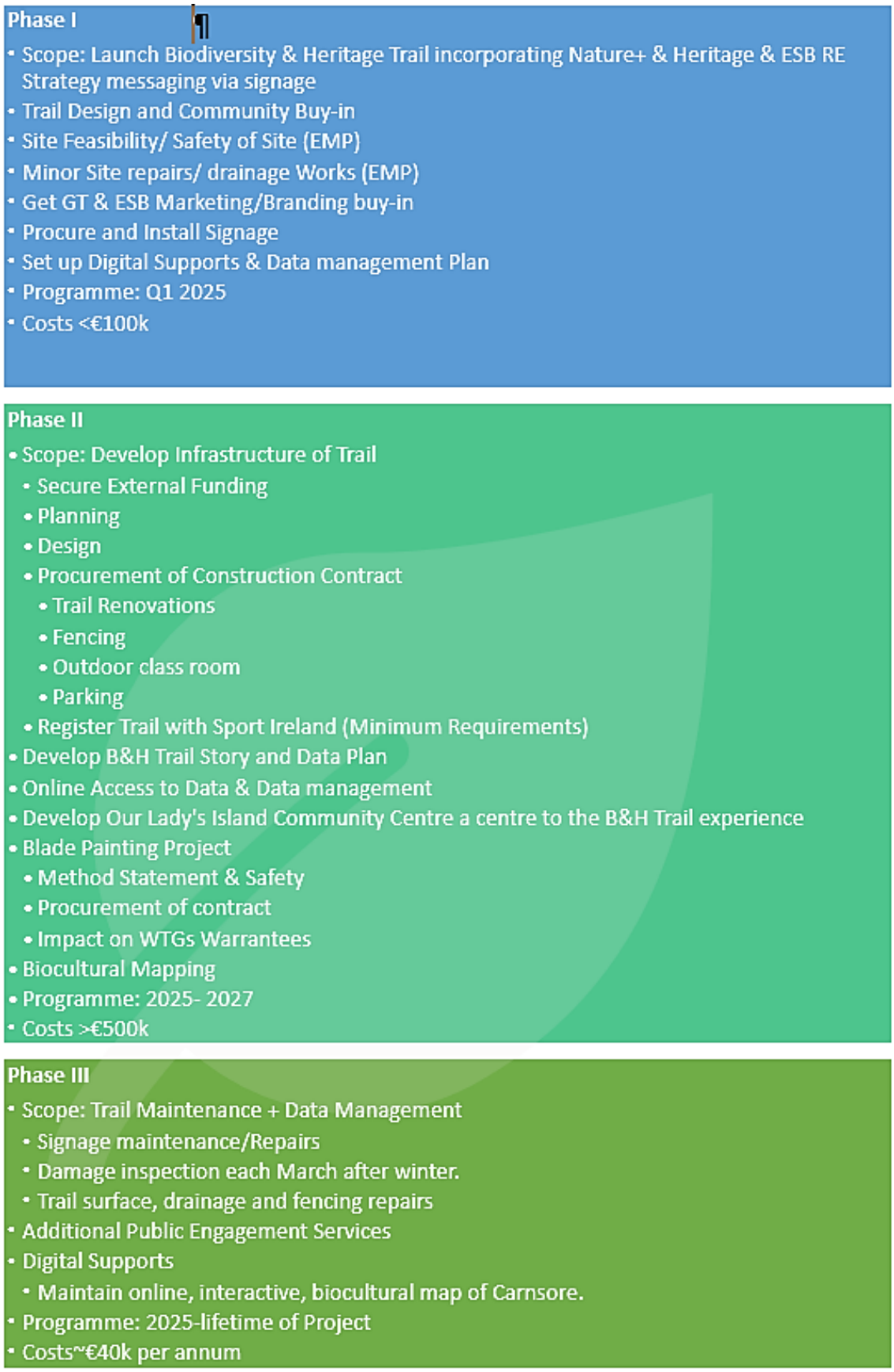

Figure 3. The three phases of the proposed development.

