

FS007188 RWE Renewables Ireland, Site Investigations for the proposed Dublin Array offshore wind farm.

Invitation for Public Submissions for Purpose of Conducting Stage 2 Appropriate Assessment, during period 30/06/2022 – 29/07/2022.

Public Submissions.

1. Private.
2. Private Fisher.
3. Private Fisher.
4. Gus Cullen Solicitors on behalf of Fisher clients and Seafood clients.
5. Wild Kildare.
6. The Adela-Hare Centenary Commemoration Committee.
7. Private.
8. Wild Defence Ireland
9. Killiney Bay Community Council.
10. Private.
11. Wild Defence Ireland (copy)
12. Private.
13. Private.
14. Private.
15. Private.
16. Coastal Concern Alliance.
17. People Before Profit.
18. Private.
19. South East Coastal Protection Alliance

1 Private

From: [REDACTED]@gmail.com>
Sent: Thursday 30 June 2022 13:49
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: Dublin array.

Hi,

Again to briefly outline my opposition to all parts of this proposed development.

1. Destruction of seascape. The view would be ruined for miles of coast.
2. Disturbing of dolphins etc by the work and also by the electrical fields.
3. Killing of birds by giant turbines.

It is near Rockabill island, an important breeding place.

Regards,

[REDACTED]

2 Private Fisher

From: [REDACTED]@gmail.com>
Sent: Thursday 30 June 2022 20:33
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: FS007188 RWE SI – Consultation on Stage 2 AA)

Hello

I'm a fisherman working in this area , I've 3 vessels and 7 lads working here for 20 plus years , there's been no consultation with fishermen as to where these wind farms will be placed , it's been a bully boy attitude that there going to be built so get onboard , There's been more lies told to Europe by our government on the status of kish , bray and codling banks than you could make up , this has been brought to the attention of European Commission by many groups including fishermen, I'm part of an existing industry operating in this area and I wont be moving from this area for Rwe / codling or any other windfarm company's (ESB) .

https://www.europarl.europa.eu/doceo/document/A-9-2021-0184_EN.html

Thanks

[REDACTED]

3 Private Fisher

From: [REDACTED] <[REDACTED]@gmail.com>

Sent: Monday 4 July 2022 10:21

To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>

Subject: Re: FS007188 RWE Renewables, Foreshore Application for Site Investigations - Notice of Public Consultation on Stage 2 Appropriate Assessment

Hi

I own a fishing boat that fishes for whelk in the area.

Very concerned as this will have a negative impact on my ability to earn a living and pay for my boat plus wages for two crew men.

First I've heard of this sage as we haven't been consulted.

Regards [REDACTED]

[REDACTED]

4. Gus Cullen Solicitors on behalf of Fisher Clients and Seafood Clients

From: [REDACTED] <[REDACTED]@aclsolicitors.ie>
Sent: Saturday 23 July 2022 15:39
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: FW: FS007188 RWE Renewables, Foreshore Application for Site Investigations - Notice of Public Consultation on Stage 2 Appropriate Assessment [RYA123/0001]/[East Coast Fishers]/[East Coast Fishers]

Augustus Cullen Law thoughtful clear advice

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e info@aclsolicitors.ie

23 July 2022

Department of Housing and local government ,Mr. Darragh O'Brien T.D. ,Minister for
Housing, Planning and Local government, Custom House, Custom House Quay, Dublin 1,
D01 W6X0,
Foreshore Unit, Department of Housing, Local Government and Heritage, Newtown Road,
Wexford, Co Wexford, or email
foreshoreORE@housing.gov.ie ministerofstate@housing.gov.ie
ref: HPLG-MoSB-00228-2020

Response to opportunity to make submissions on **RE: FS007188 RWE Renewables Ireland, Foreshore Application for Site Investigations for the proposed Dublin Array offshore wind farm**

East Coast Fishers Objection to RWE in Kish Dublin Array ,SSE Arklow Bank , Codling on
Codling Bank , ESB Wind Development Limited Site Investigations at Sea Stacks Offshore
Wind off Dublin and Wicklow , RWE in Kish Dublin Array and Reath Na Mara east of RWE,
Energia at South Irish Sea and many more in the pipeline projected to take over and lead to
the demise the Whelk , Lobster and Crab fishing industry off the East Coast from Dun
Laoghaire to Arklow South

Dear Sirs,

We are instructed to refer you to our objection of 29 September 2020 and your responses
and to file this further objection and FOI request on behalf of East Coast Fishers
(membership set out in attached word document and to our attached objection of 3 June
2022. This submission is made in Response to opportunity to make submissions on **RE:
FS007188 RWE Renewables Ireland, Foreshore Application for Site Investigations for the
proposed Dublin Array offshore wind farm**

Primary Concern

We have been retained by the fishermen whose names and vessels are set out [Above] fishermen primarily from the Codling , East Coast Sea Stacks, Dublin Array, Kish ,Wicklow, and Arklow area. Our clients are increasingly concerned at the far reaching proposals for wind farms in the Irish Sea. They see major lacunae and neglect in the approach of the sponsoring companies to their opportunity, income and livelihoods in fishing in the Irish Sea. They agree there are merits in Windfarms and need for greener energy . If it was one wind farm it would not be such a concern . It is the cumulative effect of multiple windfarm projects surveying and applying for construction permits for Windfarms invading their fisheries , forcing out the whelk , lobster and crab to the demise of their whelk , lobster and crab industry and the future livelihood of our clients with their boats and equipment .

National policy implications

The nature and extent of these applications and related adjacent applications by other Wind Farm Companies are of such a scale that a comprehensive framework is required if these developments are to proceed in a manner consistent with the interests and constitutional rights of traditional fishermen, navigation, and the community generally. It is the adverse cumulative effect of all the surveys and all the windfarms that is of concern and the subject of this objection.

The development of wind energy is important strategically and economically. It requires an coherent and joined up approach which gives due regard to the interests not just of wind power developers and the exigencies of energy planning, but also to the impacts on the marine environment, on fishing activity and the livelihoods of the fishermen who have traditionally made their livelihood from fishing in the area.

The following issues arise:

1. Nature and extent of the applications
2. Stages of Development: surveys, construction, development and operation.
3. Impact on fishers - fisheries impact assessments
4. Impacts on Environment
5. Exploitation of marine resources.

1. Nature and extent of applications

The applications for foreshore licences cover substantial areas in the immediate vicinity of the East Coast of Ireland and in this application Arklow, Codling ,Sea Stacks, Dublin Array , Bray Banks and Kish. It is also clear that significant areas of the Exclusive economic zone

outside the foreshore area may be absorbed or impacted by wind farms. They are included in this geotechnical surveys. If the true impact of these developments is to be assessed, then it should not be done on a piece meal basis, but it should be done in an integrated way. This will involve both the Foreshore Acts 1933 as amended and the Continental Shelf Acts. It appears that some of the proposed development and surveys will extend beyond the Foreshore and into Ireland's exclusive economic zone on the Continental Shelf and require careful statutory processes to avoid an ultra vires situation. It must consider the MARA Act and National and EU policy documentation and Marine Spatial Plans.

2. Stages of Development

The proposed developments will have different impacts as they progress. It is necessary to distinguish four stages as follows (a) the surveys stage, (b) the physical planning stage, (c) development stage and construction, and (d) the operating stage. It is suggested that a coherent and consistent approach to the each of these stages should be mapped out, so that all those concerned and affected by these major developments are in a position to take an informed view. In what follows below we concentrate on the fisheries and environmental aspects

3. Impacts on fishers.

Of critical concern to us is that the current daily users of the Irish Sea, the fishermen we represent, who use it as a workplace have not been consulted adequately in the process to date. Their concerns relate to the impacts of each of the stages of large-scale development identified in paragraph 2 above. These impacts concern (i) the potential loss of opportunity to fish, (ii) the loss of income and, (iii) ultimately the loss of livelihood. If these developments are to proceed in a manner consistent with established rights of local fishers, it is imperative that the agencies of the state ensure that mechanisms are put in place to vindicate the fisher's rights. We believe that inter alia, this requires an independent assessment of the impacts in paragraph 3 on fishers at each of the stages mentioned at paragraph 2. We believe that to expedite development the most effective means would be to put in place a mediation process to compensate for those losses at each stage. Ideally a national strategy and framework would be negotiated and agreed. It is of real concern that the environmental impact studies do not include mention of Whelk , Crab or Lobster.

4. Impacts on the environment.

A major consideration in assessing these applications must be evaluation of the likely impact of developments of this scale on the spawning beds and fishery grounds in the area being assessed for proposed development. It is suggested that the parameters of the

exploratory work should be in partnership with the existing users, and not independently of them and their ongoing activities. Our fisher client report to us that their catch since the last RWE and Codling survey is down 40% to 70% . This devastating damage to whelk and other fish stocks since the last survey needs to be independently investigated . Our fisher clients firmly believe this reduction is a consequence of the last surveys . Our clients are willing to liaise with the evidence of their reduced turnover with an investigation by you. Our client's experience is that after each sonic/seismic survey the whelk disappear from the surveyed area for at least 2 years . It is of real concern that the environmental impact studies do not include mention of Whelk , Crab or Lobster. The loss and damage from construction and operation stage is likely to be far greater. Our clients experience of the existing underwater power cables is that there is no fish life within a half mile of each side of the existing power cables . When Turbines are constructed safety regulations and 4.5 knot tides make it too dangerous for fishermen to operate near or between turbines. Evidence of the decline of fish stocks caused by the surveys is the reduction of the fish factories (Sofimar and Errigal) from 7 days per week to 5 days per week. The CJEU developed this point when it issued a ruling in case C-461/17 ("Brian Holohan and Others v An Bord Pleanála") that determined inter alia that Article 6(3) of Directive 92/43/EEC must be interpreted as meaning that an appropriate assessment must on the one hand, catalogue the entirety of habitat types and species for which a site is protected, and, on the other, identify and examine both the implications of the proposed project for the species present on that site, and for which that site has not been listed, and the implications for habitat types and species to be found outside the boundaries of that site, provided that those implications are liable to affect the conservation objectives of the site. In that regard, consideration has been given in this Habitats Directive appraisal to implications for habitats and species located outside of the European sites considered in the appraisal with reference to those sites' Conservation Objectives where effects upon those habitats and/or species are liable to affect the conservation objectives of the sites concerned. This means all environmental impact studies ought take into account the negative effect of the survey and works on all species including whelk both in and outside the survey area. I have done a word search the for "whelk" in one environmental impact study and it is not there. This is not good enough.

Further we have been instructed by our client to draw your attention to the proposed bore holes surveys in the Cable Corridors off the Booterstown Special Area of Conservation in the Codling, due to be carried out in the next week as per Marine Notice 29 of 2022 , and other likely survey applications . Our clients understand that some of these boreholes will be in 2 metres of water at or adjacent to the Land Bird Sanctuary of the Booterstown Special Area of Conservation

5. Exploitation of wind resource.

The offshore wind resource is a national marine resource in much the same manner as fish or hydrocarbons. It therefore raises issues regarding exploitation and distribution of benefit. There needs to be fairer balance and proper consideration of the destruction of the Whelk , Lobster and Crab fishing grounds It is of real concern that the environmental impact studies do not include mention of Whelk , Crab or Lobster.

Proposal for a way forward

Our clients have identified the following as critical:

1. Directive 2014/89/EU of the European Parliament and of the Council of 23 July 2014 envisages maritime spatial planning as a cross-cutting policy tool enabling public authorities and stakeholders to apply a coordinated, integrated and trans-boundary approach. At the core should be a national strategy, a National Marine Spatial plan, drawn up in consultation with the competing economic interests, and those effected by the possible or probable Marine development. Members of the public should be afforded the opportunity to input and comment on any draft plan. The adoption of such approach would be a matter for government, as well as EU level, much as the County Development Plans are a matter for local authorities. Such an approach could consider in a holistic way, not just the distribution of economic benefits, but also environmental impacts, the impacts on fishing communities, impacts on Navigation, the impacts of exclusion zones and so forth. It is of real concern that the environmental impact studies do not include mention of Whelk , Crab or Lobster.
2. Financial and compensatory arrangements in relation to the short, medium and longer term should be independently assessed and developed to address the loss of opportunity to current economic players , and in particular fishermen for their loss of opportunity during exploratory work , and their loss of income during development, and any loss of livelihood consequent on operation of the wind projects. It is our clients' sincerely held view that their traditional fishing industry , particularly whelks, crabs and lobsters will cease to exist because these fish stocks will be wiped out .Their traditional livelihoods will be ended . The new wind industry will displace and destroy this traditional whelk , crab and lobster fishing industry . Such displacement and destruction is not authorised by Marine Spatial Plan but unless duly considered it will happen by stealth and neglect. Any good wind developer must be asked as part of their survey application be asked to take on board the likely demise of this fishing industry. Further your department as grantor of licences and body responsible for implementation of the EU Directive must bear responsibility for any failure of balance of interest giving rise to the demise of the whelk , lobster, and crab industries.

3. Appropriate environmental studies should be identified in conjunction with fishers and scientists and concluded before embarking of elements of these projects which might have unassessed impacts. It is of real concern that the environmental impact studies do not include mention of Whelk , Crab or Lobster.

4. The Department is requested in its consideration of the granting of Maritime Area consents under the Act to give due consideration to the whelk and inshore fishermen including :

- a. under section 282(3)(f) “conditions aimed at protecting rights to fish in the maritime area;”
- b. under section 282(3) (g) “conditions for, or in connection with— (i) the protection of the marine environment (including the protection of fisheries),”
- c. under DIRECTIVE 2014/89/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 July 2014 establishing a framework for maritime spatial planning , Article 5 Objectives of maritime spatial planning, 1. When establishing and implementing maritime spatial planning, Member States shall consider economic, social and environmental aspects to support sustainable development and growth in the maritime sector, applying an ecosystem-based approach, and to promote the coexistence of relevant activities and uses. 2. Through their maritime spatial plans, Member States shall aim to contribute to the sustainable development of energy sectors at sea, of maritime transport, and of the fisheries and aquaculture sectors, and to the preservation, protection, and improvement of the environment, including resilience to climate change impacts. In addition, Member States may pursue other objectives such as the promotion of sustainable tourism and the sustainable extraction of raw materials.
- d. under DIRECTIVE 2014/89/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 23 July 2014 establishing a framework for maritime spatial planning , Article 6 Minimum requirements for maritime spatial planning 2(b) “take into account environmental, economic and social aspects, as well as safety aspects;” and Article 8 requires when Setting-up of maritime spatial plans to take into account “— fishing areas,” .
- e. under section 120 of the Act application for surveys SCHEDULE 8 sets out Types of conditions that MARA may attach to Licence including 13. A condition requiring the holder of a licence to appoint—
- f. (a) a fisheries liaison officer to consult with the Sea Fisheries Protection Authority and relevant fishers ’ groups to ensure that appropriate actions are taken to avoid or minimise any adverse interactions between the activities or operations the

subject of the licence and any ongoing fishing activities in the part of the maritime area the subject of the licence . It is contended by our clients that this is not happening and that the fisheries liaison officers are more concerned with telling fishermen why they must give way to the Windfarm industry to the detriment and eventual demise of the Whelk , lobster, and Crab fishing industry .

Conclusion

It is of concern to our fishing clients that consents are being considered and granted on a piecemeal basis without due consideration for our clients' industry interests as stakeholders in the Irish Sea.

The projects now being contemplated involve a major incursion into the Irish Marine area. As such it would be appropriate to agree an overall approach and principles. A collaborative consultative process with the fishers being impacted could be used to guide developments and take proper and timely account of impacts, and avoid the dislocation and delays which failure to involve the affected fishermen will trigger.

On behalf of our fishers clients, we would ask to be included in a meaningful process in relation to the impacts on our clients, with a view to a mediated resolution of the income and opportunity issues which these proposed developments raise for our clients.

There is a parallel between the manner in which it was necessary to articulate a policy in relation to offshore hydrocarbon exploration. It is pointed out that the environment and economic implications of wind power development could be at least as significant - possibly even more so.

This is an opportunity for the relevant Departments to take a leadership role and balance and mediate a pragmatic co-existence relationship and financial framework between the fishermen and the Windfarm developers. If the Government departments responsible for implementation of the EU Directives choose not to adequately protect our clients fishing livelihoods or compensate in lieu it is contended that this is a failure to so implement those directives and liability for such loss will then lie with the State. Please consider the legal implication of this .

Further we are instructed to hereby to seek from you a map showing all of the existing , proposed and applied for windfarm foreshore licences in the area from Dun Laoghaire Southward in the Irish Sea , together with projected cable corridors and each Department assessment its estimated impact on the Whelk , Lobster and Crab fisheries in the area the subject matter of this letter.

We look forward to hearing from you.

Yours faithfully



■■■■ Solicitor Accredited Mediator and Collaborative Practitioner | Diploma in Commercial Litigation & Mediation & Certificates in Health Care Law , Human Rights , Advanced Advocacy and Arbitration and IT and IP Law | Consultant | Augustus Cullen Law |
Email: ■■■■@[aclsolicitors.ie](mailto:■■■■@aclsolicitors.ie) | Wicklow Office: 7 Wentworth Place, Wicklow | Tel: +353 (0)404 67412 | Fax: +353 (0)404 69219 | Dublin Office: 18 Bow Street, Duck Lane , Smithfield Dublin 7 | Tel: +353 (0)1 6139188 | Web: www.aclsolicitors.ie
Augustus Cullen Law Three times Winner of Irish Law Awards

5 Wild Kildare

From: [REDACTED] <[REDACTED]@gmail.com>
Sent: Wednesday 27 July 2022 16:08
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: Observation on Application for Site Investigation concerning proposed Dublin Array Offshore Windfarm

Please find observations in Attachment below, regards [REDACTED]

Attachment From Wild Kildare:

Date: 26/7/2022

From: [REDACTED] (Acting Chairman Wildkildare)

To: Foreshore Unit Department of Housing, Local Government and
Heritage, Newtown Rd, Wexford

Re: FS007188 RWE SI - Consultation on Stage 2 AA

A chara

The basis of my concerns regarding this Wind Energy related application (and others in the Irish Sea) are routed in recent revelations via hundreds of records released to Coastal Concern Alliance, a citizens' group, under Freedom of Information and Access to Information on the Environment rules, which raise serious questions for habitat protection and wind farm development in the Irish Sea – a synopsis of this investigation can be found via the following link

<https://iwt.ie/dodgy-dealings-under-the-sea/>

The serious matters raised in the above link are now subject of an EU investigation – in light of this I believe the granting of this application at this time is highly premature and will further erode public confidence in how various government departments apply relevant National and EU rules in this space. Further more the ongoing failure of this state to implement the required MPA's in the Irish Sea ahead of such Wind Energy related works will undoubtedly lead to further legal and planning complications down the line.

Regards, [REDACTED]

6 The Adela-Hare Centenary Commemoration Committee

From: AdelaHare <adelahare1917@gmail.com>
Sent: Wednesday 27 July 2022 21:13
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: Re: FS007188 RWE SI - Consultation on Stage 2 AA

Re: FS007188 RWE Renewables, Foreshore Application for Site Investigations - Notice of Public Consultation on Stage 2 Appropriate Assessment

To whom it may concern,

Please see attached our committee's observations/submission as it relates to the RWE Dublin Array S.I - Foreshore Licence to undertake geotechnical and geophysical site investigations and ecological, wind, wave, and current monitoring to provide further data to refine wind farm design, cable routing, landfall design and associated installation methodologies for the proposed Dublin Array offshore wind farm.

We hope that the Department of Housing, Local Government and Heritage will give this matter its full attention and take on board the points raised. We would ask for confirmation that our committee's observations/submission was received as part of the consultation process.

Yours sincerely,

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Committee Member, and on the behalf of The Adela-Hare Centenary Commemoration Committee.

E-mail: adelahare1917@gmail.com

Facebook: <https://www.facebook.com/adelahare1917/>

Website: <http://thewater-front.com/>

Attachment from adelahare1917@gmail.com:

The Adela-Hare Centenary Commemoration Committee,
c/o 4 Redwood Lawns,
Kilnamanagh,
Tallaght,
Dublin 24.
adelahare1917@gmail.com
davidpcotter2014@gmail.com
The Foreshore Unit,
Department of Housing, Local Government and Heritage,

Newtown Road,
Wexford,
County Wexford.

Email: foreshoreORE@housing.gov.ie

24th July 2022.

Reference No.: FS007188 RWE Dublin Array S.I - Foreshore Licence to undertake geotechnical and geophysical site investigations and ecological, wind, wave, and current monitoring to provide further data to refine wind farm design, cable routing, landfall design and associated installation methodologies for the proposed Dublin Array offshore wind farm - Public Consultation for Purposes of Conducting a Stage 2 Appropriate Assessment.

To whom it may concern,

On the behalf of The Adela-Hare Centenary Commemoration Committee, we wish to make the following further observations regarding the application submitted by RWE Renewables Ireland Limited to undertake geotechnical and geophysical site investigations and ecological, wind, wave, and current monitoring to provide further data to refine wind farm design, cable routing, landfall design and associated installation methodologies for the proposed Dublin Array offshore wind farm and in particular the public consultation for purposes of conducting a Stage Two Appropriate Assessment. In doing so, we wish to refer to our previous submission and associated with the above proposed development dated the 16/12/2021.

As previously stated by our committee, this investigative foreshore licence application for geotechnical and geophysical site investigations would impact negatively on the following NATURA 2000 conservation sites:

- Howth Head Coast SPA [004113],
- South Dublin Bay and River Tolka Estuary SPA [004024],
- North Bull Island SPA [004006],
- Dalkey Islands SPA [004172],
- The Murrough SPA [004186],
- Howth Head SAC [000202],
- South Dublin Bay SAC [000210],
- North Dublin Bay SAC [000206],
- Rockabill to Dalkey Island SAC [003000],
- Bray Head SAC [000714],

- The Murrrough Wetlands SAC [002249].

The proposed geotechnical and geophysical site investigations and follow on offshore wind farm development has the potential to cause permanent damage to the fragile sand banks off the east coast of Ireland thus impacting on the above NATURA 2000 conservation sites and their associated ecology/biodiversity importance. It is our belief that the Dublin Bay coastline would be under serious threat from loss of the protection that the sand banks offer.

The proposed development will fundamentally change the character of Dublin Bay as we currently know it. The introduction of man-made features into a highly designated land and seascape could significantly change perceptions of the County Dublin coastline.

It is a known fact that offshore wind farm infrastructure, if located in the wrong place, can cause the loss of habitat particularly on the seabed. Cables to bring the energy produced from offshore wind farms onshore are normally buried below the seabed but in some cases, this is not feasible and consequently cables are covered with rock armour, causing a loss of habitat. This could further cause a loss of important nursery grounds for fish and vital feeding areas for marine mammals and birds. The construction, operation, and decommissioning phases of offshore wind farms, exert pressures on marine environmental receptors, i.e., any species or habitat supporting that species. These include plankton, fish, marine mammals, birds, etc. It is a known fact that offshore wind development can affect hydrodynamics and in turn have implications for important and endangered fish species. Even seagrass, saltmarsh, and deep-sea mud, all of which can be disturbed by offshore windfarm construction, play a vital role in storing large amounts of carbon, so disturbing them to build a windfarm is counter-productive and defeats the purpose in the first instance.

Offshore wind farms should be well excluded from high biodiversity and ecologically sensitive areas containing threatened marine species and habitats, particularly those situated in or in the vicinity of areas with valuable seascapes. It is our belief that the NATURA 2000 conservation sites list above are well located within the foreshore licence application area and should be indeed deemed valuable seascapes. The risks far outweigh the benefits gained and would be in breach of and contravenes provisions as set under the EU Habitat's Directive (Council Directive 92/43/EEC).

Our committee urge's the Department of Housing, Local Government and Heritage to give this matter it's full intention and in doing so, refuse to grant a foreshore licence for this proposed development.

Yours sincerely,

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Committee Member,

and on the behalf of The Adela-Hare Centenary Commemoration Committee.

E-mail: adelahare1917@gmail.com

Facebook: <https://www.facebook.com/adelahare1917/>

Website: <http://thewater-front.co>

7 Private

From: [REDACTED] <[REDACTED]@yahoo.ie>
To: foreshoreORE@housing.gov.ie <foreshoreore@housing.gov.ie>
Sent: Thursday 28 July 2022 at 22:56:20 IST
Subject: Re RWE Renewables Ireland Ltd

FS007188 RWE SI

Consultation on Stage 2 AA

AA for Proposed Dublin Array Offshore Windfarm Foreshore Licence.

(to: foreshoreORE@housing.gov.ie.)

Re: Killiney Bay proposed Shanganagh Landfall Cable Site Area Shanganagh coastal areas (DLR Map 10) and further considerations.

SAC Rockabill to Dalkey Island

Proposed Landfall Cable Site Area at Killiney River Estuary Area.

A close scrutiny of the SAC grid southern boundary area reveals that this lies within 1.5 km of the Deansgrange River Estuary and the distinctive rocky 'reef' area in the intertidal shore area just to the north of the Deansgrange River. (This is often visible from mid to low tide periods and is a feature of the beach contour)

The southern grid points are 53° 14' 51" N: 6° 5' 27 " W.

The Shanganagh River Estuary is just another 500 metres to the south.

The SAC should probably be designed to encompass the river inflow areas as they are an intrinsic influence on the SAC instead of stopping abruptly short of them.

Due to the flat nature of the immediate hinterland this is perceived to be a convenient site for landfall cables.

The river mouths on this section of beach are not in fixed channels though they require regular dredging as a flood prevention measure, which may give the impression of defined channels following a fresh dredging.

In effect these inshore waters are a buffer zone for the SAC. Disturbance and disruption of food chains in the nearshore area could have an adverse effect on the well being of the porpoise population nearby. With a prolonged survey period, followed by heavy construction of landfall cables and the possible cumulative impacts of more than one company operating intensive surveys in the same nearshore area, long term impacts may reduce the conservation success of the SAC.

At the same time, if survey activity (etc) has to avoid the SAC waters, that confines the traffic and intensity of activity to the immediate nearshore zone, with further impacts on coastal biodiversity. This is not yet an 'industrial' zone but may be reduced to one in the coming decades. It readily facilitates the Shanganagh Bray Wastewater Treatment Plant which is due for expansion soon and the major long sea Outfall Pipe which brings treated waste water one kilometre out into the Bay.

The Rocky Reef north of the Deansgrange River Estuary provides both respite and foraging for seabirds that typically include **cormorants, heron, black headed gulls and herring gulls**. **Crab** and **small fish** provided sustenance along with **Sea Lettuce**. **Wrack** and **Kelp** seaweeds feature on the rocks depending on the water quality and **red algae** can also be frequently seen at this location. A full assessment of the typical algae is necessary at different times of year.

Limpet and **barnacle** are generally found on the reef rocks.

Further monitoring of the biodiversity on this reef is required as it can also support **octopus** and **lobster**. This habitat is already susceptible to changes in water quality and silting along with potential smothering by eutrophic green algae when the seawater nutrient load is out of balance. This can apply to rockpool areas further along the Shanganagh Coast and tends to peak in late summer.

Pelagic fish can also be in the area depending on the season. In autumn 2021 **sprat** attracted shoals of **mackerel** into Killiney Bay, along beaches and as far as Coliemore Harbour Dalkey.

The nearby Shanganagh River Mouth and Estuary is also regularly frequented by seabirds including **oyster catchers** in winter, among other species. The river lagoon below the old stone railway bridge provides extra shelter to birds.

Turnstones can be observed all along this shore. **Brown trout, sea trout** and sometimes **eel** feature in the Shanganagh River and continue upstream into the wetlands area.

Marine bird species overlap with land birds along this section of shoreline.

Seal also pass close to the coast here on a north to south axis along Killiney Bay.

Otter are known to breed on the outer rocky area between Bulloch Harbour and Dalkey and are observed at times between Seapoint and the Shanganagh River where they continue upstream to the Loughlinstown Common and beyond. This is a recognised corridor and the pattern was confirmed in the latest DLR survey.

There was a recent sighting in mid July 2022.

Along with porpoise other cetaceans can be sighted in inshore waters.

Butterflies

The fringe vegetation in this area and along the clifftop to the south of the Shanganagh River continues to support several butterfly species and is a special habitat for two particular grassland butterflies in the peak summer months: Ringlet and Meadow Brown. Numbers have held well over the past decade in spite of Climate Change impacts, coastal erosion and increased recreational trampling. Habitat is being lost to these species in other parts of DLR due to building expansion (eg Woodbrook, but other areas too) Statistics show that grassland butterflies are generally in decline in Europe. (NBDC reports etc)

Bats

Bats are regularly observed by the old stone bridge across the Shanganagh River and also along the clifftops to the south. Further data on both the foraging and migrant bats is necessary. Bats have probably been associated with the area for many decades from when the hinterland was predominantly rural and agricultural in character.

Sandmartins nesting in the Glacial Cliffs.

These migrant birds are a typical feature of the Shanganagh River estuary area and all along the glacial cliffs almost as far as Woodbrook to the south. There are a number of breeding colonies between the Shanganagh River Estuary and Corbawn Lane Beach Access at the proposed cable link landfall sites. They can be observed dipping in and out of the river waters while still in flight.

In a recent survey of the soft cliff between the Shanganagh River and Woodbrook several 'tufa' sites were identified by DLR.

Drift Line and Fringe or Transitional Vegetation.

Seashore species consistently feature **Sea Radish, Sea Spurge, Sea Beet, Sandwort, Mayflower, Sea Holly, Tree Mallow, Sea Rocket** and even **Sea Kale** along with grasses such as **Lyme** while **Kidney Vetch, Bird's Foot Trefoil, Tree Mallow, Cowslip, Meadow Scabious** and many more varieties grow on the cliff edges or upper shore vegetated zones. Many of the species serve to anchor the shifting shingle with creeping stems just below the surface and help provide a more stable natural

protective barrier to the nearest inshore areas. These systems are already under pressure with the impacts of storms, climate change and coastal erosion. They help break the force of possible tidal surges along with the old Victorian railway embankment that spans the immediate upper shore.

Overlapping small scale habitats and wildlife corridors.

Though the Killiney/Shanganagh/Hackettsland shore area is small and confined there are several overlapping habitats including river wetland, meadow, estuary, shingle shore, soft glacial cliff and rocky intertidal patches. Disturbance to any part can fragment the eco systems.

A full ecological assessment of the flora and fauna (including insects and other pollinators) of this area is overdue. It already suffers the pressures of climate change, and increase in recreational use with an expanding population, impacts of anti social behaviour such as scrambler bikes and the existing threats to the water quality of rivers and the receiving sea waters.

It is essential to get an accurate picture of the shoreline with regular 'walkovers' to monitor pressure points especially following highest tides and stormy episodes in an area which is already subject to change by natural processes.

Possible Landfall Cable Link site on the beach below the Shanganagh Waste Water Treatment Plant via the seabed.

At high tides and during storms the water comes right up to the cliff edges at this location and for much of the coast from the Shanganagh River Estuary to Bray. Storm forces continue to erode the soft cliff at this location. Routing cables through this dynamic environment will be challenging and require sufficient space for the initial works along with on-going repairs and maintenance over the years. A distance of 250 metres to the river mouth is very tight especially when the river is in full flood. Wind force can determine the path of the exit water channels that also scour the beach.

Marine Spatial Planning was not in place before the landfall cable link site was proposed at this location (and by more than one company)

There are concerns about the impact of Electromagnetic fields from cables on the passage of fish and mammals. There is a possible impact also on crabs.

Any on-shore cable links that need access to the electricity Grid will also require a route that may further disrupt the immediate coastal and terrestrial habitats and cause loss of biodiversity. It is difficult for the local community to predict where the routes may be especially if a requirement for purchase of adjacent land may emerge at some stage.

The proximity to any other projects that may also be operating in this space would also be an issue.

Wider Impacts on Killiney Bay and beyond.

Over the past 30 years there have been several coastal protection projects along Killiney Bay: the construction of a berm bank and the import of rock armour at the north end of the bay; re-enforcement of the soft cliff between the Military Road access steps and the Seafield Road Railway Underpass access point; the recent Corbawn Lane access update and the Bray Landfill Remediation works which are still underway at Bray North Beach just beyond Woodbrook Shankill. These are all indicators of the extent of coastal erosion and have an impact on longshore sediment cycles over time. The Corbawn and Bray project plans went through a full Part 8 local authority planning process so people were given an opportunity to submissions with full information and site drawings available. These works may ultimately result in a narrowing of the beaches over time. That was factored in to the risk assessments at the time and the information was available to the public when various options were under discussion. As the old landfall site was shedding material into the surrounding environment and sea there was an urgent problem to be addressed. Rock Armour at the Bray site will be put in place during the final phase of the work and is not yet in situ.

The wider implications of fixed foundations for turbines along the Kish and East Codling sandbanks will also have an implication on sand cycles across Killiney Bay and these concerns are shared by

other communities along the east coast as other proposals come into the picture. Inshore fishermen are very concerned about the changes with which they may have to contend.

Our sand banks are natural protective barriers to Dublin Bay, Killiney Bay and parts of the Wicklow coast and have been so for centuries. There is a danger that we may upset this balance in the race to implement rapid changes.

Cumulative impacts from the combined effects of turbines in close proximity to each other, on tidal currents and wind patterns are an increasing possibility in addition to the already observed increase in Coastal Erosion as a result of natural processes and climate change.

Beaches at Greystones, Brittas Bay and Courtown, County Wexford are just some that have changed in character in the past 30 to 50 years with erosion often as a driving factor. Communities in the north Dublin Coastal areas also question the impacts of so many wind farm developments at the same time. Inevitably these will bring about changes to inshore waters, coastal habitats and for the species that depend on those habitats.

There has been a call for clear modelling of the tidal processes predicted by the introduction of windfarms to the nearshore marine environment to be demonstrated to the public.

'Revitalising Our Shores', the recent report by Regina Classen for Fair Seas draws our attention back to **Phytoplankton**, the major key to healthy marine eco systems and the basis for sustainability of all marine species. Ireland is still well placed to protect our life abundant waters as long as we maintain vigilance in our marine planning.

I trust you will give these observations serious consideration.

with best regards

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Killiney Hill Road

Co Dublin

8 Wild Defence Ireland

To: Marine Environment and Foreshore Section, DHLGH at: Foreshore Unit, Department of Housing, Local Government and Heritage, Newtown Road, Wexford, Co Wexford – **email:** foreshoreORE@housing.gov.ie

From: Wild Ireland Defence CLG at wildirelanddefence@gmail.com

Re: Submission II to Foreshore Licence Application FS007188 (**FS007188 RWE SI - Consultation on Stage 2 AA**) regarding the proposed Dublin Array Offshore Windfarm.

Date: 29 July 2022

A chara,

Re: FS007188 RWE SI - Consultation on Stage 2 AA - Submission II to Foreshore Licence Application FS007188 regarding the Dublin Array Offshore Windfarm.

This submission is made in addition to the previous observation by Wild Ireland Defence CLG (17 December 2021) regarding the above proposed development application seeking foreshore licence consent.

The following is submitted in good faith and based on concerns regarding achievement of the objectives of the Nature Directives.

As noted previously, responding to the ecological crisis at an international level the EU Commission concludes that both the Habitats and Birds Directives (providing strict protection for protected habitats and species) remain fit for purpose. However, the need to better implement both directives is emphasised:

"Commission evaluation shows Nature Directives are fit for purpose.

...

On 16/12/2016 the Commission has published the 'Fitness Check' evaluation of the EU Birds and Habitats Directives (the 'Nature Directives') and concluded that, within the framework of broader EU biodiversity policy, they remain highly relevant and are fit for purpose.

However, full achievement of the objectives of the Nature Directives will depend on substantial improvement in their implementation in close partnership with local authorities and different stakeholders in the

9 Killiney Bay Community Council

From: KILLINEY COMMUNITY COUNCIL <info@killineycommunitycouncil.ie>

Sent: Friday 29 July 2022 14:45

To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>

Subject: FS007188 RWE SI - Consultation on Stage 2 AA

A chara,

Please see attached response to the above public consultation.

Kind regards

■■■■ & ■■■■ ■■■■

For Killiney Bay Community Council

RESPONSE TO CONSULTATION INVESTIGATIONS, REFERENCE NUMBER FS007188

ENTITLED: RWE RENEWABLES IRELAND, SITE INVESTIGATIONS FOR THE PROPOSED DUBLIN ARRAY OFFSHORE WIND FARM

FROM: KILLINEY BAY COMMUNITY COUNCIL, KBCC

TO: THE DEPARTMENT OF HOUSING, LOCAL GOVERNMENT AND HERITAGE

FS007188 RWE SI - Consultation on Stage 2 AA

In the above Foreshore Licence application, RWE are applying for authorisation to undertake a geotechnical and geophysical site investigation for the proposed Dublin Array offshore wind farm. This application is being considered despite the lack of a valid selection site process for windfarm development. Environmental impacts have not been adequately assessed. Back in 2012 these sites had been designated [as Special Area of Conservation \(SAC\)](#)¹ and [Special Protected Area \(SPA\)](#)²

Killiney Bay Community Council (KBCC) notes that the imposition of site examination techniques on the Kish and Bray sandbanks, by RWE/Dublin Array, is of particular concern. KBCC pledges to protect, care and improve our neighbourhood, which includes our marine environment.

KBCC refers to the proposed development activity in locations off the coast of Dublin and County Wicklow, in preparation for the installation of multiple wind turbines. This will involve the granting of a Foreshore Licence to undertake geotechnical and geophysical site investigations and ecological, wind, wave and current monitoring to provide further data to refine wind farm design, cable routing, landfall design and associated installation methodologies for the proposed Dublin Array offshore wind farm.

KBCC notes in regard to the proposed location of wind turbines at a distance of approximately 10km from Killiney Beach, that this area has not yet received the attention or, if confirmed, the identification of a Marine Protected Area (MPAs). We see this as a deviation from proper planning, whereby zoning of the near shore Irish Sea for the purpose of mapping the ecology systems is not taking place in tandem with the assignment to developers of such portions of the Irish Sea for the construction of multiple wind turbines. This anomaly enables the assignment of large portions of near shore territory to developers, without reference to MPA's.

¹Special area of conservation (SAC) means a site of Community importance designated by the Member States through a statutory, administrative and/or contractual act where the necessary conservation measures are applied for the maintenance or restoration, at a favourable conservation status, of the natural habitats and/or the populations of the species for which the site is designated

² A Special Protection Area (SPA) is a designation under the European Union Directive on the Conservation of Wild Birds. Under the Directive, Member States of the European Union (EU) have a duty to safeguard the habitats of migratory birds and certain particularly threatened birds.

1. Geophysical and technical specifications

These are indicative of site preparation for infrastructural works on the Kish and Bray Banks. We note that the legislation which replaces the foreshore licence does not consider the following:

- Reference to historic applications for a single proposed project, and concomitant historic failures in winning a foreshore licence, with reference to making provision to rectify these failures before a new foreshore licence process can proceed.
- Consideration of alternative sites: in an application for a foreshore licence, it is necessary for the applicant to consider alternatives. (this applies to both lease and licence applications.)
- The visual representation of the proposed height of the turbines in Killiney bay. We cite the Offshore Energy Strategic Environmental Assessment Review and Update of Seascape and Visual Buffer Study for Offshore Wind Farms (Hartley Anderson, March 2020, and 2022). Visual impact studies consider impingement on shorelines to be critically important, especially adjacent to high public amenity beaches such as Killiney Beach.

In connection with these omissions, KBCC notes the following protections in place for Killiney Bay:

- Killiney Bay is adjacent to the southern end of the UNESCO Dublin Bay Biosphere Partnership, which includes management by Fingal County Council, Dublin City Council, Dun Laoghaire County Council, Dublin Port Company and the National Parks and Wildlife Service of the Department of Housing, Local Government and Heritage and the Gaeltacht.
- In reference to the Supplementary Map contained in the Dun Laoghaire County Development Plan 2022-2028, we note that this map continues south across Killiney Bay to a point opposite the Martello Tower and offers a grid of protection to marine life. <https://docreader.reciteme.com/doc/view/id/629f3b85187c4>
- Killiney Beach is the recipient of the Bord Failte grant of 1M for the construction of an Amenity Centre for sea water sports. <https://www.failteireland.ie/tourism-news/19m-investment-announced-water-based-activity-facilities.aspx>

In this context, KBCC take note of the de-listing in 2012 of the Special Area of Conservation (SAC) designation for the Kish bank. in 2012. We seek an explanation for this removal of this protection, and whether the absence of this SAC, which was fully compatible with SAC requirements, was made in order to favour the development of wind farms on these sandbanks. In this context, we examine the proposed objective to install 61 turbines, 310 metres high, on the Kish Bank, and the continuation to include the Bray Bank.