(Source: Frank Kelly, ESB)

4. EXISTING BIODIVERSITY RESOURCE VALUES

From a natural history perspective. the most usage of the Carnsore Point area at present is among birdwatchers who visit the landmark to see migrants arriving and leaving the country from the exposed headland, and to see passing seabirds, especially when they are driven close to shore during periods of strong onshore wind. For birdwatchers, the wide field of view and the consequent ability to avoid the glare of the sun are added advantages of the site. The biodiversity value of the wind farm is limited at present. The main habitats present comprise agricultural lands, windswept hedgerows, some scrub, and some stone walls.

5. EXISTING PROTECTED SITES IN THE AREA

The ESB property (Figure 4, red fill) adjoins and/or overlaps three Natura 2000 sites. The three sites featured together in Figure 4, and for clarity, are shown separately in Figure 5.

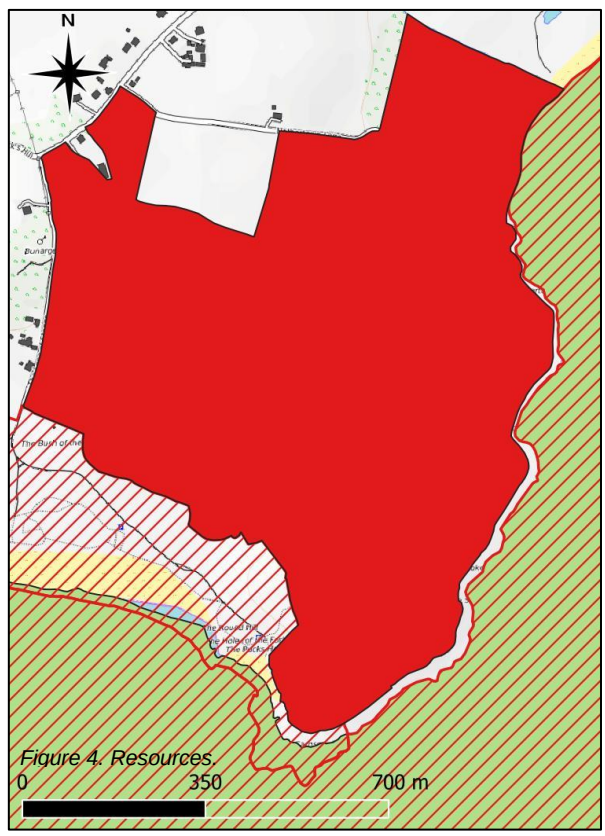

Figure 4. Resources.

- **Carnsore Point SAC**. The wind farm site adjoins the Carnsore Point Special Area of Conservation (SAC), Site Code IE0002269 (Figure 4, marine-based diagonal red lines). That SAC has three qualifying interests (QIs): (1) Mudflats and sandflats not covered by seawater at low tide (Habitat Code 1140) [for example, Nethertown Strand], (2) Reefs (1170) [for example, bedrocks and boulders at Carnsore Point], and (3) Harbour Porpoise (1351) [offshore only]. The Carnsore Point SAC overlaps with the following two sites.
- **Seas off Wexford pSPA**. The wind farm site also adjoins the Seas off Wexford proposed Special Protection Area (pSPA) Site Code IE0004237 (Figure 4, green fill). The SPA is proposed for 20 named species of seabirds, 18 summer breeders and two wintering species [Red-throated Diver and Common Scoter].
- **Lady's Island Lake SAC**. The wind farm site adjoins and overlaps the Lady's Island Lake SAC, Site Code IE0000704 (Figure 4, land-based diagonal red lines). That SAC is designated for three qualifying interests (QIs): (1) Coastal lagoons* (1150), (2) Reefs (1170), and (3) Perennial vegetation of stony banks (1220). A small part of the Lady's Island Lake SAC overlaps a small part of the wind farm site. The overlap area, known locally as 'The Commons', is the area in the townland of Burrow between the proposed walking trail from turbine No 3 (T3) to T5 and the existing Carnsore Point walking Trail (Figure 6). The overlap area does not support any of the three QIs of the Lady's Island Lake SAC and is not flagged as a significant habitat. At present, it is used for grazing bovids. While the pasture supports abundant Ragwort at present, the habitat has potential for restoration.

Figure 5 separates the three overlapping Natura 2000 sites at Carnsore Point.