2. Geophysical Site Investigation Survey

Analysis of the extensive detail presented in RWE Renewables Ireland regarding a geophysical site investigation, confirms their intention to construct the platform for the proposed turbines on one inshore site, the Kish and Bray sandbanks, approximately 10kms from Killiney Bay. This is not site evaluation, this is preparation for site construction. The term *ipse dixit* is appropriate in this case: the assertion is, '*this is just how it is*' dominating the argument by opting out of alternative arguments: declaring that the issue is intrinsic, and not open to change.

This logical fallacy uses an assertion that the Kish and Bray Bank area, as shown on RWE Renewables site maps, is the only site available in Killiney Bay.

KBCC believes that the information provided does not 'provide complete, precise and definitive information capable of removing all reasonable scientific doubt as to the effects of the works' with reference to:

- the integrity of the Kish and Bray banks
- '**pre-construction survey**' or 'Array area' determines and reinforces and confirms the premise that this will be the area identified for construction, regardless of distance from shore, height of the turbines or ecological effect

KBCC questions the purpose of this geotechnical survey. RWE Renewables state there is a necessity to examine foundation design, the size and installation methodology and to finalise cable route and landfall design and installation methodology, this work is effectively, to our knowledge, preparation for construction. Technology allows modelling for foundation design without the use of heavy machinery. A model will not damage the site for which a project is not yet decided.

3. Proposed Benthic and Sea Floor Testing

a) Cone Penetration Tests in the Array area and Export Cable Corridor

We note that up to 61 seafloor Cone Penetration Tests, up to an approximate geologically shallow depth of 80m below seafloor are proposed within the Kish and Bray sandbank area, and 31 CPT's to an approximate depth of 6m below the seafloor in the export cable corridors which extend into the area. Three of these are in the subtidal locations where a CPT rig will be lowered to the seafloor from a suitable vessel by a deck mounted crane or a-frame. An instrumented cone, with a diameter of approximately 40mm, will then be pushed into the seabed at a constant speed. Continuous measurement of the cone end resistance, the friction along the sleeve of the cone and the pore water pressure will be recorded. The cone will then be recovered to the rig and the rig returned to the vessel. The duration of operation at each CPT location within the RWE area is expected to be up to 6 hours. In the intertidal area a similar process will be undertaken from a tracked vehicle.

b) Vibrocores

Vibrocores will be taken across the export cable routes which extend into the RWE Array area. Up to 48 Vibrocores, approximately 150 mm diameter and penetration depth of up to approximately 6 m will be taken. Five of the 48 Vibrocores may be located within the intertidal areas. A vibrocore rig will be lowered to the seafloor from a suitable vessel by a deck mounted crane or a-frame. A vibrocore head will be attached to the core barrel and will induce high frequency vibrations in the core liner. The sediment in immediate contact with the core barrel forms a 'liquefied' boundary layer enabling the core barrel to penetrate the sediment strata. A core-catcher is attached to the end of the barrel which holds the sediment inside the barrel when withdrawn from the sediments. Each core would have a sediment sample volume of approximately 0.05 m³. The expected duration of the vibrocoreing operation at each location is less than 5 minutes. In the intertidal a similar process will be undertaken from a tracked vehicle.

c) Boreholes

Up to 61 subtidal boreholes to a geologically shallow depth of 80 m below seafloor are proposed within the RWE Array area to target proposed foundation locations. A borehole is a method of drilling into the seabed to recover samples and enable downhole geotechnical testing to be completed. A drilling head is lowered to the seabed via a drill string with an outside diameter of up to 254 mm and stabilised using a seabed frame. The drill string is then rotated to commence boring. Tools are lowered into the drill string to recover samples or conduct in-situ soil test to see if drilling fluids will be fit for purpose and where possible selected from the 'OSPAR list of substances/preparations used and discharged offshore which are considered to pose little or no risk to the environment'. The offshore boreholes will be left to back-fill naturally. The duration of the operations at each borehole location within the RWE Array area is expected to be approximately 48 hours. Four boreholes are also planned at each of three possible landfall locations (i.e. 12 in total). The nearshore boreholes will be in water depth of 0 to 7 metres and will be to a target depth of 45m below seafloor. The external diameter of the drill pipe will be approximately 100 mm. The nearshore boreholes would either be backfilled or grouted to within 2m of surface of the base of mobile sediment typically using a 2:1 bentonite cement mix. The surface will be reinstated to previous condition as the investigations at each location are completed. Pre and post investigation site photographs will be taken. The duration of the operations at each borehole location within the intertidal area is expected to be approximately 36 hours.

d) Coastal Erosion Considerations:

We have now reached greenhouse induced climate scenarios. Sea levels are rising (see BBC Met Office). The presence of multiple turbines along the East Coast of Ireland will affect wind-wave energy and currents. Anthropogenic interference in littoral processes, via aggregate offshore extraction, excavation and construction of

wind towers, raises concerns re. coastal erosion, which has a severe effect, devouring coastal habitats. In addition, independent and impartial reference to the destruction of habitat of birds, mammals, fish and invisible benthic ecosystems must be included in these accounts.

4. Costings Considerations:

Costings are an essential condition for a public appraisal and evaluation of profit and loss balances deriving from the installation of multiple wind turbines within and near to the pristine Killiney Bay area.

- A. Factor the monetary value of, offset by the damage to, the benthic ecosystem proximate to the Dublin Bay Biosphere and proximate SAC within Killiney Bay
Note: Supplementary Map
<https://docreader.reciteme.com/doc/view/id/629f3b85187c4>
Value the proximity of this area to the Special Area of Conservation, Rockabill to Dalkey.
- B. Define, weigh and calculate the ecological valuation of the Kish and Bray sandbanks as spawning grounds for fish and molluscs, and feeding grounds for seabirds. Such valuations are now current in environmental research institutes. (See Professor Jane Stout, TCD, Dublin. <https://www.tcd.ie/Botany/people/stoutj/>)
- C. Estimate chart measurements of yearly speeds and durations of wind source, direction and power.
- D. Equate these costs with the output of 'green electricity' profits.
- E. Estimate of the band levels of customer consumption: domestic, manufacturing, farming, transport, technology (data centres) .
- F. Define the recipients of this electric power. destinations, cost per kilowatt.
- G. Define the difference in costs of the installation of turbines, near shore, and further from shore:
 - installation into Killiney bay, 9 - 12 km
 - installation further from shore, 22 km
- H. Define the difference in costs between turbines installed on sandbanks and floating turbines.
- I. Define the cost estimate of:
 - manufactured parts of the turbines
 - installation of x number of turbines
 - maintenance and monitoring

- repairs and replacements (blades)
- removal of exhausted turbines

J. Define predicted costs due to coastal erosion on Killiney Beach and Cliffs.

K. Consider the effect of rapidly degrading natural capital in the context of the risks of corporate decision-making and financial markets. Take account of impacts on nature, society and the economy and its dependency on the availability of air, water, land, biodiversity, marine resources, the rule of law, and human capital.

Conclusions

KBCC seeks an independent assessment of Government decisions which currently seem to be inclined to favour the development of multiple windfarms on marine sites which have not properly assessed for development. Although we understand decisions made under the mandate of climate change, and 'clean energy', we argue that sensitive sandbank ecosystems, which were marked as SAC and SPA in 2012 are now not protected. This is a "back to front", approach to development. Marine Protected Areas must be decided prior to, or at least, in tandem with government contracts for multiple marine acres for wind farm construction. We note at present, additional potential developments which adding RWE Dublin Array, ESB Sea Stacks and Rialta Na Mara, the area to be covered amounts to approximately 500km². This is the equivalent of 123,553 football fields.

It is difficult to distinguish the intention of Government as separate from the aims of developers of wind farms. We address the concept of 'project splitting' in which the proposed development activity straddles a stated aim, and yet, incorporates a decision already taken.

KBCC believes that the information provided by RWE Renewables does not provide complete, precise and definitive information capable of removing all reasonable scientific doubt as to the effects of these investigations. The amount of drilling fluids is unspecified. The reinstatement of surfaces problematic. It is unclear if the threshold tolerance of a selected site will survive CPT's, microcore machinery, and borehole drilling, thus depriving the site of its inherent ecological value.

References:

EU Birds and Habitat Directives

<https://ec.europa.eu/environment/nature/info/pubs/docs/brochures/nat2000/en.pdf>

Seabed mapping and seafloor processes in the Kish, Burford, Bray and Fraser Banks area, South-Western Irish Sea, Irish Geography, January, 2001.

Offshore energy strategic environmental assessment review and update of seascape and visual buffer study for offshore wind farms final report for Hartley Anderson, March 2020

www.whiteconsultants.co.uk

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/896084/white_consultants_2020_seascape_and_visual_buffer_study_for_offshore_wind_farms.pdf

10 Private

From: [REDACTED]@yahoo.ie <[REDACTED]@yahoo.ie>
Sent: Friday 29 July 2022 15:09
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: FS007188 RWE SI - Consultation on Stage 2 AA

Dear Sir or Madam,

Please see below my submissions on the above proposed RWE Renewables Ireland, Site Investigations for the proposed Dublin Array Offshore Wind Farm.

I believe the application should be rejected for the following reasons:

- This site was selected by the original Developer decades ago without any assessment as to environmental suitability. It has now been granted the status of a “Relevant Project” and there still has **never** been any appropriate assessment as to its environmental suitability.
- The Foreshore Licenses for these projects appear to have been originally granted in 2000 and expired in 2005 without ever been validly renewed. The original proposed areas and turbines bear no relation to the current proposed sizes. Consequently the current application has no validity.
- The site is chosen by foreign private developers on purely economic grounds as being cheap to develop, with all profits accruing to the private developer and none to the State -not even an undertaking of cheap electricity supply. No other European country would permit their environment to be vandalised by foreign interests in this manner.
- There has been **no Marine Spatial Planning** in place whatsoever prior to the selection of this proposed development site.
- The technology proposed for Dublin Array is totally outdated as one would expect for a site first selected decades ago. While Ireland is progressing with in this outmoded fashion, other nations are 5 to 6 years ahead in developing **proven** floating windfarm technology which can be located over the horizon, particularly on the West coast where the wind is strong and constant.
- The Kish Bank is directly in line of sight of one of the most beautiful natural amenities in the most populated area of the country – one that is extensively used for leisure and tourism. Again, no other country in Europe would consider using an equivalently located and aesthetic site for private windfarm development in this manner.
- Kish Bank has previously been identified by the National Parks and Wildlife Service (NPWS) as the richest example of marine biodiversity amongst Irish East coast sandbanks. In fact, the NPWS originally proposed the Kish Bank to be a protected area (SAC) before political interference forced them to retract.
- Currently there are proposals for windfarm development on sandbanks running along the whole Eastern Irish coastline from Wexford to Louth – it is simply not possible to effect cumulative development of this scale without destroying numerous habitats and utterly closing off migratory bird flight paths. Many of these proposals need to be dropped immediately as cumulatively they would be an ecological catastrophe with disastrous effects on the protection of our habitats and very shoreline itself. In this context, the Kish Bank proposal should be one of the first to be dropped due to its rich biodiversity and amenity value.

11 Wild Defence Ireland (copy)

From: [REDACTED] <wildireland.defence@gmail.com>
Sent: Friday 29 July 2022 15:27
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: Re: FS007188 RWE Renewables, Foreshore Application for Site Investigations - Notice of Public Consultation on Stage 2 Appropriate Assessment

A chara,

Thank you for the email Notice sent on 20 June 2022, relating to *FS007188 RWE SI – Consultation on Stage 2 AA*. Below is a *copy* of the observation emailed earlier this morning.

To: Marine Environment and Foreshore Section, DHLGH at: Foreshore Unit, Department of Housing, Local Government and Heritage, Newtown Road, Wexford, Co Wexford – **email:** foreshoreORE@housing.gov.ie

From: Wild Ireland Defence CLG at wildirelanddefence@gmail.com

Re: Submission II to Foreshore Licence Application FS007188 (**FS007188 RWE SI - Consultation on Stage 2 AA**) regarding the proposed Dublin Array Offshore Windfarm.

Date: 29 July 2022

A chara,

Re: FS007188 RWE SI - Consultation on Stage 2 AA - Submission II to Foreshore Licence Application FS007188 regarding the Dublin Array Offshore Windfarm.

This submission is made in addition to the previous observation by Wild Ireland Defence CLG (17 December 2021) regarding the above proposed development application seeking foreshore licence consent.

The following is submitted in good faith and based on concerns regarding achievement of the objectives of the Nature Directives.

As noted previously, responding to the ecological crisis at an international level the EU Commission concludes that both the Habitats and Birds Directives (providing strict protection for protected habitats and species) remain fit for purpose. However, the need to better implement both directives is emphasised:

"Commission evaluation shows Nature Directives are fit for purpose.

...

12 Private

From: [REDACTED] <[REDACTED]@gmail.com>

Sent: Friday 29 July 2022 16:10

To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>

Subject: FS007188 RWE SI - Consultation on Stage 2 AA response to Invitation for Public Submissions for Purpose of Conducting Stage 2 Appropriate Assessment - submission

Dear Officer,

Please find attached my submission on Invitation for Public Submissions for Purpose of Conducting Stage 2 Appropriate Assessment FS007188 RWE SI - Consultation on Stage 2 AA. **Please acknowledge receipt of my submission in writing as soon as ever possible.**

I wish for my name to be withheld for privacy concerns when uploaded to the Government site if possible - but please feel free to use my initials SK if this is acceptable.

[REDACTED] [REDACTED]

t 087 [REDACTED]

Please let me know asap if you have trouble reading or accessing my submission.

RESPONSE TO CONSULTATION INVESTIGATIONS, REFERENCE NUMBER FS007188, July, 2022, by a member of the public and local community.

Applicant Name

RWE Renewables Ireland Ltd.

Proposed Development Activity

Description:

Foreshore Licence to undertake geotechnical and geophysical site investigations and ecological, wind, wave and current monitoring to provide further data to refine wind farm design, cable routing, landfall design and associated installation methodologies for the proposed Dublin Array offshore wind farm.

Location:

Off the coast of County Dublin & County Wicklow.

FS007188 RWE SI - Consultation on Stage 2 AA

RESPONSE TO THE INVITATION FOR PUBLIC SUBMISSIONS FOR PURPOSE OF CONDUCTING STAGE 2 APPROPRIATE ASSESSMENT AND TO CONSULTATION INVESTIGATIONS, REFERENCE NUMBER FS007188, ENTITLED: RWE RENEWABLES IRELAND, SITE INVESTIGATIONS FOR THE

PROPOSED DUBLIN ARRAY OFFSHORE WIND FARM

FROM: [REDACTED] [REDACTED]

TO: THE DEPARTMENT OF HOUSING, LOCAL GOVERNMENT AND HERITAGE

In the above Foreshore Licence application, RWE are applying for authorisation to undertake a geotechnical and geophysical site investigation for the proposed Dublin Array offshore wind farm development. This application is being considered despite the lack of a proper process for site selection.

I wish to note to the Department in regard to the proposed location of wind turbines at a distance of 9 km from Killiney Beach, that this area has not yet received the attention or, if confirmed, the identification of a Marine Protected Area. This cannot be deemed to be proper marine planning, whereby zoning of the near shore Irish sea for the purpose of mapping the ecology systems has not taken place before the assignment to developers of such nearshore, coastal sites in the Irish sea for the construction of multiple wind turbines. This lack of eco-system based planning enables the assignment of large portions of near-shore territory to developers, without reference to MPA'S. The Hartley Anderson Report, which is the basis of the justification for RWE's application for a Stage 2 Assessment, seems to be substantially the same Report which was offered considered in December, 2021. The imposition of site examination geotechnical and geophysical testing on the Kish and Bray sandbanks, by RWE/Dublin Array, is of particular concern.

Hartley Anderson Limited (hereon in referred to as H & A report)
Marine Environmental Science and Consultancy
Screening for Appropriate Assessment
RWE Renewables Ireland, Site Investigations for the proposed Dublin Array Offshore Wind Farm
Report to Department of Housing, Local Government and Heritage – updated following RFI

In general, statements and responses on the part of the H&A report to public and statutory body submissions lack complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.

When inaccurate data or obfuscation in the Dublin Array Foreshore Licence NIS documentation has been challenged within a submission of a relevant expert (such as in the case of IWDG re acoustic testing and the harbour porpoise), the H & A report in response does not provide complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the adverse effects on cetaceans (protected Annex IV species) in particular the harbour porpoise of the proposed works.

I Found that the explanations and responses by the H & A report seemed to be aimed chiefly at deflecting or dismissing the legitimate concerns and findings of NGOs and members of the public, rather than removing any scientific doubt as to the ability of the proposed exploratory works / site investigations to impact on the integrity of habitats and species populations in the area. As such, any foreshore licence and lease application process for Dublin Array investigative survey which seeks to rely on H & A's Screening for Appropriate Assessment prepared for the Department of Housing, Local Government and Heritage by Dublin Array, should be rejected.

I would also emphasise that DHLGH has a duty of due diligence and objectivity to take overall careful note of the shortcomings and data gaps already evident in the proposed Kish and Bray banks site investigation licence/lease applications 2000 – 2022, and in this H & A report and any present in previous Dublin Array NIS screening documents.

I also wish to note to DHLGH that it is questionable how at this stage, the viability of the relevant project site and Dublin Array/RWE's wind farm proposal is still in existence, given that in 2006 / 09 the Marine Licence Vetting Committee rejected a lease application submitted to them by the then Kish and Bray consortium on the basis that no alternative sites were proposed and because of gaps in the data / information provided to the MLVC for consideration by the developer in question.

I also draw the developer and department's attention to the reach of Article 12.1. (d) of the Habitats Directive, which is clear: Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV (a) **in their natural range**, prohibiting: (d) **deterioration** or destruction of breeding sites or resting places.

The H & A report for the DHLGH perpetuates the deficit in the previous developer's reports of complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works, in particular effects that can result in the **deterioration** or destruction of breeding sites or resting places of the harbour porpoise, dolphin, seal (and angel shark and tope which the Dublin Array NIS screening document does not mention) in surrounding SACs and SPAs.

The effects of the future large scale industrial nearshore wind project - which this stage 2 AA process seeks to underpin - will also likely precipitate a habitat-specific marine biodiversity crisis in

the surrounding marine and coastal area with ecosystem decline in and around the Kish and Bray sandbanks, which is particularly concerning given that these banks, with their documented range of qualifying features for submerged sandbanks - 1110 habitat, were proposed as an SAC until 2013 when they were removed from the list of sandbanks for consideration, an issue that raises questions as to why this came about. See the IWT piece on this matter: <https://iwt.ie/dodgy-dealings-under-the-sea/#:~:text=Sandbanks%20are%20an%20important%20habitat,predominantly%20surrounded%20by%20deeper%20water.>

The inappropriateness of developer-led site selection for a large scale wind farm on the Kish and Bray banks, 10 km from shore, in an area vital for sensitive coastal and marine habitats and species, has not been properly addressed by the relevant authorities, or in this H & A report, or sufficiently by the body tasked with protecting and monitoring marine habitats – the NPWS.

Given this critical issue, it is not surprising that the H & A report for the Department of Housing, Local Government and Heritage fails in my opinion to present complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the likely significant effects (LSEs) on the habitat integrity and ecological functionality critical to benthic communities, marine food webs and protected species in the survey area and species that rely on the Kish and Bray sandbanks and surrounding integral marine habitats, including surrounding SACs and SPAs, sandbanks for the purposes of spawning, foraging, breeding, resting.

Of most concern under the provisions of the EU habitat and birds directives is that I find that the H & A report does not provide complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the likelihood of the proposed exploratory works role in the precipitation of population decline in both the harbour porpoise and other internationally important and threatened bird species.

H & A's Screening for Appropriate Assessment prepared for the DHLGH does not provide enough proper scientific objectivity in that the report presents data gaps, uses over-generalisations on the basis of unclear data to attempt to deflect concerns, or simply refuses or fails to address legitimate concerns as to errors in the Dublin Array NIS screening documents on the basis of precise and definitive findings and conclusions capable of removing all reasonable scientific doubt.

To emphasise this concern - the H & A's Screening for AA takes no account of a baseline expert bird study presented to the then deciding authority in 2001 that clearly found that the sandbanks in question should be designated as an SPA on the basis of the presence of the roseate tern alone – let alone other internationally important bird species found there. Why would the H & A's Screening document neglect to reference the findings of such a report, which was commissioned by the Dublin Array developer/ foreshore licence applicant and submitted to the deciding authority? To my mind this raises a concern as to the question of a potential leaning in favour of the proposed exploratory works in the case where **any AA report** appears to aim at dismissing or neglecting to refer to previous expert and objective findings on birds and the site of the original foreshore licence application.

These important findings in this case are in a 2001 report to the department from the developer which clearly state that no exploratory works or turbine construction should take place in the vicinity or on the site of Kish and Bray banks and are as follows, highlighted for emphasis:

“Kish Bank Proposed Offshore Wind Farm Progress Report No. 2 on Seabird Surveys Sept 2001- Sept 2002_12

By Dr Steve Percival Eugene Archer, and Peter Cranswick

Contractor: Kish Bank Consortium

“The other potential impact highlighted in the preliminary report was the possible displacement of foraging seabirds from the Kish Bank by the presence of the wind farm. This was identified as a potentially significant impact for rather more species of national importance. As stated in that report, shallower sea areas such as the Kish Bank are relatively scarce in this region, the Kish itself constitutes quite a large proportion of the available resource. Therefore any effective loss of habitat would be more likely to result in significant ecological consequences, such as reduced breeding success and increased mortality. Alternative feeding areas with similar characteristics may well be limited. Similarly for birds outside the breeding season, loss of feeding resources could be significant. Again, if a disturbance effect occurs, its ecological consequence would be dependent on the availability of alternative feeding areas. If such alternative areas were not available and then birds were unable to reach adequate body condition before migration, this could result, for example, in increased mortality rates.

The main problem still lies in the lack of information about how these species would be affected by the presence of a wind farm (Percival 2001a). However, given the importance of the area, a precautionary approach would need to be taken. This is particularly the case when the conservation status of the populations using the Kish Bank is considered. The Bank itself has sufficient conservation value to qualify for SPA status, solely on the grounds of the roseate tern numbers that use it. This is not, however, the only SPA issue, as many of the seabird populations using the Kish are very likely to be from designated SPAs nearby. This includes all of the following:

- Rockabill Island - breeding roseate and common tern.
- Skerries Islands - breeding shag and cormorant
- Lambay Island - breeding Manx shearwater, shag, guillemot, razorbill, fulmar, cormorant, kittiwake.
- Ireland's Eye - breeding gannet, cormorant, kittiwake, guillemot and razorbill.
- North Bull Island Dollymount - breeding common tern, passage roseate and

other terns.

- Howth Head - breeding kittiwake and razorbill.
- Sandymount Strand / Tolka Estuary - breeding common tern, passage roseate and other terns.
- Wicklow Head - breeding kittiwake, razorbill, guillemot, fulmar and shag.

*KISH BANK PROPOSED OFFSHORE WIND FARM ECOLOGY CONSULTING SEABIRD SURVEYS: SEP 01-SEP 02
December 2002 PROGRESS REPORT No. 2*

If birds feeding on the Kish and breeding/on passage at any of these other SPAs were affected, it is possible that the overall SPA populations of these species could be reduced.

With the current lack of knowledge about how seabirds are affected by wind farm developments it can be concluded at this stage that as far as the most sensitive bird issue on the site is concerned, roseate tern, it would be inappropriate to construct a wind farm within its main area of use (i.e. in the northern half of the Bank). It would not be possible to be sure that significant impacts would not occur, and hence the only current solution would be to locate the wind farm outside the area used by this species.

In terms of the nationally important species, there are potentially significant issues with regard to the impacts on the Kish populations themselves and also in terms of possible impacts on

neighbouring SPAs for a range of species, particularly including Manx shearwater, shag, kittiwakes, common terns, guillemots and razorbills.”

(110506_7c6ec79b-e118-4726-bbff-2366030383fb.pdf)

In fact, elsewhere these concerns as to effects of all stages of offshore renewable energy projects are cited by the government’s own authority – the NPWS - as one of the main pressures on seabirds in Ireland:

*“ Renewable Energy As a pressure, no seabird species was assessed as a medium or high for the pressure/threat known as Wind, wave and tidal power, including infrastructure (Code D01). **However as a threat is was the most frequently assigned one across the suite of Irish breeding seabirds.** This assessment was primarily informed by the report Feasibility study of Marine Birds Sensitivity Mapping for Offshore Marine Renewable Energy Developments in Ireland (Ramiro & Cummins 2016). Although tidal and wave technologies were considered in the report, **this assessment focuses on the potential impact of offshore windfarms on Ireland’s seabirds primarily on account of planned future offshore wind farm development, which is considered to be relatively much more advanced and specifically in the Irish Sea** (see www.seai.ie for further information). The main risks of offshore wind farms to seabirds have been identified as: collision mortality, disturbance, barrier effects and habitat loss or displacement (Desholm & Kahlert, 2005, Fox et al., 2006, Langston & Pullan, 2003). Therefore tables five and six of the Ramiro and Cummins’ (2016) report, which relate to the various seabirds’ ranked sensitivity scores to wind farm collision and displacement/disturbance scores respectively, led to defining the magnitude of this threat at a species specific level in this report ... Twenty-two seabird species were classed as medium or higher for this threat. **This level of threat is justified on the grounds that there are several offshore windfarm projects which are currently at various stages along the consent process and thus, such cumulative pressures acting on seabirds will need to be assessed. Ireland’s marine SPA network is not yet finalised. Therefore the ex-situ aspects of appropriate assessments of potential impacts are of particular importance.**”*

(<https://www.npws.ie/sites/default/files/publications/pdf/IWM114.pdf>)

In relation to the above, a report by the Environmental Protection Agency verified that the Kish sandbanks were legitimately being considered for designation (up to 2013) as an SAC or SPA:

*“The Kish Bank is currently not designated as an SAC or SPA, **however it is understood that NPWS intend to propose the Kish Bank as an SAC under the Habitats Directive (and possibly as an SPA under the Birds Directive) as sandbanks are Annex I habitats under the EU Habitats Directive.** The location of this potential SAC/SPA can also be seen in Figure 2.1 (please note that the exact boundaries of the potential SAC/SPA are unknown at present and the boundary shown in Figure 2.1 is based on bathymetric features and included for reference only).”*

(https://epawebapp.epa.ie/licences/lic_eDMS/090151b28046d5fd.pdf)

The designation as an SAC or SPA of the Kish sandbanks - the site that is the subject of the H & A report to the DHLGH - would have led, among other things, to a much stricter standard of protection for the sandbanks, and would probably have excluded further exploratory works or site investigations for the purpose of furthering the construction of a large scale, nearshore wind farm. Similar sites have been found to qualify for SPA designation where, as noted by the EU in a case involving Ireland’s failure to designate SPAs “*It is sufficient that the area in question hosts a significant number of individuals of such a species or subspecies (at least 1% of the national breeding population of a species referred to in Annex I or 0.1% of the biogeographical population) in order for it to have to be classified as an SPA.*”

The EU further underlined that in the case of Ireland, “*After pointing out that SPA boundaries should be defined by ornithological considerations and not economic ones, the Commission notes that the Irish authorities, by contrast, have in many cases limited SPAs to sites in public ownership and have not classified sites seriously contested by economic interests.*”

(<https://curia.europa.eu/juris/document/document.jsf?docid=71717&doclang=en>)

These points above, raised at the highest level of the EU in relation to Ireland’s failure to designate SPAs, brings me to my main point which relates to shortcomings in the H & A report for the DHLGH. I have found data gaps and omissions in relation to protected bird species and Special Areas of Protection which are affected by the current licence foreshore application under consideration. These gaps and inaccuracies further undermine the report’s ability to present complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the potential for LSEs on SPAs and protected bird species.

In the H & A tables (pp 119 – 129) for Sites screened for likely significant effects I find there is a failure to correctly and adequately assess likely effects of exploratory works on bird species for the purposes of establishing beyond scientific doubt that the following species will not be subjected to: **Direct Disturbance, Increased Vessel Traffic and Underwater Noise:**

Protected bird species in Hartley & Andersen report to DHLGH that are either mistakenly **omitted** or **miscategorised** as **not being affected** by Direct Disturbance, Increased Vessel Traffic and Underwater Noise from proposed exploratory works/site investigation:

1) The Murrough SPA: listed in report **as not affected:** Red-throated Diver (on the AMBER LIST – breeding and wintering) , Herring gull, Little Tern – the foraging, breeding and resting grounds of these species will be affected – see reference to Developers own 2001 baseline report.

Species OMITTED from Murrough SPA that will likely suffer LSEs: Black headed Gull – This SPECIES IS ON RED CONSERVATION STATUS LIST.

2) Howth head Coast SPA: Kittiwake, incorrectly listed in report **as not affected.** NPWS report states that Kittiwake depend primarily on sand eels which thrive **only** in and around the area of sandbanks targeted by applicant for prolonged periods of drilling, seismic and acoustic testing/works – works and testing which will inevitably negatively impact on the marine food web availability in and around sandbanks. “*While some seabirds are able to adapt to fluctuations in food availability (Montevechhi & Myers, 1996), several studies have shown that seabird survival, breeding success and chick growth are closely correlated to food availability (Furness & Tasker, 2000, Barret et al., 2007, BirdLife International, 2008). During the breeding season, seabirds are effectively ‘tied’ to their breeding colonies meaning that local fluctuations in fish recruitment and availability can have a pronounced effect on the reproductive output for some species. In the worst-case scenario, if prey levels are reduced below the level needed to generate and incubate eggs, or if the fish species and prey sizes needed to feed chicks are unavailable, then fewer or no young are fledged due to starvation or depredation or indeed, seabirds fail to reproduce at all if the shortfall occurs early in the season.*” **The Kittiwake is Red-list species (high conservation concern).**

Protected bird Species OMITTED IN REPORT from Howth head SPA that will likely suffer LSEs (foraging, breeding, resting):

Razorbill (Near threatened status, protected - <https://eunis.eea.europa.eu/species/854>); Fulmar (Threatened and Endangered status - Wintering habitats open ocean); Guillemot: threat status

Europe: Near Threatened (IUCN); – all of these species are liable to access the proposed site area of Kish and Bray banks and surrounding exploratory site area for breeding, resting foraging, and post-fledgling (nursery) purposes.

3) Dalkey Islands: Roseate Tern, Common Tern, Arctic Tern: all of these species are categorised by H&A report as NOT liable to LSEs from proposed exploratory works. **This is incorrect according to EUNIS, Birdwatch Ireland data and NPWS data.** “Post-breeding (late July-September) even larger concentrations of birds occur in Dublin Bay and the nearby sandbanks (e.g. Kish Bank) attracting terns, not only from local colonies, but from further afield in Ireland (e.g. Lady’s Island Lake in Wexford) and overseas (North Sea, Baltic Sea) (79) (80) with recent counts indicating up 4,000 terns feeding in the Bay immediately post-breeding (5 species including Black Tern, Roseate Tern, Common Tern, Arctic Tern & Sandwich Tern) feeding in the bay post breeding (76) . The concentration of terns, particularly on the Kish Bank, is likely due to a supply of forage fish such as sandeels and sprats in late summer (79) . While the main east coast tern colonies are in Special Protection Areas (SPAs), in the Irish Sea, there is little data on available prey species sandeels and sprats, which terns depend on for chick provisioning (74) . If these resources become limited, then ultimately the long-term viability of these colonies will be tested.” (<https://birdwatchireland.ie/app/uploads/2019/04/BirdWatch-Ireland-2016-Life-on-the-Edge.pdf>). These protected species use the Kish and Bray banks as primary foraging, breeding, post-fledgling and resting grounds. The Roseate Tern presence alone, **according to a baseline expert report commissioned by the developer in 2001 and referred to the deciding authority for attention in decision making process stated that the extensive use of the site by this species would ensure that the Kish and Bray banks qualify as an SPA –** but this designation has never happened. Tern breeding is re-establishing itself on Dalkey Island and Maiden Rock is now hosting an offshoot colony of roseate terns for the first time in years which rely on sandeel foraging from the undisturbed banks of the site application. **How is it that the H & A report fails to include this critical data and the following?:** “This site is a Special Protection Area (SPA) under the E.U. Birds Directive, of special conservation interest for the following species: **Roseate Tern, Common Tern and Arctic Tern. Dalkey Islands SPA is both a breeding and a staging site for Sterna terns. The site, along with other parts of south Dublin Bay, is used by the three tern species as a major post-breeding/pre-migration autumn roost area. The site is linked to another important post-breeding/pre-migration autumn tern roost area in Dublin Bay.** Birds are present from about late-July to September, with c. 2,000 terns, comprising individuals of all three species, recorded in 1998. The origin of the birds is likely to be the Dublin breeding sites (Rockabill and Dublin Docks) though the numbers recorded suggests that birds from other sites, perhaps outside the State, are also present. **The site also has breeding Great Black-backed Gull (7 pairs in 2001), Shelduck (1-2 pairs) and Oystercatcher (1-2 pairs). Herring Gull bred in large numbers in the past but is now very scarce (14 pairs recorded in 1999) ...** Dalkey Islands SPA is of particular importance as a post-breeding/pre-migration autumn roost area for Roseate Tern, Common Tern and Arctic Tern. **The recent nesting by Roseate Tern is highly significant. All three tern species using the site are listed on Annex I of the E.U. Birds Directive.”** <https://www.npws.ie/sites/default/files/protected-sites/synopsis/SY004172.pdf> Another omitted species from this SPA is the Sandwich tern which are also present on site: “Sandwich Tern The largest tern with a small crest and black bill, tipped yellow. There are large colonies in Down and Wexford but non-breeding birds are widespread in the Irish Sea throughout the summer. Such birds regularly visit Dublin Bay and plunge-dive for fish around Dalkey”

4) Ireland’s Eye Cormorant Herring Gull Kittiwake Guillemot Razorbill - these species are categorised by H&A report as not liable to LSEs from proposed exploratory works. **This is incorrect**

according to EUNIS, Birdwatch Ireland data and NPWS data. H & A report – Omission of Protected Species whose foraging grounds will be affected by proposed exploratory works: Fulmar, Shag, Puffin, Northern Gannet, (<https://www.rsgyc.ie/wp-content/uploads/2016/11/Inspectors-Report.pdf>)

Northern Gannet: whose predicted foraging range is 47 km (maximum 159 km).

Atlantic Puffin: “there is a scattering of smaller colonies at east-coast sites, including Ireland's Eye and Lambay Island ... Atlantic Puffins are known to switch from feeding on mainly fish during the breeding season and post breeding periods to zooplankton over the remaining winter period (Nov-Jan) (41) . Atlantic Puffins more generalised feeding strategy of switching between prey types allows them to cope with fluctuations in forage fish during breeding (88) . **Sprat and sandeels** [present mainly on Kish and Burford sandbanks within proposed site exploration area] are key prey items for Puffins. Changes in availability of these forage fish due to fishing down the food webs in North-Western Europe, which holds the majority of the global population, has had negative implications for overall numbers of Atlantic Puffins in the biogeographic region”. (<https://birdwatchireland.ie/app/uploads/2019/04/BirdWatch-Ireland-2016-Life-on-the-Edge.pdf>)

The Atlantic Puffin is **Red Listed as of high conservation value:** “Species Biology, Diet: Being a marine species, the Puffins diet consists of various marine life such as fish and crustaceans. A favoured food item among the Puffins are sandeels. Habitat: This species is highly associated with marine habitats and will be found on suitable coasts and islands. Reproduction: During the breeding season, a single egg is laid and both parents will take turns incubating the egg for a period of 36-45 days. This egg will weigh approximately 64 grams. **The fledging period can take anywhere from 34 to 60 days.** An average wild Puffin can live for 18-20 years and will reach breeding age at five years.” <https://species.biodiversityireland.ie/profile.php?taxonId=10029>

5) Lambay Island Fulmar, Kittiwake, Puffin, Cormorant, Lesser black backed gull Guillemot, Shag, Herring gull, Razorbill are all listed as species that will not suffer LSEs from proposed exploratory works. **This is not correct.** These species have a wide foraging range. Lambay Island is 25 km from exploration area and it is likely that these protected or threatened species will suffer disturbance from exploratory activities within their wider foraging area, in particular in relation to their chief food source found on the sandbank site at the centre of the site delineated for exploratory works : sand eels.

6) Wicklow Head SPA H & A report listed species Kittiwake - incorrectly listed as not prone to LSEs from exploratory works.

H & A **OMITTED species** which are QI species for this SPA and likely to suffer LSEs from exploratory works: Razorbill: Threat status Europe Near Threatened (IUCN);

Fulmar: (Threat status Europe Endangered (IUCN), EU Population status: Threatened, Protected by: EU Birds Directive and 1 other international agreement);

Guillemot: Threat status Europe: Near Threatened (IUCN).

7) Rockabill Island SPA and Rockabill to Dalkey Island SAC Purple sandpiper, **Arctic tern**

Roseate tern: This is one of the most striking mis-categorisations in the H & A report of a protected species which will be affected by Direct Disturbance, Increased Vessel Traffic and Underwater Noise from proposed exploratory works/site investigation but is listed in the tables as not being affected.

Rockabill Island SPA is widely recognised an internationally important breeding site and staging post for the roseate tern and the colony is well documented by Bird Watch Ireland and Bird Life

International, as being critically dependant on the Kish and Bray banks, for breeding, foraging (sand eels) , resting and post-fledgling activity. The Arctic Terns from Rockabill are also present in and around the proposed site area for the same purposes.

Omitted protected species – The Kittiwake (**Threat status Europe: Vulnerable RED LIST** (IUCN); EU Population status: Threatened; Protected by EU Birds Directive and 4 other international agreements; Breeding habitats sparsely vegetated land, Wintering habitats coastal open ocean shelf; Natura 2000 species code: A188.)

The Developer/ Applicant/ Deciding Authority also neglects to assess cumulative impacts of Codling Wind farm surveys and ESB SeaStacks investigative surveys (among others in the pipeline) which will inevitably lead to likely significant effects on protected bird species that depend upon the surrounding coastal habitat and Kish and Bray sandbanks for survival. Regardless of cumulative effects, the following species are in fact likely to suffer habitat deterioration or fragmentation, disturbance, avoidance resulting in a consequent loss of foraging, breeding and resting sites which will seriously impact on these species populations, undermining their status and resulting in the deterioration of their habitat. This would then be in contravention of the Habitats and Birds Directives whereby repeated geotechnical and geophysical surveys (drilling, seismic testing etc) are allowed to take place over 5 years, in particularly affecting bird species prevalent and breeding in the summer months when the bulk of investigative works are scheduled to take place. This will result in deterioration of ecological functionality for these SPA / SAC protected areas and will adversely affect favourable conservation status resulting in species decline. For example “the site objectives of Rockabill to Dalkey Island SAC relate to temporary or permanent barriers. The site objectives to the [Rockabill to Dalkey Island SAC](#), available [here](#) say "Species range within the site should not be restricted by artificial barriers to site use". To compound insufficient or patchy data on protected bird species there are still present in the H & A report there remains Insufficient Evidence or Mitigation Measures. To quote from another submission contained in the report:

“There is insufficient evidence that the proposed works, individually, or in combination with other plans or projects, is unlikely to have a significant effect on any European Site/s subject to specific mitigation measures. AA screening information in relation to matters including the bird species studied, the impact of underwater noise on bird species, a lack of clarity in relation to the proximity criteria and zone of influence used in screening sites and a failure to present evidence to support conclusions in relation to in combination effects.

Likely significant effects in combination with other plans or projects were not assessed, including combined effects of past investigations in the area.