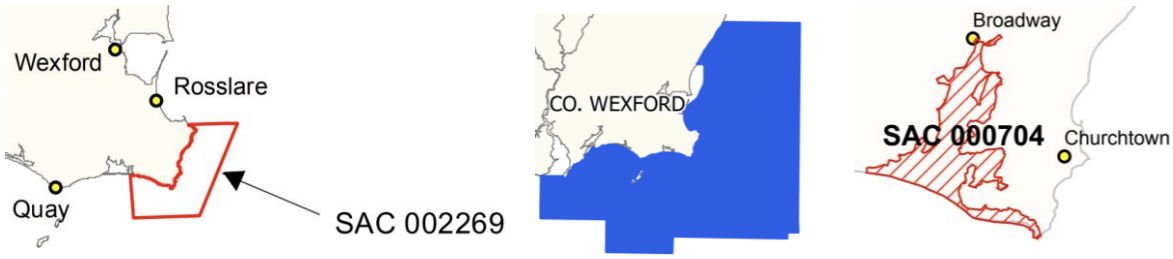

Figure 5. Three Natura 2000 sites: Carnsore Point SAC (left), Seas off Wexford pSPA (centre, blue fill), and Lady's Island Lake SAC (right).

(Sources: NPWS 2011, NPWS 2024, and NPWS 2019 respectively)

Figure 6 features the area where Lady's Island Lake SAC (diagonal red lines) and the ESB property (pale blue fill) overlap.

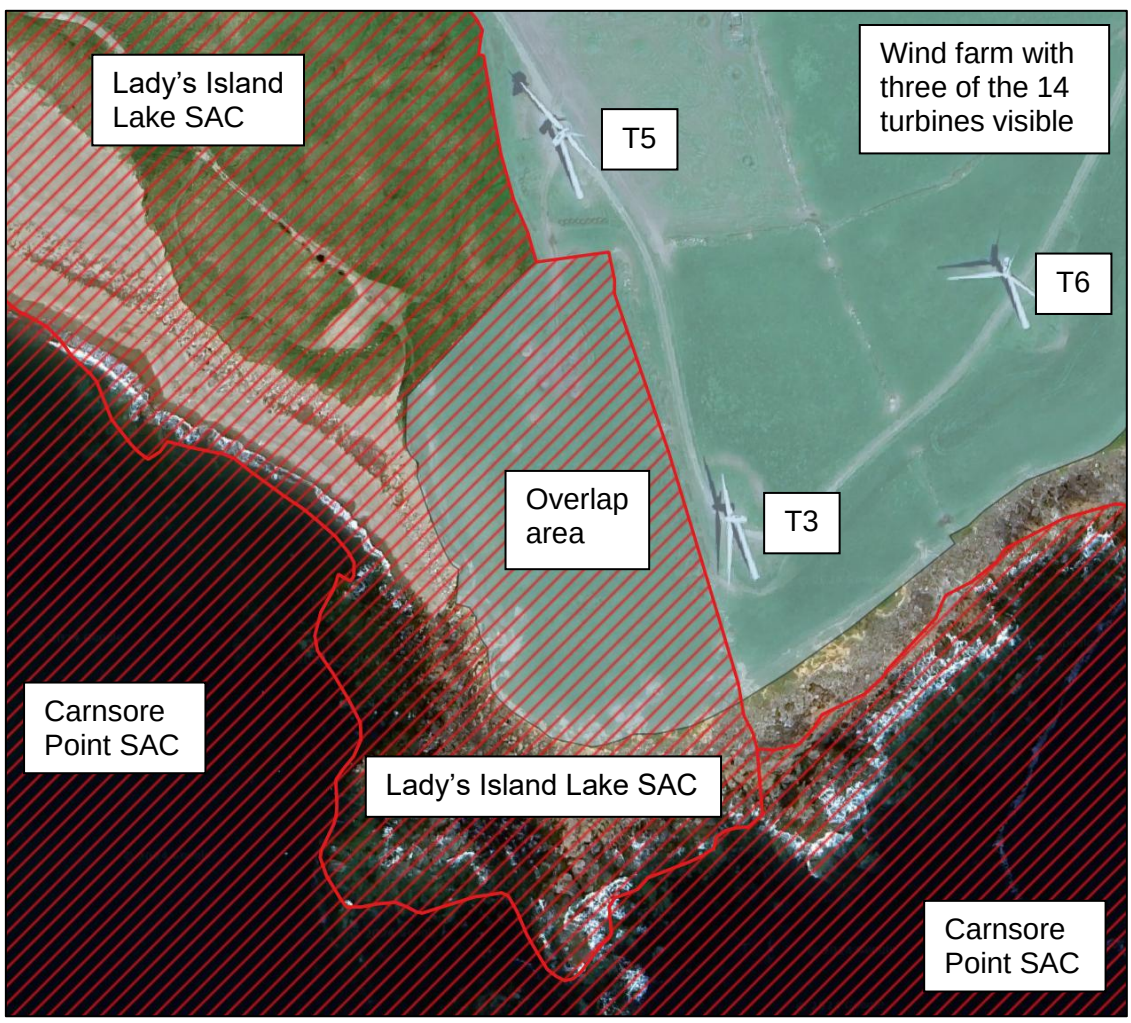

Figure 6. Overlap of Lady's Island Lake SAC (diagonal red lines) and ESB property (pale blue).

Figure 7 features Phase I of the three-phase project.

Figure 7. Phase I of the three-phase project.

Notes Figure 7

- The red line nearest to the sea is the portion of the existing Carnsore Point Walking Trail that skirts around the headland.
- The inner red lines are the proposed new trails within the footprint of the existing windfarm. The proposed new trails enter/exit the existing Carnsore Point Walking Trail at two points (each circled in yellow).
- The magenta dots are the proposed locations for interpretive signage.
- The scale bar is 0-600m long.

County Geological Site. The ESB property (Figure 8, red fill), adjoins the Carnsore Point County Geological Site, Site Code WX012 (Figure 8, green fill), flagged in the County Development Plan as *"worthy to receive protection"* (WCC, 2022 Volume 1, page 546, Table 13.3, and Meehan, 2018).

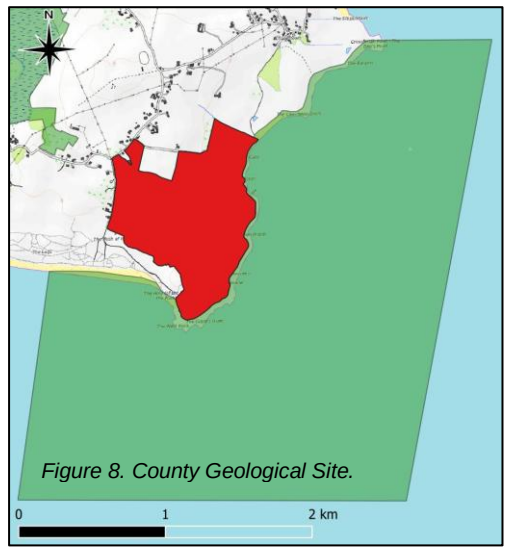

Figure 8. County Geological Site.

6. POSSIBLE ADVERSE IMPACTS

It is considered that Phase I of the project poses no possible adverse impacts on the Natura 2000 network. With regard to Phases II and III it is proposed to submit an Appropriate Assessment Screening Report with any application for planning permission for any works that planning permission may be required for. At this early stage, it is anticipated that possible adverse impacts are unlikely to exist and that, on the contrary, the proposed development has the potential to enhance both local Nature 2000 sites and biodiversity appreciation in general by promoting the local heritage and providing relevant interpretative resources.

7. FEASIBILITY AND VIABILITY OF THE PROJECT

The project is entirely feasible in that it appears to be easily achievable, and it is viable in that it can be straightforwardly developed and maintained. Promoting walking, promoting awareness of biodiversity, and promoting awareness of Co Wexford's geological heritage all have several linkages with both Wexford County Council's Development Plan (WCC, 2022) and Biodiversity Plan (WCC, 2012) and complies with the policies of both of these plans. The proposed development also has benefits for the local economy due to passing trade as people access and exit the walking trails.

8. REFERENCES

Meehan, R., Hennessy, R., Parkes, M. and Gatley, S. 2018. *The Geological Heritage of County Wexford*. Unpublished report. Dublin: Geological Survey of Ireland. Available online at https://www.gsi.ie/en-ie/publications/Pages/The-Geological-Heritage-of-Wexford.aspx.

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Jim Hurley, SWC Promotions, 10 December 2024

Appendix 1: The TCD Nature +initiative.