The license application indicate that ‘The exact locations will be determined prior to undertaking the site investigation works’ however, no detailed grounds on which these determinations will be made has been outlined, therefore no appropriate determination can be made on whether this will adversely affect the integrity of local sites

The license application states that in carrying out intertidal works at South Dublin Bay and River Tolka Estuary SPA that “an ecologist will be employed to ensure that disturbance is minimised”. Not alone is this an admission of disturbance but it represents a likely significant risk that is not clearly defined at the licensing stage and it is left to the developer (or developer employed ecologist) to decide what constitutes damage to site integrity.

The license states that:

“If roosting birds are present on the shore during intertidal works, the nearby sample stations will be postponed until the birds depart, without provocation.” It is not clearly defined, at what stage resumption of work will proceed, e.g. after the roosting birds have departed, after the chicks have departed. As such the license fails to contain complete, precise and definitive findings and

conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works. Approval of such license would contravene article 6(3) of Directive 92/43/EEC ('the Habitats Directive')."

This failure to correctly assess LSEs on cetaceans and bird species and these data gaps effectively remove a lot of the validity of the Hartley Anderson report's overall data and conclusions. Again this data failure goes to the heart of the matter: the pre-existing knowledge of the unsuitability of the site as flagged in written reports by professional and prestigious bird protection groups to the government and department at the outset of this foreshore application process for the Kish and Bray which were and continue to be ignored. The department, in spite of critical findings in an MLVC report at foreshore lease application stage, has refused to oblige or direct the developer to consider other sites as part of the application process, even though it is within its power to do so.

All likely sources of effects arising from the plan or project under consideration should be considered together with other sources of effects in the existing environment and any other effects likely to arise from proposed or permitted plans or projects. These include ex situ as well as in situ plans or projects. The report does not clearly state what in combination plans and projects have been considered in making the determination in relation to in combination effects. Simply re-stating that "there are no cumulative impacts" or that the works will only be "exploratory in nature is insufficient. Therefore, in spite of the findings of the H & A report for DHLGH there are Remaining Risks and Lack of Robust Scientific Data and Granting of this license on the basis of this report would likely contravene article 6(3) of Directive 92/43/EEC ('the Habitats Directive') by failing to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.

13 Private

From: [REDACTED] [REDACTED] <[REDACTED]@icloud.com>
Sent: Friday 29 July 2022 16:22
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: FS007188 RWE SI - Consultation on Stage 2 AA

Further to the invitation for Public Submissions for Purposes of Conducting Stage 2 Appropriate Assessment I wish to make the following submission. I strongly object to the granting of a Foreshore Licence to undertake geotechnical and geophysical site investigations and ecological, wind, wave and current monitoring to provide further data to refine wind farm design, cable routing, landfall design and associated installation methodologies for the proposed Dublin Array offshore wind farm.

Today 29/7/2022 it is reported that Minister Ryan, reflecting on the recently announced emissions targets, has vowed "I have every faith that we will, together, reduce our overall economy-wide carbon emissions, year by year". This is absolutely crucial but just as crucial as the need to reduce carbon emissions is the need to protect the greatest natural carbon sink we have.

Efforts to decarbonise must also focus on protection of what is working for us. The sea is an absolutely crucial carbon sink. A damaged marine environment will not function effectively in this regard. We must know exactly what we are doing when we select sites for off shore wind. The primary consideration for the selection of sites for wind farms must be based on where windfarms will do least damage to ecosystems. We must first do the least environmental harm possible. Site selection therefore must be science led. To date site selection on the East Coast has been developer led without adequate independent environmental assessment. Blindly chasing targets without safeguarding biodiversity is counterproductive. We must start with a clear scientific analysis of where we need to protect our carbon sink, in other words we must start with effective Marine Planning. While new Marine Planning legislation has gone some way towards this, legacy projects advanced under the hopelessly inadequate 1933 legislation continue to hold special status and too much power to grant or refuse licences lies within the sole remit of one Minister.

Flawed Marine Planning

Even for ordinary citizens without scientific expertise, it is not hard to see from the work done by voluntary groups and Community Councils, that there has been a long history of systemic flaws in Irish Marine planning. Relative to other jurisdictions, Ireland to date has designated an unacceptably tiny portion of its marine environment for protection. In this planning vacuum, Legacy Projects that made applications under outdated 1933 legislation have been afforded special status going forward.

Information emerging from Voluntary Groups

Emerging evidence unearthed by voluntary groups, community councils and concerned citizens indicates that decisions not to designate the Kish/Bray Sandbanks for protection in the past were based on dubious studies, inadequate assessments and concerns other than scientific ones. This is deeply worrying. We must be able to have confidence that the Government on our behalf, will engage bodies who have appropriate expertise to assess these complex environmental issues.

Decisions must be based on science

Until we have sufficient designation of MPAs based on best independent scientific expertise we simply can not stand over the selection of sites for near shore wind farms or their investigative work.

Before we allow intrusive investigations for such industrial development we must know what areas need protection. Granting licences in advance of this is premature.

I fully support the Submissions made in relation to this Foreshore Licence Application by Coastal Concern Alliance and Dr Owen Clarkin. In their submissions, in my opinion, they have provided evidence that far outweighs the evidence provided to date by RWE Renewables regarding the impact of wind farm investigation work and windfarm development on vulnerable marine habitats, and on areas vulnerable to coastal erosion in the context of increased adverse weather events. I completely share their concerns and call on the Government to carefully consider the volumes of scientific information they have provided to inform all current and future decision making regarding granting of foreshore licences.

It is irresponsible to leave EIA to developers. FOI/AIE investigation has revealed that in 2006 the Marine Licence Vetting Committee reported that EIS relating to Kish and Bray Bank Wind Farms was found to have “serious shortcomings” leaving it “deficient in its content” and was not satisfied that it complied “with relevant EU and national EIA legislative requirements”. The Government must commission independent investigations to collect and analyse data based on up to date methodologies.

Inadequate Public Information and Consultation

The issues involved in these Foreshore Licence Applications are extremely complex. To date the Government has failed to provide user friendly information, that ordinary citizens such as myself can relate to. It is not acceptable that voluntary groups and concerned citizens are left with the onerous task of challenging the submissions made by Wind Farm developers in the absence of meaningful unbiased public information and consultation. The NPWS has been chronically under resourced for years and because it has only had a very recent injection of funds it is now having to play catchup in gathering data relating to these matters. Voluntary groups have had to step into the breach, gather information, wade through the licensing history, make FOI/AIE requests, make complaints to the EU, organise public information meetings, analyse the data and generally act as watchdog. Pitched against the resources of massive wind farm developers backed by Government this feels less than democratic.

14 Private

From: [REDACTED] <[REDACTED]@avhu13.com>
Sent: Friday 29 July 2022 16:25
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: re: FS007188 RWE SI - Consultation on Stage 2 AA

Dear Sir or Madam,

Please see below my submissions on the above proposed RWE Renewables Ireland, Site Investigations for the proposed Dublin Array Offshore Wind Farm.

I believe the application should be rejected for the following reasons:

- This site was selected by the original Developer decades ago without any assessment as to environmental suitability. It has now been granted the status of a “Relevant Project” and there still has **never** been any appropriate assessment as to its environmental suitability.
- The Foreshore Licenses for these projects appear to have been originally granted in 2000 and expired in 2005 without ever being validly renewed. The original proposed areas and turbines bear no relation to the current proposed sizes. Consequently the current application has no validity.
- The site is chosen by foreign private developers on purely economic grounds as being cheap to develop, with all profits accruing to the private developer and none to the State -not even an undertaking of cheap electricity supply. No other European country would permit their environment to be vandalised by foreign interests in this manner.
- There has been **no Marine Spatial Planning** in place whatsoever prior to the selection of this proposed development site.
- The technology proposed for Dublin Array is totally outdated as one would expect for a site first selected decades ago. While Ireland is progressing with in this outmoded fashion, other nations are 5 to 6 years ahead in developing **proven** floating windfarm technology which can be located over the horizon, particularly on the West coast where the wind is strong and constant.
- The Kish Bank is directly in line of sight of one of the most beautiful natural amenities in the most populated area of the country – one that is extensively used for leisure and tourism. Again, no other country in Europe would consider using an equivalently located and aesthetic site for private windfarm development in this manner.
- Kish Bank has previously been identified by the National Parks and Wildlife Service (NPWS) as the richest example of marine biodiversity amongst Irish East coast sandbanks. In fact, the NPWS originally proposed the Kish Bank to be a protected area (SAC) before political interference forced them to retract.
- Currently there are proposals for windfarm development on sandbanks running along the whole Eastern Irish coastline from Wexford to Louth – it is simply not possible to effect cumulative development of this scale without destroying numerous habitats and utterly closing off migratory bird flight paths. Many of these proposals need to be dropped immediately as cumulatively they would be an ecological catastrophe with disastrous effects on the protection of our habitats and very shoreline itself. In this context, the Kish Bank proposal should be one of the first to be dropped due to its rich biodiversity and amenity value.

- The investigation work proposed will inevitably damage the protected Rockabill to Dalkey SAC habitat and disturb species that rely on that habitat, particularly the porpoise population.
- The investigation work proposed will inevitably damage the sandbank habitat and disturb species that rely on that habitat.
- The investigation work proposed will inevitably damage the shore habitat and disturb species that rely on that habitat.
- The mitigation measures proposed are wholly ineffective in protecting our fish, sea mammals and porpoise populations, particularly in the aspect of sonar disturbance.
- The works proposed are effectively to be executed in a wholly unregulated and unsupervised manner with no apparent independent mitigation measures and wholly biased conclusions.

For all of the above reasons, this application should be rejected in the public interest.

Please do not hesitate to contact me if I can be of assistance in relation to this submission.

Best regards,

■■■■ ■■■■

15 Private

From: [REDACTED] <[REDACTED]@gmail.com>
Sent: Friday 29 July 2022 16:26
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: FS007188 RWE SI - Consultation on Stage 2 AA

Dear Sir or Madam,

Please see below my submissions on the above proposed RWE Renewables Ireland, Site Investigations for the proposed Dublin Array Offshore Wind Farm.

I believe the application should be rejected for the following reasons:

- This site was selected by the original Developer decades ago without any assessment as to environmental suitability. It has now been granted the status of a “Relevant Project” and there still has **never** been any appropriate assessment as to its environmental suitability.
- The Foreshore Licenses for these projects appear to have been originally granted in 2000 and expired in 2005 without ever being validly renewed. The original proposed areas and turbines bear no relation to the current proposed sizes. Consequently the current application has no validity.
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- Kish Bank has previously been identified by the National Parks and Wildlife Service (NPWS) as the richest example of marine biodiversity amongst Irish East coast sandbanks. In fact, the NPWS originally proposed the Kish Bank to be a protected area (SAC) before political interference forced them to retract.
- Currently there are proposals for windfarm development on sandbanks running along the whole Eastern Irish coastline from Wexford to Louth – it is simply not possible to effect cumulative development of this scale without destroying numerous habitats and utterly closing off migratory bird flight paths. Many of these proposals need to be dropped immediately as cumulatively they would be an ecological catastrophe with disastrous effects on the protection of our habitats and very shoreline itself. In this context, the Kish Bank proposal should be one of the first to be dropped due to its rich biodiversity and amenity value.
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For all of the above reasons, this application should be rejected in the public interest.

Please do not hesitate to contact me if I can be of assistance in relation to this submission.

Best regards,

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16 Coastal Concern Alliance

From: Coastal Concern Alliance <info@coastalconcern.ie>
Sent: Friday 29 July 2022 16:35
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: FS007188 RWE SI - Consultation on Stage 2 AA

Dear Foreshore Unit

Please find attached a submission to the above consultation on behalf of Coastal Concern Alliance.

Please acknowledge receipt of this email and attached submission.

Kind regards

■■■■ ■■■■

CCA Policy Team

info@coastalconcern.ie

www.coastalconcern.ie

@coastalconcern

■ *George's Street Lower*

Dun Laoghaire

Co Dublin



Submission in Response to the application by RWE Renewables Ireland Ltd.

for Conducting a Stage 2 Appropriate Assessment

FS007188 RWE SI

Coastal Concern Alliance is an independent voluntary citizens' group, set up in 2006 to campaign for reform of Foreshore Legislation and for the introduction of Marine Spatial Planning to balance competing interests in our seas and conserve marine wildlife, habitats and coastal landscapes. We are supportive of the development of offshore renewable energy to meet climate and energy targets when developments are properly sited, to a proper scale and managed under a democratic fit-for-purpose marine planning regime. We have no affiliation with any political party or industry group.

29th July 2022

Introduction

Coastal Concern Alliance welcome the acknowledgement by the Department that Likely Significant Effect on a number of Natura 2000 habitats and species could arise as a result of the proposed development activity for which consent is sought in this Foreshore Licence application.

We assume that all of the pertinent information included in our submission in response to the Foreshore Licence Application (2021) will be considered in the current additional Stage 2 Appropriate Assessment required by the Department.

Stage 2 Appropriate Assessment

It is the competent authority's responsibility to carry out Stage 2 Appropriate Assessment, with full details of the plan or project being considered at this stage.

Full details of the Plan or Project are not considered.

The current Appropriate Assessment is being carried out for the stated purpose of obtaining *'authorisation to undertake a geotechnical and geophysical site investigation for the proposed Dublin Array offshore wind farm development...'*. Therefore, the full details of the project are not considered in the screening for this Appropriate Assessment.

In addition, Annex III of the EIA Directive as amended refers to 'the size and design of the whole project". Clearly, this is not what is addressed.

With reference to the Preliminary Examination for EIA, we take issue with the conclusions drawn.

In fact, we find them extraordinary, given the invasive nature of the proposed investigation (boreholes, sound, sonar, etc) and potential impacts on protected habitats and species.

We suggest:

1. The nature of the proposed development is exceptional in the context of the existing environment with endless invasive surveys spanning decades.
The investigations proposed have the potential to cause likely significant effect to sandbanks, protected birds (notably terns, a qualifying interest in Rockabill SPA) and cetaceans (harbour porpoise, a qualifying interest in the Rockabill to Dalkey Island SAC, and others).
The investigations proposed, include the drilling of up to 61 boreholes in the area of the array on the Kish and Bray Banks, an Annexe 1 sandbank habitat, along the cable route and in the vicinity of proposed landfall sites. (Further details below)
2. Significant areas of Ireland's East coast have been subject to ongoing surveys for decades; the current licence application area overlaps the proposed Codling Bank site investigation area. The cumulative environmental impacts from these have not been considered.
3. The size of the area included in this application is exceptional and together with additional large sites under investigation for the Codling wind farm and others, effectively the whole of the East coast of Ireland is subject to invasive surveys.
4. The investigation is proposed in an ecologically sensitive location, the Kish and Bray Banks, and encompasses numerous SACs and SPAs *e.g.*, the Rockabill to Dalkey Island SAC.
5. The investigations have the potential to affect other environmental sensitivities in the area, notably protected bird species from Rockabill SPA and other locations around Dublin Bay.

Ireland has failed to meet requirements of the Habitats Directive

Ireland have publicly committed to designating 10% of our marine area for protection by 2020 and the target for 2030 is 30%. Currently, just 2.1% is listed for protection and adequate management measures are yet to be put in place.

The Department of Housing, Local Government and Heritage is charged with the responsibility for assessing applications for developments in the marine AND complying with Ireland's obligation to designate marine and terrestrial sites for designation.

Environmental NGOs have incessantly called on the government to urgently address this deficit in Natura 2000 designations BEFORE vast proposals for extensive wind farm developments are progressed. CCA have, for many years drawn attention to the totally inadequate marine planning legislation that has pertained in Ireland since 1933. The Maritime Area Planning Act 2021 encompasses some of the most undemocratic aspects of the Foreshore Act 1933, embodied in the progression of 'relevant' projects, including the proposed Dublin Array development.

A new report, prepared by [Fair Seas](#) and based on robust scientific methodology, has proposed Areas of Interest for designation to meet Ireland's obligation under the EU Habitats Directive. Large areas of the East coast are included in these Areas because of their high conservation value.

It is incumbent on the government department charged with protecting our marine environment, to set the highest possible standards of environmental assessment with regard to proposed projects that have potential to have very serious environmental impacts. Far from doing this, it appears that there is an enormous drive to advance vast coastal wind farm developments, such as the Dublin Array, BEFORE marine sites are allocated for protection.

Recent reports highlight that the loss of biodiversity is an even greater threat to our survival than climate change. Nature Conservation is the key to addressing both the climate and biodiversity crises. [A 2019 UN Report](#) states 'In a blow to human progress, damage to ecosystems undermines 35 of 44 UN sustainable development targets for poverty, hunger, health, water, cities, climate, oceans and land, the authors found.'

Kish/Bray Bank deselected for designation as Special Area of Conservation (2012)

Since CCA made our submission (December 2021) in response to the Application by RWE for a Foreshore Licence to carry out additional surveys in relation to the proposed development of a wind farm on the Kish and Bray Banks, we have continued to carry out an investigation into the manner in which, in 2012, the Kish and Bray Banks were selected by National Parks and Wildlife Service (NPWS) for designation as a SAC, but subsequently removed. We made a preliminary reference to this in our December 2021 submission.

Querying the integrity of the SAC designation process

Additional findings from this investigation are very relevant to the public consultation on Stage 2 Appropriate Assessment. **We contend that, had proper procedures, in compliance with the Habitats Directive, been followed in 2012, the Kish/Bray Banks, the Annex 1 sandbank habitat on which it is proposed to construct an offshore windfarm, WOULD have been designated SAC with the qualifying interest 'sandbanks slightly covered by seawater all the time'.** As such, the area of

the Bank itself would constitute a European Natura 2000 site and would be scoped in to the Stage 2 Appropriate Assessment, the subject matter of this consultation.

Natura 2000 Habitats should be selected based on science.

The reason for the removal of the Kish/Bray Bank habitat was stated in Records released to CCA to be that Hempton's Turbot Bank and the Blackwater Bank *'are in almost pristine condition, with good representation of the species typical for Irish sand banks, the location and area of habitat within the network would comply with guidance received from the European Commission, and current indications are that there are no operant or expected pressures at either site that would compromise the long-term sustainability of the habitat feature. (This is not true for Kish/Bray Bank as there is an option on a Foreshore Lease in relation to the Dublin Array Wind Park).'*

Coastal Concern Alliance are unaware what the term 'option for a Foreshore Lease' means. One hypothesis is that there is a system, of which the public are unaware, by which the Department gives assurances of 'an option for a Foreshore Lease' to prospective developers of offshore wind farms (or other proposed developments). If this is the case this information should be in the public domain.

The Habitats Directive requires that only scientific criteria be used in the selection of Natura 2000 sites. Clearly, whether or not the site has been targeted for industrialisation is not a scientific consideration. Therefore, we believe that the removal of the Kish/Bray Banks from designation as a SAC is in breach of the EU Habitats Directive.

Relevance in Current Stage 2 Appropriate Assessment Consultation

The removal in 2012 of the site selected as a SAC by the NPWS, the Kish/Bray sandbanks, is especially pertinent given the current consultation which, it appears, is being carried out to determine impacts on Natura 2000 habitats and species that could result from the undertaking of the investigative surveys (and the subsequent construction of a wind farm) that RWE and the Department deem necessary even at this point, ten years after it was stated in a Departmental Record, dated 2012, *'Justification for the designation of sandbanks'*, that a lease option on this site was already in place. It is not possible, then, to separate the environmental impacts of the investigation works from the impacts that would result from construction of the windfarm.

Ongoing investigations at National and EU level

A complaint has been lodged with the European Commission in relation to the removal of the Kish/Bray Bank from SAC designation and in relation to other findings from our investigation. Given the very serious nature of the findings, aspects of the material have been appealed to the Information Commissioner and the Commissioner for Environmental Information.

Sandbank Habitat – SAC or not

Damage to the integrity of the sandbank

The importance of sandbank habitat has been highlighted in a recent report (2021) from IUCN, the prestigious global nature conservation body, entitled ['Mitigating the Biodiversity Impacts Associated with Solar and Wind Development'](#) which states (p95)

Offshore wind farms could impact a variety of offshore and coastal habitat types, such as sandbanks, coral reefs, seagrasses, mangroves, salt marshes, oyster beds and wetlands. These habitats may also provide important ecosystem services such as fisheries and coastal protection.

Such habitat types are sensitive to loss, fragmentation and degradation, and restoration can be complex and variable by life stage. Careful planning and site selection are key to avoiding sensitive habitats (Section 3), for example to minimise impacts of the export cable landfall.