The Nature + initiative was launched on 9 November 2017 in Trinity College Dublin (TCD). The initiative comprises a multidisciplinary team of researchers from the TCD School of Natural Sciences and from other institutions, with experience in understanding natural systems in order to manage and sustainably use them. The goal is to better connect academia with coalface operators to promote biodiversity. The group works with industry partners to develop transferable methods for managing natural capital, and, by better understanding the feedback between natural capital and climate systems, it will design future-proof solutions to ensure economic growth.

(Source: https://www.tcd.ie/news_events/articles/nature-launches-to-better-connect-sustainability-science-with-industry/)

The 'Nature + Wind farming' initiative covers nine project sites around Ireland. Two of the sites are located in Co Wexford: Richfield Wind Farm, and Carnsore Point Wind Farm. It is anticipated that a national plan for the wind farming industry will be developed together with local, site-specific plans for the participating sites. One site has been selected as a demonstration site which will be open to the public and will involve the local community. Carnsore Point Wind Farm has been chosen as the national demonstration site to display the initiative.

Appendix 2: The ESB perspective.

"As outlined in Ireland's 4th National Biodiversity Plan, Ireland's 'biodiversity is in trouble across a range of species and habitats' with 85% of our EU protected habitats in unfavourable status and almost half (46%) demonstrating ongoing declines.

The 300 or so onshore wind farms dotted around Ireland today are located in many different types of habitats – from agricultural land, to bogland, coastal areas or forests. What if we could unlock the potential of this rich biodiversity to take even more carbon from the atmosphere, improve the resilience of ecosystems to climate change, and enhance the many ways that nature supports our lives?

That is why ESB has partnered with Nature+Energy, a collaborative initiative to explore how land management at onshore wind farms can strengthen habitat quality, biodiversity and connectivity between people and nature.

Now in its third year, the project brings together leading Irish universities and energy companies, with our Carnsore Wind Farm in Co Wexford one of nine participating sites. Spanning 200 acres in the most south-easterly corner of Ireland, Carnsore is home to 14 turbines powering around 7,600 households a year. The land is mostly agricultural but with pockets of wet grassland, scrub and reed beds. Recognised as extremely rich in biodiversity, the region includes special marine areas of conservation and protected areas for birdlife.

Nature+Energy is developing new ways of monitoring the nature on site, to identify both existing habitats and the potential to create space for greater biodiversity. One system under development records bird calls and songs, and uses AI to analyse this data, identify the species present around the wind farm, and transmit this information to the operator. This can raise the alert if a high-risk species is present near a turbine. Another innovation being field-tested is a radar-based sensor that can classify small flying insects based on how often they beat their wings, providing valuable insights into species that are hard to detect on the ground.

Crucially, the project seeks to measure the value of the benefits delivered by the wind farm ecosystems to the local community – looking at 'ecosystem services' such as pollination, water filtration, or the mental health benefits of spending time in nature.

This will give operators like ESB a new way to evaluate biodiversity on the sites and prioritise actions to strengthen these natural resources.

The initiative is a prime example of the regenerative or 'net positive' approach underpinning ESB's Sustainability Leadership Plan: the objective is not just to minimise harms, but to actively enhance nature at the sites where the company operates.

"While working towards ESB's goal of achieving net zero emissions by 2040, we are also conscious of how the future energy system may affect biodiversity and the communities where we operate," explains Frank Kelly, Wind Operations Stakeholder Manager at our Generation and Trading business unit. "We are stepping up by challenging ourselves to ensure our activities make a positive social and environmental impact."

The local community in Carnsore has been an integral partner in the project since day one. A key output will be the Nature+Biodiversity Park, a place for people to enjoy nature at the wind farm and learn about the value of local biodiversity. This will be developed in a co-design process involving Wexford County Council, local walking groups, and schools, and will include walking trails and educational resources around people's connection to nature.

Ultimately the work done by Nature+Energy can provide a template for our other wind farms and similar sites. This will support the company's Sustainability Leadership Plan goal of being 'nature positive' by 2030, which includes the requirement for all new onshore sites to be developed for biodiversity net gain. Moreover, data gathered by the project will feed into an evidence-based Biodiversity Action Plan for the wind sector as a whole, helping both operational and planned wind farms across the country to better account for and protect the biodiversity at their sites."

(Source: https://esb.ie/media-centre-news/blog/article/esb/2024/08/01/why-we-need-to-enhance-our-land-for-biodiversity)

(Image: ESB)