The complete absence of site selection oversight and the developer-led planning that still pertains in Ireland is far from the ‘*careful planning and site selection*’ described by the IUCN.

The [UN Convention on Biological Diversity](#), to which Ireland is a party, aims to halt the loss of biodiversity by 2020, *i.e.* conservation of ecosystems, habitats and species, both inside and outside protected areas. Under the Treaty on the Functioning of the European Union, environmental protection is an integral part of all EU policies.

Irrespective of whether or not the Kish and Bray Banks are inside or outside protected area, it is clear that these sandbanks are an important habitat both as an Annex 1 sandbank and as a foraging and feeding ground for numerous endangered bird species (see below).

It is also clear that **the construction of wind farms on sandbanks will damage the habitat and that the current continued investigation cannot be separated from the construction of the proposed windfarm.**

In response to queries submitted by CCA to NPWS (2020), it was stated:

CCA Question. *Is it the view of NPWS that development of extensive windfarms on ‘sandbanks covered by sea water all of the time’ does remain a threat to the integrity of the banks, as stated in Conservation Assessment reports and in the NIS of the NMPP?*

NPWS Answer: The installation of windfarms on Sandbanks can be expected to:

- result in a loss of the Annex I habitat area,
- introduce a different habitat to the site in the form of artificial reef and
- changes the hydrodynamics over the sandbank.

It may also indirectly affect the habitat’s structure and functions by introducing either or both invasive alien species and opportunistic species.

The extent to which the current proposed surveys will damage the sandbank habitat itself has not been considered.

Dredging damages sandbank habitat

The Status of EU Protected Habitats and Species in Ireland, 2019 (Section 7.3) refers to the potential threat to sandbanks from dredging (fisheries).

Dredging, which is required to clear accumulated sand from the bases of the seven small wind turbines on the Arklow Bank, was permitted in 2017. Consent was given to dredge and dump 99,999 tonnes of sand material on the bank over a period of eight years, so one can assume that this activity

is continuing. Clearly this constitutes a very significant impact on the sandbank and the species that live there.

The Dumping at Sea permit was awarded by the EPA without any Environmental Impact Assessment (EIA). The Marine Planning Foreshore Section of the Department of the Environment, Community and Local Government had confirmed that an Environmental Impact Assessment was not required. Given that dredging is known to be an activity that damages the seabed, the failure to carry out an EIA is clearly out of line with best environmental practice, as stated by the [Irish Whale and Dolphin Group](#).

It can be assumed that the **sandbank habitat on the Kish/Bray Bank** is likely to react in precisely the same manner as the sand on the Arklow Bank and that similar remedial action would be required to clear sand. If dredging is a damaging process flagged by NPWS with regard to fishing, then dredging to remove sand from the bases of wind turbines is equally damaging.

Birds – Kish Bank SPA for Birds?

National Parks and Wildlife Service

The National Parks and Wildlife Service, with reference to ‘sandbanks slightly covered by seawater all the time’ (e.g., The Kish and Bray Banks) state on their website (29/7/2022):

‘Shallow sandy sediments are often important nursery areas for fish and consequently can provide feeding grounds for seabirds (especially puffins (Fratercula arctica), guillemots (Uria aalge) and razorbills (Alca torda)) and sea-duck (e.g., common scoter (Melanitta nigra)). A survey undertaken upon the habitat of terns in the Irish Sea showed that the Kish Bank had significant numbers of auks (guillemots, razorbills etc.) and terns in the area. Roseate, Common and Arctic Terns were recorded roosting on the Kish Lighthouse and peaked in numbers during late August and early September. The presence of these bird species is indicative of feeding resources in the area.’

Record showing that Kish/Bray Bank would be designated as SPA for Birds (2012)

Reference has already been made in CCA’s submission (2021) to this consultation (p 9) to the fact that in an official 2012 document received from the Department, it was stated that the Kish/Bray Bank would be likely to be designated as a **Special Protection Area for Birds**. This is unsurprising, given the extensive evidence that these banks are important feeding and foraging grounds for many species. **Rockabill Special Protection Area** has as its conservation objectives Purple Sandpiper plus the three tern species - Roseate Tern, Common Tern and Arctic Tern.

Birdwatch Ireland

We can see no submission from Birdwatch Ireland in relation to this Appropriate Assessment Consultation. However, we assume that Birdwatch Ireland is a statutory consultee. Can you confirm this? Lack of resources for these critically important NGOs is likely to be a factor contributing to their inability to contribute. While we appreciate that this is not the purpose of this consultation, it is imperative that adequate funding is provided so that NGOs, such as Birdwatch, can express the views of the public with regard to the need for environmental protection. We welcome the increased funding provided to NPWS and hope that this initiative will extend to improving funding for environmental NGOs.

Tern Conservation on Rockabill

Ireland plays host to the **largest European breeding colony** of [Roseate Terns on Rockabill Island](#). Considerable conservation work has been undertaken over the years by Birdwatch Ireland, whose efforts have been extremely effective.

Their website states that efforts on Rockabill now make this one of the most successful conservation projects in Ireland. If development was to be consented on the Kish/Bray Banks, the impacts on these protected bird species could not be mitigated and years of conservation work would be at risk of being wasted.

Given that determined efforts and vast resources have been invested to conserve and enhance the habitat for Roseate Terns on Rockabill and that it is known that the Kish and Bray Banks are important foraging and feeding grounds for these birds during the breeding season (and pre & post breeding) it seems extraordinary that these sandbanks have not been designated as a Special Protection Area (SPA) for birds, as it was anticipated, in 2012, they would be.

Below we list some of the sources of information relating to the Kish & Bray Banks as important areas for birds, although given that this is already acknowledged at official departmental level, this should not be necessary.

Environmental Impact Bird Survey – Dublin Array, 2013

A document entitled ‘Progress Report No. 2 on Seabird Surveys Sept 2001- Sept 2002’ provided information on a year long survey of birds on the Kish / Bray Banks. This survey was commissioned by the developer, Saorgas Energy. It is of note that in spite of the fact that this was a developer-commissioned survey, the results as presented raise serious questions about the suitability of the site for windfarm development. What is extraordinary is that this appears to have been totally ignored by the Department.

The Report stated:

The existing information identified during the desk study shows that the Kish Bank supports important bird populations. A further year-long survey followed.

Results of the year-long survey

The survey results showed that the main Kish Bank study area held a range of important bird populations, including (based on the peak counts recorded) internationally important numbers of roseate terns, nationally important numbers of Manx shearwaters, shags, kittiwakes, common terns, guillemots and razorbills, and regionally important numbers of gannets, cormorants, and arctic skuas.

Birds displaced by windfarm

The other potential impact highlighted in the report was the possible displacement of foraging seabirds from the Kish Bank by the presence of the wind farm. This was identified as a potentially significant impact for 'more species of national importance'. As stated in the report, **shallower sea areas such as the Kish Bank are relatively scarce in this region, the Kish itself constitutes quite a large proportion of the available resource**. Therefore, any effective loss of habitat would be more likely to result in **significant ecological consequences, such as reduced breeding success and increased mortality**.

The report states: 'Alternative feeding areas with similar characteristics may well be limited. Similarly, for birds outside the breeding season, loss of feeding resources could be significant. Again, if a disturbance effect occurs, its ecological consequence would be dependent on the availability of alternative feeding areas. If such alternative areas were not available and then birds were unable to reach adequate body condition before migration, this could result, for example, in increased mortality rates.'

CCA Note: Since this result was published, razorbills, puffin and kittiwake have been added to the Endangered list of species threatened with extinction. Kittiwakes feed almost exclusively on sandeels. Given that it is clearly stated that shallow sea areas like the Kish/Bray Banks are scarce, damage or disturbance of any kind in the area could not be mitigated.

Tern Feeding and Foraging Habits

Table 1 compiled from a JNCC [Literature review of tern \(*Sterna & Sternula spp.*\) foraging ecology](#) provides information on the feeding and foraging range of all tern species that occur in Ireland.

Table 1. Tern Feeding Habits and the importance of sandeels

Species	Primary Food Source	
	Adults	Chicks
Little Tern	Sandeel	Sandeel, Herring, Gobies
Sandwich Tern	Sandeel, Gobies	Sandeel, Spratt, Herring
Common Tern	Sandeel, Clupeids	Sandeel, Clupeids, Gadoids
Arctic Tern	Sandeel	Sandeel, Sprat
Roseate Tern	Sandeel, Clupeids	Sandeel, Clupeids, Gadoids

This Table shows that the Kish/Bray Banks, a sandeel habitat, is a significant feeding and foraging area for these important Red Listed protected species.

Sandeels – What [The Wildlife Trusts](#) say

Sandeels are small eel-like fish which grow up to 30 cm in length and can often be found in vast shoals. They feed primarily on plankton of variable size, ranging from small plankton eggs up to larger energy rich copepods found in great abundance in Scotland's seas. Some species of sandeel can live for as long as 10 years, reaching maturity at around 2 years of age.

Sandeels have a close association with the sandy substrates into which they bury to protect themselves from predators. Once settled, studies have shown that sandeels are mostly resident, rarely travelling over 20 miles from the areas they call home. In fact, they rarely emerge from the sea bed between September and March, except to spawn. Between April and September, they swim in large shoals close to the seabed and will burrow into the sand to escape predators. In the winter months, they bury themselves up to 50cm in the sand.

Given that it is clear that the Kish and Bray Banks are the habitat that provides the food source for a range of critically endangered bird species listed as qualifying interests in nearby SPAs, no invasive drilling / boreholes should be permitted on these banks. The presence of a large sandeel population highlights the wealth of biodiversity in this area of Ireland's coast, a known hot-spot for the plankton that are the food source for the sandeels. Reduction in the food source for protected bird species could not be mitigated.

Newton & Crowe Survey, 1999.

This survey states:

'A total of 3,015 birds of 26 species was recorded around the north end of the Kish Bank in August and September 1999. Of these 25 were true seabird species and one (Dunlin) was a wader species. Common Guillemots, Black-legged Kittiwakes and Common Terns were the most commonly recorded species while Roseate Terns, Kittiwakes and Common Terns were the predominant species seen roosting on the Kish Lighthouse. Over 1,000 terns were estimated to be roosting here on 3rd September 1999. A high number of Common Guillemots (1,482 on 3rd September) was also recorded in the area.'

Ringsend Wastewater Treatment: *Appropriate Assessment of Spoil Disposal*

An Appropriate Assessment was carried out in relation to the Ringsend Spoil Disposal. In the conclusions it is stated:

'A total of nine species of seabirds, which are qualifying interests for a number of Natura 2000 sites on the Dublin coast, are likely to occur regularly in the proposed spoil disposal area to the west of the Burford Bank. The northern part of the Kish Bank (6 nautical miles or 11 kilometres east) is known to be an important foraging area for these seabirds in August and September.'

Cetaceans

The Irish Whale and Dolphin Group, in their submission on the Appropriate Assessment for the Ringsend Wastewater Treatment Plant, with reference to Kish Lighthouse, Howth Head and Dalkey, give a summary of recent sightings at each location. They stated 'harbour porpoises are frequently

recorded at all sites (up to 24 sightings in one year in 2011 at Howth Head). Minke Whales are also regularly recorded at Kish Lighthouse and occasionally at the other locations. Bottlenose Dolphin are being recorded with increasing frequency, especially at Dalkey. The 1999 surveys of seabirds also recorded cetaceans on the Kish Bank in August and September. The main species recorded was the Harbour Porpoise with a single dead specimen of Risso's Dolphin (Newton and Crowe 1999).

Their submission goes on to refer to a targeted survey of Harbour Porpoise in the Dublin Bay area in July-September 2008 that found that 'The mean group size was quite consistent ranging from 1.08 to 1.50. The overall density estimate was 1.19 per km² which gave an estimated abundance of 138±33 porpoises. This represents one of the highest densities of the species recorded in Ireland to date (Berrow *et al.* 2008).

Impacts at landfall site

Shanganagh

There has been no outline of how an actual route for cables in this area would proceed in order to access the electricity grid. Whatever direction is taken will have an impact on shoreline habitats in a zone with small but integrated eco-systems. The shingle shore is anchored by vegetation which helps withstand high tides and protects against **coastal erosion**, a known risk for Ireland's East coast.

Project Splitting

The cable that it is proposed to bring ashore at Shanganagh has to have a proposed route by which power is taken ashore. No consideration has been given to the potential environmental impacts of this, which suggests **project splitting**. Project splitting is contrary to EU law. It is clear that in order to avoid misuse of the European Union rules by splitting projects which, taken together, are likely to have significant effects on the environment, it is necessary to take into account the cumulative effect of such projects which have an objective and chronological link between them.

Sandmartins



Sandmartin birds return every year to the soft cliff faces of the Shanganagh to Corbawn Shoreline and at stretches further south along the Bay. This breeding pattern has been long established. Was this considered in the Screening Report? Are sandmartins a Protected species in Ireland? In the UK it is clear that they are. [The RSPB website](#) states '***Sand martins and their active nests are fully protected by the Wildlife and Countryside Act 1981. Sand martin nests are protected from the moment birds begin tunnelling. Penalties can include fines and imprisonment.***'

Clearly the creation of a cable route through a cliff face that annually houses a breeding colony of sandmartins would have a devastating impact on the birds. These effects cannot be mitigated.

Support for other submissions

CCA are supportive of submissions from other concerned citizens who have expressed reservations about various aspects of this proposed Foreshore Licence Application. This includes, but is not limited to:

- Residents in the area close to the Shanganagh Cliffs **proposed landfall site**, as referenced above.
- More detailed submissions relating to the impacts of noise on cetaceans, notably **Harbour Porpoise**
- Detailed submissions in relation to impacts on **Birds**.
- Submissions expressing concern about the **archaeology** of the area surrounding the Kish/Bray Banks
- Killiney Bay Community Council.

Discussion

Coastal Concern Alliance have, since our formation in 2006, appealed to government to put in place proper planning and environmental assessment procedures for offshore development. It is absolutely evident to us at this stage, after 16 years of endless campaigning, that this has not happened, but it could have. Consecutive administrations have failed to bite the bullet and legislate effectively for proper marine planning and biodiversity protection in our seas.

What will they do now?

What we have come to expect is that they will ignore, deny, defend or justify their long-held determination to support an untenable position. The system is broken. Recent investigations show that there are major flaws in the current **marine management** process. The **NPWS Review**, carried out by the Department of Housing, Local Government and Heritage under the guidance of Minister Malcolm Noonan revealed that with regard to the Marine, NPWS was not equipped to meet their statutory responsibilities. A recent investigation, commissioned by SWAN confirmed that the 2021 **National Marine Planning Framework** is not ecosystem based and does not fulfil the requirements of the Marine Spatial Planning Directive. Recent revelations regarding systemic issues in **An Bord Pleanála** have been aired in the media and raise very significant questions about the reliability of that critical agency.

And it is in this environment that citizens are left to respond to consultations such as the one in question here. A new approach is needed. Our elected (and unelected) representatives must stop

and re-think. Biodiversity protection must be brought centre stage and given the consideration it needs.

Conclusions

In the context of the current Government discussions on new emissions targets, Minister for Environment Eamon Ryan has stated (29 July 2022) that the Government priority in land use must be “to restore Nature”. This must also be our priority with regard to use of Ireland’s vulnerable coastal waters already under threat from a variety of human influences. Climate protection and biodiversity protection must go hand in hand.

ENDS

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17 People Before Profit

From: [REDACTED] [REDACTED] <[REDACTED]@oireachtas.ie>
Sent: Friday 29 July 2022 16:43
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: Submission

Attached please find submission from People Before Profit

Beartas ríomhphoist an Oireachtais agus séanadh. oireachtas.ie/ga/email-policy/
Oireachtas email policy and disclaimer. oireachtas.ie/en/email-policy/

People Before Profit

c/o [REDACTED] [REDACTED] [REDACTED]

Dáil Eireann

Kildare St

Dublin 2

29 July 2022

People before Profit submission Ref: FS007188 Appropriate Assessment re RWE development on Kish/Bray Banks

We would like to state in advance of this submission that we are 100% in favour of advancing renewable energy infrastructure as a matter of urgency. We believe this should be state funded and state led to ensure the maximum benefit for people and to prevent profiteering and speculation by private companies.

We believe that renewable energy cannot and should not come at the expense of local habitats, biodiversity and the greater environment.

We look to the case of Derrybrien where the siting of a wind farm at the top of a mountain caused untold damage when the weight of the windmills and the subsequent changes to the ecology, caused the mountain to collapse.

We need to learn from this disaster.

We also need to learn from the desperate mistakes that have been made in planning on land in Ireland when developers were allowed to select their own sites and direct planning decisions.

Our Marine area is not only our biggest carbon sink it is an enormously valuable natural resource. Planning for renewable energy at sea must be done with the utmost care and must use the precautionary principle.

Or marine area must be analysed and audited in advance of choosing sites for renewables to ensure the best protection of sensitive habitats and species.

The state must then, and only then, designate areas for development and after that the planning and siting of renewable energy farms should be progressed

All this must be directed and decided by the state in conjunction with the environmental experts not the developers.

We, in People Before Profit, welcome that the Minister has decided that an appropriate assessment is required.

This assessment is an absolute necessity because the area in question is mainly around the Kish and Bray SandBanks.

Sand banks are an important habitat and are listed under Annex 1 of the Habitats directive.

According to the National Parks and Wildlife Service (NPWS), they contain unique communities of invertebrates while the sandy substrate is home to sand eels, a small sliver of a fish that gathers in shoals and w

Like sand dunes on land, sandbanks are dynamic systems, constantly shifting with the waves and currents. In this way the sand on the sandbanks is connected to the sand on the shore and the dunes behind the shore. The wind and water are constantly moving this sand around, blowing particles inland, dumping sand from the sea onto the shore and washing sand from the shore back out to sea are an important food source for sea birds such as terns.

So, sandbanks are important for wildlife but also serve a very practical purpose in protecting our coastal infrastructure. The vast majority of sand banks around the Irish coast are located in the Irish Sea and this is perhaps not surprising given the expanses of sandy beaches that can be seen to stretch from County Wexford in the south to County Down in the north.

When the Habitats Directive became law in Ireland in the late 1990s, Ireland had an obligation to designate a representative sample of our sandbanks within Special Areas of Conservation (SAC).

The importance of the above cannot be understated and that is why not only do we welcome an Appropriate Assessment but crucially we also request that there is an immediate analysis of all of the areas along these sand banks and to advance the protection of our Marine Area in advance of any new developments along these banks.

Signed

■■■■ ■■■■ ■■■■

On behalf of People before Profit.

18 Private

From: [REDACTED] <[REDACTED]@gmail.com>
Sent: Friday 29 July 2022 16:57
To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>
Subject: FS007188 RWE SI - Consultation on Stage 2 AA

Dear Sir/Madam,

Please find attached a resubmission for submission #11 of the original submission.
Please find three files attached to this email:

- 1) An amended version of the original submission, which still stands (amendments based on clarification of Applicant's comments)
- 2) A response to the Applicant's comments on my original submission.
- 3) Additional Comments on Marine life

Regards,

[REDACTED]

Dublin Array license application FS007188 Observations

1. Remaining Risks/Lack of Robust Scientific Data:

Granting of this license would contravene article 6(3) of Directive 92/43/EEC ('the Habitats Directive') by failing to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.

- Fish (particularly non-commercial variety), bird species and cetaceans in and around the site location and impact on the same has not been adequately assessed. This may result in a contravention of the Birds Directive (Directive 2009/147/EC) as well as the habitats directive (92/43/EEC).
- Annex E, Paragraph 6.2.6 states:

“For the equipment used within the proposed works, SSS and MBES surveys, the frequency ranges vary between 190 and 420 kHz (MBES) and 300/900 kHz (SSS). All these systems fall outside the hearing threshold of all species (harbour porpoise has the highest frequency range of 200 Hz to 180 kHz (Southall et al., 2007)). Magnetometer surveys are passive systems and do not emit a signal or generate underwater noise. Therefore, it is considered that there would be no potential for injury or disturbance to any cetacean or fish species from these equipment.”

However, though the specific SSS and MBES used in this license may not effect marine mammals, Sub Bottom profiler (boomer, SBP) and UHR operate at a frequencies within the range of harbour porpoises, which may be performed over a 24 hour period. Additionally DP Vessels noise range is within the audible range of the Harbour Porpoise and no assessment of the risk, nor any mitigation measures are provided. Therefore there is insufficient evidence that the proposed works, individually, or in combination with other plans or projects, is unlikely to have a significant effect on any European Site/s subject to specific mitigation measures.

- Paragraph 6.2.15, Annex E presents an unacceptable argument for the use of SPL assessment of noise levels over the use of the current gold standards, SEL. The recent license application on Arklow Bank successfully calculated noise levels using SEL technique and there is no technical reason why this could not also be adopted by this developer. The availability of 'easy calculate figures' in the literature does not represent a reasonable excuse for not developing figures where they are lacking. This does not represent an appropriate assessment.
- Paragraph 6.2.15 Annex E states that:

“While the sound levels from drilling may result in some degree of localised disturbance to marine mammals any disturbance would be expected to be small-scale and short-term with surveys lasting

approximately 2 -3 months, with no effects lasting beyond the period of the works.”

Even if not permanently deafening these creatures, the prolonged noise created by the proposed license, over the license period, will inevitably force them to avoid the wider area (250 km considered as a buffer for cetaceans, as stated 3.3.6 Annex E) and reduce their feeding grounds. Given that much of this work is occurring both in and around Rockabill to Dalkey Island SAC, this will have a knock-on effect on their populations and, as a result, the status of their SAC. Combining this with other adjacent projects along the coast, this could have a really large effect on local populations.

- Paragraph 6.2.16 of Annex E states that:

“Modelling for sound levels from drilling works for offshore wind farms (e.g. East Anglia Two Offshore Wind Farm) identified that the threshold for PTS and TTS onset for all marine mammal hearing groups would be less than 100 m from a drilling vessel.”

Yet no reference to the proposed modelling is provided and it appears that much of the assessment is based on this figure, the basis on which it was calculated remains unknown. The recent license application on Arklow Bank (FS007339) indicated a TTS for high frequency cetaceans (incl. phocoena phocoena aka Harbour porpoise) of 757m for vessels using DP (as is proposed in this license application) and 607m for vibro-coring. Therefore, given the lack of evidence presented in this application fails to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works and granting of this license would contravene article 6(3) of Directive 92/43/EEC.

2. Insufficient Evidence or Mitigation Measures:

There is insufficient evidence that the proposed works, individually, or in combination with other plans or projects, is unlikely to have a significant effect on any European Site/s subject to specific mitigation measures.

- AA screening information in relation to matters including the bird species studied, the impact of underwater noise on bird species, a lack of clarity in relation to the proximity criteria and zone of influence used in screening sites and a failure to present evidence to support conclusions in relation to in combination effects.
- Likely significant effects in combination with other plans or projects were not assessed, including combined effects of past investigations in the area.
- The license application indicate that ‘The exact locations will be determined prior to undertaking the site investigation works’ however, no detailed grounds on which these determinations will be made has been outlined, therefore no appropriate determination can be made on whether this will adversely affect the integrity of local sites

- Granting of benthic grabs/trawls, without preceding drop down camera, ROV or SCUBA dives of the site is poor international practice and may result in the damage to sensitive habitats
- The additional mitigation measures “proposed to allow for the presence of harbour porpoise calves during the months of May to September” of “sound producing activities shall not commence until at least 45 minutes have elapsed with no marine mammals detected within the Monitored Zone by the MMO” is totally inadequate and as such a likely significant risk remains in place and approval of this license would constitute a contravention to the habitats directive.
- “SAM deployment will take approximately two weeks during mid 2022” (I assume during the geophysical survey), “independent of other surveys, the equipment will remain on site for the duration of the Foreshore Licence to provide a long term data set of pre construction monitoring of marine mammals;” Why not deploy the SAM in advance of the other surveys to ensure that Harbour Porpoise and other marine mammals are not in the Zone of Influence (250 km considered as a buffer for cetaceans, as stated 3.3.6 *Annex E*) prior to starting the geophysical and geotechnical works. This could not only act as a further mitigation measure but also provide scientific data (which should be published open access) on the effects of acoustic disturbance in and on sensitive SACs whose qualifying interests are Harbour Porpoises.
- With regard to mitigation measures in place to inhibit PTS in marine mammals, no mention of the use of passive acoustic monitoring (PAM) has been mentioned, which would be required for the ‘qualified observer’ to ensure that no marine mammals were present within the zone of inhibition prior to initiating noise creating works. An observer, no matter how qualified will likely miss sensitive marine mammals in the vicinity without the use of this apparatus and as such a likely significant risk remains in place.
- According to the Natura 2000 statement, “the Conservation Objectives to maintain the favourable conservation condition of Harbour Porpoise (*Phocoena phocoena*) [1351] within the Rockabill to Dalkey Island SAC, are defined by the following list of attributes and targets:
 - Species range within the site **should not be restricted by artificial barriers** to site use; and
 - Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.”

Both as a result of noise disturbance and physical destruction of reefs, there is admittedly by phase 1 assessment in the Natura 2000 Statement presented, a “potential for adverse effects” on the qualifying interests (QIs) of the SAC.

As outlined in the Natura 2000 statement presented:

“With regards the harbour porpoise feature and the temporary overlap with the calving period of harbour porpoise (May to August) within Rockabill to Dalkey SAC, the noise associated with the proposed works described in Section 6.2 and 6.3 of Annex E: Report to Inform AA Screening have the potential for localised disturbance and have

potential to disturb and/or displace fish prey items of all cetacean and pinniped species resulting in localised indirect effects”

Section 4.2.6 (p. 60) of the Natura 2000 statement states that “given that any noise impacts on cetaceans and their prey would be short term, temporary and intermittent... potential for disturbance to the species will be minimised and no impacts on the Conservation Objectives of the SAC are predicted.” I do not accept this statement and would present that the noise disturbance and inhibition of QI species and their food source represents a “**restriction by artificial barrier**” and is contraindicated by the conservation objectives of the SAC.

3. Unregulated Development Environment:

Granting of this license would contravene article 6(3) of the Habitats Directive by granting a consent to a project which leaves the developer free to determine subsequently certain parameters without first having made certain that the development consent granted establishes conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site.

- The development consent, if granted, should establish conditions that are strict enough to guarantee that those parameters will not adversely affect the integrity of the site. This is not evident from this application
- The number and type of benthic grabs and trawls is unclear,
 - in some instances only grabs are mentioned,
 - in some instances biological trawls are mentioned.
 - In some areas of the application 30 grabs are mentioned,
 - in other areas 90 grab samples are mentioned,
 - yet other areas (Annex E, p.19) states annual sampling for 3 years, including 90 grabs and 90 epibenthic trawls are mentioned
 - yet other areas (license application) 1-2 weeks/year for up to 3 years is mentioned, which if only a single grab per period was carried out would result in 78 grabs. The license in this regard is unclear and as such the department cannot effectively ascertain if there is a likely significant impact on Natura 2000 sites and as such, represents a contravention of the habitats directive.
- The license application area is large relative to the size of the area wherein specifically described activities and monitoring are to take place, particularly to the south. It is unclear from the application why the proposed area is so large and if unspecified activities such as benthic grabs/trawls are to be carried out in the greater license area. If this is the case then further cumulative impacts should be assessed, as the area has recently undergone multiple benthic grab surveys. As this cannot be ascertained for the enclosed documents the department cannot effectively ascertain if there is a likely significant impact on Natura.
- The license application states
 - *“The inter-tidal and sub-tidal geotechnical sampling locations will be selected after review of the geophysical and environmental data*

collected during the 2020 Site Investigation campaign. The data will be reviewed for the presence of potential ecological features such as subtidal geogenic reef. Sampling locations will then be micro-sited where necessary to avoid ecological (as well as archaeological) impacts.”

This represents a likely significant risk that is not clearly defined at the licensing stage and it is left to the developer to decide what constitutes an ecological feature, such as subtidal geogenic or subtidal biogenic reef. As such the license fails to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works. Approval of such license would contravene article 6(3) of Directive 92/43/EEC (‘the Habitats Directive’).

- The license application states
“To prevent damage to saltmarsh and sand dune habitat all access to the Poolbeg intertidal by track machine will be supervised by an ecologist to ensure these sensitive areas are avoided.”

This represents a likely significant risk that is not clearly defined at the licensing stage and it is left to the developer (or developer employed ecologist) to decide what constitutes a ‘sensitive area’. As such the license fails to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works. Approval of such license would contravene article 6(3) of Directive 92/43/EEC (‘the Habitats Directive’).

- The license application states that in carrying out intertidal works at South Dublin Bay and River Tolka Estuary SPA that “an ecologist will be employed to ensure that disturbance is minimised”. Not alone is this an admission of disturbance but it represents a likely significant risk that is not clearly defined at the licensing stage and it is left to the developer (or developer employed ecologist) to decide what constitutes damage to site integrity.
- The license states that:
“If roosting birds are present on the shore during intertidal works, the nearby sample stations will be postponed until the birds depart, without provocation.”

It is not clearly defined, at what stage resumption of work will proceed, *e.g.* after the roosting birds have departed, after the chicks have departed. As such the license fails to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works. Approval of such license would contravene article 6(3) of Directive 92/43/EEC (‘the Habitats Directive’).

- The license states that:
“If for any reason access by sea to the near-shore or intertidal sample locations is not possible, any temporary access arrangements or structures that are put in place to allow machinery access to the beach

area will be prepared in consultation with an ecologist and the site should be fully reinstated post works.”

It is not clearly defined. Though this may seem like a minor point, access risks should be examined and outlined in the license application and should be appropriately assessed. No such examination appears to be included in the application. As such the license fails to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works. Approval of such license would contravene article 6(3) of Directive 92/43/EEC (‘the Habitats Directive’).

- The license states that:
“Reinstatement of the intertidal habitat will be carried out to pre-survey conditions. Spoil from boreholes would be contained and removed off site.”

It is not clearly defined, exactly how boreholes will be reinstated to their pre-survey condition, while spoils are being removed off site. I assume that material removed from bore holes will be mixed, containing both surface material and deeper sediments. Deeper sediments can contain heavy metals hydrocarbons, nutrients and other potential contaminants. The developer does not appear to have defined how exactly they plan to deal with this issue to avoid contamination of local areas and species. As such the license fails to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works. Approval of such license would contravene article 6(3) of Directive 92/43/EEC (‘the Habitats Directive’).

- *Annex E: Report to inform Appropriate Assessment Screening* (4.1.3) states that:

“The indicative locations of the survey areas which form the scope of the proposed works are shown in Figure 3 to Figure 7. The final geotechnical and ecological sampling locations and buoy deployment positions will be selected after a review of the most up to date geophysical data available in advance of selection of the sampling stations. The data will be reviewed for the presence of anomalies of potential anthropological origin and potential for ecological features such as subtidal reef. Locations will be micro-sited where necessary to avoid archaeological or ecological impacts. As such, no figure is provided for the benthic sampling locations, but taking a precautionary approach it has been assumed that samples could be taken anywhere across the Foreshore Licence application area.”

The license fails to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works. Approval of such license would contravene article 6(3) of Directive 92/43/EEC (‘the Habitats Directive’).

- Choice of benthic grab methods is not clear and is of utmost importance in attaining correct data for the next stage of the appropriate assessment of the proposed wind park. Biological trawls are considerably more beneficial in

some instances and a clear indication of what will and will not be discovered by these methods should be outlined.

4. Cumulative Impact:

The current license application appropriate assessment fails to take into account properly or at all the cumulation of the impact of the project with the impact of other existing and/or approved projects contrary to Directive 2011/92/EU article 4(3) and Annex III. Granting of this license would be a breach of Directive 2011/92/EU article 4(4) by failing to ensure that the project was properly described in terms of cumulation of impacts.

- The cumulative impact of the granting of multiple licenses in the area for surveys such as these will have a cumulative impact which has not been appropriately assessed. As such, granting of this license would constitute a breach of the habitats directive.
- No cumulative assessment has been made of the very real possibility that two developers could be conducting similar site survey work including boreholes and cone penetration tests in the same area at the same time.
- In combination effects the applicant only considers synchronous events and synchronous licenses/leases and do not give any consideration to prolonged repetitive surveying, dredging and noise in the area, impacted by past licenses/surveys, such as their own previous surveys as recently as 2019. In fact, it is not made clear in the application why repeated benthic grabs/trawls is required and may cause significant impact to benthic communities.

Comments on Applicant's Responses to Public Submission – Public Submission # 11

Remaining Risks/Lack of Robust Scientific Data:

In response to the lack of data regarding fish, particularly non-commercial variety, the Applicant states that the closest SAC for fish species are located 50km to the North of the proposed site. However, effects on non-commercial fish species (e.g. sprat, herring and sand eel), as well as commercial fish species, potentially have an indirect impact on bird SPAs, as well as cetaceans SACs. As the proposed development is within the foraging range of QI of SPAs (birds) SACs (cetaceans) this impact has not been adequately addressed.

The Applicant states that *“with the proposed mitigations in place, as specified in Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (DAHG, 2014) the Article 12 Assessment concludes that no marine mammals whose range may overlap the survey area will be impacted by the proposed marine survey”*. I disagree with this statement and propose on the following basis (PTS and TTS calculations below) that Harbour Porpoises (possibly among other cetaceans/ Pinnipeds) will be harmed during the proposed works and that this will have a likely significant effect on the QI of the Rockabill to Dalkey Island SAC.

The applicant states (Section 5.2.4) that:

“The Southall et al 2007 guidance and thresholds for non-impulsive sounds have been used for this assessment as the more recent Southall et al, 2019 report does not include SPL peak for non-impulsive sounds, instead they detail SEL_{cum} thresholds and it is not possible to make comparisons of different metrics. The use of Southall et al, 2007 in line with the DAHG, 2014 guidance.”

This statement is misleading as the noise sources within the auditory range of the marine mammals (e.g. harbour porpoises), i.e sub-bottom profiler (pinger) is considered as an impulsive noise source, not a non-impulsive noise source. Therefore, the Applicant should be using the most up to date methods (i.e. Southall et al. 2019) and SEL values.

Effectiveness of Mitigation Measure (Monitored zone):

The NPWS (2014) guidelines *“Guidance to manage the risk to marine mammals from man-made sound sources in Irish waters”* is, as stated, a guidance document and in this case an outdated one. Regardless of the guidelines followed, it is on the onus of the Notice Party to carry out an Appropriate Assessment in compliance with the Habitats Directive and ensure that where a *likely significant effect* exists due to the proposed operations, that mitigation measures are put in place to eliminate that *likely significant effect*. If, after the application of mitigation measures a *likely significant effect* remains, as in this case, then the competent authority must reject the application.

“Where reasonable scientific doubt remains as to the absence of adverse effects on the integrity of the site linked to the plan or project being considered, the competent authority must reject the application for authorisation.” (Commission notice 7730, EC, 2020).

The mitigation measures put in place to limit the effect on the harbour porpoise community (application of a Monitoring Zone) are inadequate to inhibit a LSE on the harbour porpoise community in the application area.

In an NPWS report (Berrow *et al.* 2007), the authors state that:

*“The ability to detect harbour porpoise visually at sea and thus the accuracy of density and abundance estimates is extremely dependent on sea-state.” “Palka (1996) found that the sighting rates of this species decreased by 20% from Beaufort 0 to 1 and by 75% from Beaufort 0 to 2-3. We have shown the differences in abundance estimates with sea-state can vary as much as 100% between sea-state 0-1 and sea-state 2.” (Berrow, *et al.* 2007).*

Even with the use of Passive Acoustic Monitoring (PAM), it cannot detect silent animals and may miss animals whose vocalisations are highly directional (Verfuss *et al.* 2018). PAM efficacy can also be affected by factors such as rain and background noise, fog and surface sea state. The PAM mean effective detection radius (EDR) for harbour porpoise click sequences is 72m, beyond which detection probability drops significantly. At 500m, as is outlined by the Notice Party as the monitored zone, the detection probability using PAM at the edge of that zone is zero (Nuuttila *et al.* 2018). As the effective range of visual detection of Harbour Porpoise is limited to 266m the effectiveness of visual detection at 500m is also zero (Schartmann, 2019). Therefore, according to the scientific literature, in a sea of Beaufort scale 2-3, as is common in the license area throughout the year, the detection rate by visual and PAM would be ~25% (Berrow, *et al.* 2007) up to 266m and zero beyond that point.

Therefore, there remains a likely significant effect of the onset of Permanent Threshold Shift (PTS) to a porpoise population in the area, which, given that the harbour porpoise uses sound to navigate, feed and breed, would result in a likely significant loss of the Rockabill to Dalkey Island SAC qualifying interest.

PTS Quantitative Assessment:

If we consider the worst-case scenario at shallow depths (5m) within the Rockabill to Dalkey Island SAC of noise sources 225dB (based on maximum amplitude of sub-bottom profiler - pinger) and 15kHz (lower typical range of frequency of sub-bottom profilers), then we can relatively easily estimate the Transmission Loss (TL) around the noise source (making a few assumptions; temperature 10°C, salinity 35ppt, acidity 8pH), using the equation for cylindrical spreading (due to shallow depth and location of source on seabed):

$$\text{Transmission Loss (TL)} = 10\text{Log}_{10}(r) + \alpha r \text{ [dB]}$$

Where;

r= distance from source (assuming reference at 1m)

α=absorption coefficient

Though 15kHz is used in this calculation the applicant states that the operating frequency of the Sub-bottom Profiler can go down to 2kHz (Table 5 of Annex E), which would result in lower transmission losses and sound signals travelling longer distances.

The absorption can be calculated as 1.496-2.03 dB/km, equating to a worst-case scenario (precautionary principle) of 1.496dB/km or 0.001496 dB/m (Fisher & Simmons, 1977).

At 75 meters radius from the noise source, which is the effective threshold for PAM, the TL would calculate as 18.86dB, indicating an overall noise source presence at 75m from the source of 206.14dB, which is still greater than the PTS of 202dB (Southall *et al.* 2019). In non-ideal sea state

conditions, beyond 75m from the noise source, where PAM is effective, the effectiveness of visual detection would drop to 25%. The effective range of visual detection of Harbour Porpoise is limited to 266m (Schartmann, 2019). Assuming a harbour porpoise presence of 1.87 animals per Km² (O'Brien & Berrow, 2016), the likely number of undetected harbour porpoises within the 500m *Monitored Zone*, assuming 100% detection within the 75m PAM zone¹ would be:

$(0.20433*0.75*1.87)+(0.563398*1.87)=1.34$ porpoises.

Therefore, there is a likely significant effect on the porpoise population in the Rockabill to Dalkey Island SAC. Please note that in terms of statistical significance a value of 1.34 porpoises represents a 100% probability ($p \geq 1.00$), as a general rule statistical significance is considered for $p \geq 0.05$ (5% probability) or $p \geq 0.01$ (1% probability). As this is the case for every situation whereby this audible emission takes place, it seems likely, given the applicant's indicated number of noise sources planned that this number will be significantly higher (multiple times). Please note that this is not intended to be a full analysis but rather to highlight the remaining Risks/Lack of Robust Scientific Data. Please also note that these calculations assume the use of Passive Acoustic Monitoring (PAM) Devices, however, there is no indication by the applicant that PAM will be used to detect the presence of harbour porpoises prior to initiating a sound source, regardless of the sea state.

TTS Quantitative and Collision Risk Assessment:

Regarding the Temporary threshold shift (TTS), the Applicant indicates a TTS radius of 100m, which is completely out of sync with general consensus and values typically adopted by other renewable energy developers in the Irish Sea (e.g. Codling Wind Park (FS007045) and Arklow Bank 2 (FS007339), which are similar investigations. Codling Wind Park (license FS007045) use a 5km radius based on studies of mammal response to noise by Thompson et al. (2013). The Applicant in this case uses 100m based on the 'East Anglia modelling' study, which is neither relevant nor accurate to the license in question. This is addressed later in more detail in this document. The variance of this effective area of TTS across various license applicants in the Irish Sea (a variance of 50 to 100 times) highlights the lack of guidelines for developers and the unscientific basis for such predictions.

For TTS Quantitative and Collision Risk Assessment I will use a 5km radius, being the more accurate prediction and based on observed species behaviour. A 5 km radius is accepted by the Applicant, which would encompass an area of 78.54 km². Assuming a worst-case scenario of a sound source within the Rockabill to Dalkey Island SAC, we would expect a porpoise presence of 1.87 animals per Km². As a result, a TTS effect on up to 146.87 porpoises could be expected. Temporary threshold shift (temporary auditory deafness) in porpoise can cause severe disorientation and disable navigation, feeding and communication potential (porpoises use echolocation to navigate and find prey) (Miller & Wahlberg, 2013). This is akin to a 'flashbang grenade' to humans (Madhavan *et al.* 2018). Due to the busy shipping lane (Dublin Port) within the Rockabill to Dalkey Island SAC and the overlap with this 5km radius (worst case scenario), this could result in **up to 146.87 porpoise collisions** with vessels that are normally present in the shipping lane. This is likely an overestimation but would require more detailed shipping data to elucidate further probability data. Please note that this is not intended to be a full analysis but rather to highlight the remaining Risks/Lack of Robust Scientific Data.

Regardless, it appears clear that a likely significant effect remains after the proposed mitigation measures are considered. This simple analytical quantitative analysis is beyond what was carried out by the Applicants in assessing the likely significant effect upon the European Protected Species

¹ Detection probability within this zone depends on several factors but is unlikely to be 100%.

and qualifying interest of Rockabill to Dalkey Island SAC, indicating that there Remains a Risks/Lack of Robust Scientific Data and Granting of this license would contravene article 6(3) of Directive 92/43/EEC ('the Habitats Directive') by failing to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.

Effect of Activities on SAC Conservation Objectives:

Harbour porpoise is the primary qualifying feature of the Rockabill to Dalkey Island SAC, 0km distance from the application area. Under Article 12 of Habitats Directive, Annex IV species are afforded strict protections throughout their range both inside and outside of their designated protected areas. Proposed developments must also examine the likely significant effect in light of the conservation objectives of the Natura 2000 site. We contend that the license in question poses a likely significant effect in view of the Natura 2000 site objectives of the SAC and, therefore, contravenes Article 6(3) of the Habitats Directive. (Waddenzee ruling C-127/02, paragraph 39-44).

Conservation objectives for Rockabill to Dalkey Island SAC include:

“Target 1 - Species range within the site should not be restricted by artificial barriers to site use”.

Any barrier, including those of an audible nature, would contravene the site objectives. Though assessment of PTS for marine mammals is an important criterion, assessment of Temporary Threshold Shift (TTS) onset (*i.e.* the amplitude which temporary loss of hearing is induced) can also have a LSE effect on marine mammals and consequently on site conservation objectives.

The TTS radius around the noise source will not only increase the probability of collision risk for harbour porpoises with vessels (see *TTS Quantitative and Collision Risk Assessment*, above) but also act as an *artificial barrier to site use*. Even beyond the range of the TTS the noise disturbance will likely inhibit the use of the area for harbour porpoises, which could have a LSE, particularly during calving and mating seasons, for which the Applicant did not include any mitigation measures.

“Target 2 - Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site”.

The proposed activities are clearly in breach of this site objective and will “adversely effect” the harbour porpoise community at the site. Please note that this target does not state “will not kill or injur” but rather will not “adversely affect”. Exclusion of the harbour porpoise by produced sound levels in and around the SAC, particularly during calving and mating season will have an adverse effect on the harbour porpoise community at the site.

The Applicant does not discuss these conservation objectives or provide any contrary argument to those outlined here and, as such, does not provide sufficient scientific evidence that it does not contravene these Natura 2000 site objectives.

Given that a number of these activities relating to various renewable energy proposals could be undertaken within the Rockabill to Dalkey Island SAC and that a number of investigations have been permitted in the area since, and prior to, this application, the cumulative effects of this and other projects (not considered here), are likely to have a significant effect on the number of Harbour Porpoise in the area.

The Applicant claims that *“noise associated with the proposed activities... will not result in a significant increase in vessel traffic normally active in the area”*, however, no source or quantification, either in terms of amplitude or frequency band of the proposed background noise is provided. Therefore, this represents, once again, a Risks/Lack of Robust Scientific Data. Regardless, the background anthropogenic noise should be considered as a cumulative impact, for which the proposed development is adding to. This has not been considered, either qualitatively or quantitatively and therefore, once again represents a Risks/Lack of Robust Scientific Data.

The Applicant claims that the findings of their Annex F (the Applicant’s NIS) indicate that *“any noise impacts on cetaceans and their prey would be short term, temporary and intermittent”*. I disagree and propose that the above calculations (see ‘Effectiveness of Mitigation Measure (Monitored zone)’, ‘PTS Quantitative Assessment’ and ‘TTS Quantitative and Collision Risk Assessment’) indicate that there remains a LSE of a permanent impact on the QI of the Rockabill to Dalkey Island SAC. **As the applicant provides no such detailed or quantitative assessment refuting these claims, the competent authority must reject the application for authorisation.**

The Applicant claims that *“it is theoretically possible to convert between SPL_{rms} and SEL_{cum} , however the conversion is based on a series of assumptions, which results in impact ranges which are so extremely conservative as to not provide anything meaningfully relevant to biological organisms”*. As there is no reference to this statement provided, I will assume that this is just the opinion of the Applicant and maintain that this does not represent up-to-date international best practice. The currently provided calculations do not take a precautionary approach to species exposure levels.

The Applicant states that *“Additionally, studies (Au, 1993) have demonstrated that animals not directly facing the sound of source can be exposed to significantly quieter received sounds (3 – 10dB lower for an animal moving away compared to moving towards a noise source)”*. This may indeed be the case and yet I suggest that using SEL calculations (best practice) and detracting 10dB from those calculations would be a more appropriate approach and would still likely result in a more precautionary approach than that taken. However, the assumption that all species are fleeing during the initiation of sound exposure may not be justified either. I reiterate that granting of this license would contravene article 6(3) of Directive 92/43/EEC (‘the Habitats Directive’) by failing to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works.

The Applicant refers to *“East Anglia Two which modelled drilling for monopiles”* in their response to my observations. As this data was not provided, fully referenced nor freely available during the original consultation phase the basis for this argument does not allow for public participation in the process and as such contravenes the Aarhus Convention (Article 6(1)(b)), it should therefore be stricken from the considerations in the license application. The fact that the Applicant provides the report at this stage (stage 2) when public submissions are closed (to the general public) and the reference is embedded in a response to a single applicant does not ameliorate this issue. This “East Anglia study” is a modelling study for a different sound source, of different frequency and amplitude output, in a different location and depth and so is not relevant to this license application and relying on this data to justify the granting of current license application is invalid (this is further outlined overleaf). Therefore, given the lack of evidence presented in this application fails to contain complete, precise and definitive findings and conclusions capable of removing all reasonable scientific doubt as to the effects of the proposed works and granting of this license would contravene article 6(3) of Directive 92/43/EEC.

The Applicant states that:

“As noted in Annex E (paragraphs 6.2.15 et seq), there is no risk of hearing damage to marine mammals from the proposed Dublin Array site investigation works and any disturbance will occur over a small area, in proximity to the survey vessel undertaking the work. As such any disturbance in any one area will be limited to a period of a few hours as the survey vessel undertakes work in that area, with impacts from the works not occurring within the full licensed area for the full duration of the works”

I believe that considering the arguments made above (particularly see ‘Effectiveness of Mitigation Measure (Monitored zone)’, ‘PTS Quantitative Assessment’ and ‘TTS Quantitative and Collision Risk Assessment’), this statement is not true and there remains a LSE on the QI of the Rockabill to Dalkey Island SAC and that the proposed license contravenes the site objectives of the Rockabill to Dalkey Island SAC.

With regard to the ‘East Anglia modelling’ study; this is a **modelling study for a different sound source, of different frequency and amplitude output, in a different location and depth and so is not relevant to this license application** and relying on this data to justify the granting of current license application is invalid. For example, the ‘East Anglia modelling’ study states that *“the water depths for the modelling locations considered for this study are all in excess of 45 m”*, whereas in most locations of sound sources in the proposed license application area are considerably less, which would have a significant impact on the spread and modelling method of the sound loss. I would welcome a more detailed study for the license area, wherein the sound loss is accurately modelled for the proposed area but relying on data from the East Anglia modelling is flawed.

The Applicant states that:

“the Article 12 Assessment presented in Appendix 4 of Arklow Bank’s NIS concludes that the risk of injury or disturbance to all marine mammal species would be negligible from the geotechnical survey activities and that, in this respect, mitigation is not considered necessary.”

It should be noted that **Arklow Bank’s license application is not located in an SAC whose QI is a sound sensitive cetacean**. In addition, if one superimposed Arklow Bank’s license application data/methods on this license application the outcome would be considerably different. This highlights not only the **lack of consistency in approach but the lack of guidelines from the competent authority** to provide a basis for best practice for developments in the foreshore.

Insufficient Evidence or Mitigation Measures:

The Applicant states that *“The effects of underwater noise on bird species are assessed within Section 6.2 and Section 6.3 of the Report to Inform Appropriate Assessment Screening. In-combination effects are assessed in Section 7.4 of the same.”*

Section 6.2.38 of the ‘Report to Inform Appropriate Assessment Screening’ fails to present evidence and quantification of likely impact on protected diving bird species or the likely knock-on effect on SPAs in the foraging range of the license activities. How many birds and what species are likely to be foraging underwater in the vicinity of the license area for the period of which the license is active? How will this impact on the Conservation Objectives and QI of SPAs in the vicinity?

Given the comments in Section 6.3.2 and Section 6.3.3 ('Report to Inform Appropriate Assessment Screening') regarding the impact on diving duck and tern populations can we have a guarantee that the survey will only be undertaken during the summer months? If not, then there remains an unassessed risk to the diving duck and tern populations.

In section 7.4 the Applicant assesses the spatial in combination effects but provides no consideration to the temporal in combination effects. This is important as many of the conclusions of the AA are based on short duration of the studies. These in combination effects are not adequately addressed in the Applicant's NIS either.

The Applicant states in relation to projects that may have in-combination effects "*The projects considered include those applications but not yet determined and existing licences which have been granted but the associated activities not yet completed.*" However, no licenses that have been completed were considered. The temporal in-combination effects of multiple projects over a long duration in the license area the negate "*localised and temporary nature*" of the proposed project. Such temporal in-combination effects as such fail to be considered.

The Applicant states that "*A comprehensive analysis of the potential impacts of the survey which could affect the integrity of sites has been undertaken as documented in Section 6 of Annex E, Report to Inform Appropriate Assessment Screening and Section 4 of Annex F, The Applicant's NIS. Whilst the exact sampling locations have not been determined at this time, their final locations will be selected to avoid any contact with seabed features which are sensitive to seabed disturbance or to direct contact from equipment. Sampling sites will be chosen with reference to geophysical and environmental data. Benthic grab sampling will be preceded by video and camera stills imagery. Sampling locations will then be micro-sited to avoid ecological impacts, specifically with reference to the qualifying interests of designated sites and the associated conservation objectives.*"

This is indicative of an Unregulated Development Environment; wherein insufficient oversight is being provided by the competent authority to protect subtidal and intertidal reefs and other features of public interest.

The Applicant states that "*RWE have committed to mitigation proposed for marine mammals in accordance with the relevant Irish guidance (DAHG, 2014), as agreed with NPWS. A qualified and experienced Marine Mammal Observer will monitor for the presence of marine mammals before the commencement of sound producing activities (pre-watch), during ramp up procedures and following breaks in sound output, as defined in DAHG, 2014. Sound producing activities will not commence until the monitored zone, as defined has been clear for the period required under the guidelines. The purpose of the pre-watch is to monitor for the presence of marine mammals within an area of 1,000m radial distance from the location of the sound source prior to commencement of sound producing activity. DAHG, 2014 guidance requires a prewatch period of at least 30 minutes. The extended pre-watch, during the months of May to September inclusive, was requested by NPWS in relation to survey works proposed under Foreshore Licence FS007029. If calves have been spotted in the monitored zone the sound producing activity shall not commence until at least 45 minutes have elapsed with no marine mammals detected within the monitored zone by the Marine Mammal Observer. The delay recognises the slower swim speed of mothers with calves compared to adults alone and allows additional monitoring time to ensure they have left the area of possible disturbance.*"

As outlined previously in this response the presence of MMO is inadequate to ensure no LSE on the QI of the Rockabill to Dalkey Island SAC and the DAHG, 2014 as an inadequate and outdated set of

guidelines do not exempt the Applicant from carrying out an adequate and quantitative assessment of the impact on Annex IV species or QIs, as is the case here.

Unregulated Development Environment:

The Applicant refers to [“‘Specific Conditions’ which will be assessed by or on behalf of the Minister prior to the determination to grant the Licence”](#), however, the public are not privy to those ‘Specific Conditions’ and do not have a participatory role in said ‘Specific Conditions’ nor can we determine from these ‘Specific Conditions’ if these ‘Specific Conditions’ are valid and provide a robust protection of these sites. As such this represents not only the possibility of an Unregulated Development Environment but also an inhibition to Public Participation and a contravention of the Aarhus Convention.

The Applicant states that [“Sampling locations will be selected to avoid any contact with seabed features which are sensitive to seabed disturbance or to direct contact from equipment”](#). However, the public have no visibility as to what the Applicant considers constitutes a suitable buffer distance from these hypothetical reefs, as such we are to rely on the applicant’s potentially biased decision making to determine what is and what is not acceptable, with, it seems no oversight from the competent authority. This represents an Unregulated Development Environment.

The Applicant states that:

[“As stated in the supporting marine information for the Rockabill to Dalkey Island SAC12, artificial barriers refer to “proposed activities or operations that will result in the permanent exclusion of harbour porpoise from part of its range within the site, or will permanently prevent access for the species to suitable habitat therein. It does not refer to short-term or temporary restriction of access or range”. As noted in Annex E, Section 6.2 any disturbance associated with the proposed works which are the subject of this application will occur over a small area, in proximity to the survey vessel undertaking the work. As such any disturbance in any one area will be limited to a period of a few days as the survey vessel undertakes work in that area. Therefore there will be no barrier effect, as defined by the supporting marine information for the Rockabill to Dalkey Island SAC.”](#)

However, there is no apparent valid scientific reason for inclusion of the reference to a permanent barrier as a site Conservation Target. I put to you that an ongoing temporary barrier in the form of multiple sequential site investigations within the area of the Rockabill to Dalkey Island SAC will likely result in a risk to the site objectives, i.e.

[“To maintain the favourable conservation condition of Rockabill to Dalkey Island SAC harbour porpoise”](#) and contravenes Target 2, i.e.

[“Human activities should occur at levels that do not adversely affect the harbour porpoise community at the site.”](#)

This target also specifically calls out underwater noise.

Further to this, the development of a wind farm on this site (Kish/Bray Banks) would result in a permanent barrier to Harbour porpoises from sites within the Rockabill to Dalkey Island SAC, as studies have shown that, during construction [“For harbour porpoises and harbour seals, the zone of audibility for pile-driving will most certainly extend well beyond 80 km, perhaps hundreds of kilometres from the source”](#) and [“Operational noise....may have the potential to disrupt behaviors over distances of several hundred meters from the pile”](#) (Thomsen et al., 2006). Given the proximity

of the Rockabill to Dalkey Island SAC to the proposed wind farm this should be of utmost concern. The deficiencies recently highlighted by Prof. Jane Stout in the “Reflect and Renew –A Review of the National Parks and Wildlife Service” should also be taken into account regarding the adequacies and independence of the Rockabill to Dalkey Island SAC site objectives. In addition there appears to be no site management plan present for this SAC, which should be in place before these large scale projects are approved for the area.

With regard to SAM deployment, and the timing and data acquisition of the same; it would provide poor quality, skewed scientific data to use SAM data following multiple noise producing investigations to indicate the presence or absence of cetacean numbers as an indication of mammal density at the site. If this were the case, this data would not be suitable for any future submission in assessing environmental impact of the area.

“Article 4(3) and Annex III” and “Article 4(4)” refers to Directive 2011/92/EU. The submission has now been amended to reflect this.

All previous submission statements stand and lack of further response in this document does not constitute an acceptance of the Applicant’s responses to concerns raised.

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Madhavan, P., Srinivansan, R., Analysis of the Startle Response to Flashbang Grenades, US Institute for Defense Analyses, IDA Document D-8945, Available at: <https://www.ida.org/-/media/feature/publications/a/an/analysis-of-the-startle-response-to-flashbang-grenades/d-8945.ashx>

Thomsen et al. (2006), Effects of offshore wind farm noise on marine mammals and fish, Copies available from: www.offshorewind.co.uk

- The AA does not adequately assess or quantify the effect of the proposed development on the Annex IV family of Phocidae (Grey seals) at Lambay Island SAC, using figures and seal populations relevant to the SAC.
- The AA does not adequately assess or quantify the effect of the proposed development on Risso's dolphin or leatherback turtle, which have been recorded in the area ([Arklow Bank Dumping at Sea EPA License](#)). These European cetacean species are listed on Annex IV of the EU Habitats Directive (92/43) as species requiring strict protection.
- The AA does not adequately assess or quantify the effect of the proposed development on Tope shark (*Galeorhinus galeus*), which is of particular importance as the proposed development area is a known Tope shark nursery area (Ellis et al. (2012)). Their long-life span and low birth rate make them particularly susceptible to species decline. Threats to the tope shark include habitat degradation in nursery areas, which makes the proposed license particularly precarious to them. Tope shark is listed under the IUCN Red List status as "vulnerable" and is protected under the Northern Ireland Priority Species List. The tope shark's range is large and are known to migrate to Strangford and Carlingford Loughs.
- The AA does not adequately assess or quantify the effect of the proposed development on how seabed vibrations affect bottom dwelling fish or the hearing capabilities of sharks, rays and skates and invertebrates. Disturbance to the seabed equates to habitat loss for the angel shark (*Squatina squatina*) is a bottom-dwelling shark that spends most of the day buried in the sand. The angel shark has been declared extinct in the North Sea and locally extinct over part of its former range in the Irish Sea. Threats to the angel shark include being killed as bycatch and habitat degradation. The angel shark's long life span and low birth rate make it particularly susceptible to species decline. The angel shark is protected by the Northern Ireland Priority Species List, is listed on the Irish Red Data Book as critically endangered. The angel shark is also recognized by the IUCN and OSPAR in Ireland.
- The AA does not adequately assess or quantify the effect of the proposed development on the undulate ray (*Raja undulata*), which is a member of the skate and ray family. The flat, bottom dwelling fish is found throughout the Irish Sea. The undulate ray is listed on the IUCN Red List as endangered, recognised by the IUCN in Ireland, listed as UK Priority Species and protected under the Northern Ireland Priority Species List. The undulate ray is particularly sensitive to habitat degradation from human activity.
- The application area is a nursery ground for spotted ray, thornback ray and the AA does not adequately assess or quantify the effect of the proposed development.
- The AA does not adequately assess or quantify the effect of the proposed development on the Sandeel. Sandeel are an **exceptionally important source of nutrition** for local seabird colonies. Though it is accepted that many areas of the proposed license area the sediment is course (not all areas) and sediment will not remain suspended for long, the proposed activities will result in significant depth of local smothering of sandeel and other benthic communities. No assessment or quantification of this aspect of the plan has been presented in the appropriate assessment. A development of the proposed size, combined with the cumulative impacts of previous and current developments, would result in a prolonged recovery period for the sandeel, as the license area is a known spawning ground for sandeel (Ellis et al. 2012). Sandeels live on the seabed in this area and the proposed development represents a real threat to the sandeel and their predators. Sandeels are keystone species and sandeel abundance have been shown to have direct effect on some seabird population and the **breeding success of kittiwakes (red**

listed), terns (amber), fulmars (amber listed) and shags (amber listed). Sandeels are part of many food webs for other fish species and seabirds. No assessment of the indirect effects of this smothering on Annex I habitats within SACs or birds from local SPAs has been carried out by the developer. Sandeel are listed on the IUCN red list as a threatened species, it is on the UK BAP priority species list and the Northern Ireland priority species list.

- The AA does not adequately assess or quantify the effect of the proposed development on the European eel (*Anguilla Anguilla*). It is expected that the proposed activities will result in significant depth of local smothering of European eel and other benthic communities. No assessment or quantification of this aspect of the plan has been presented in the appropriate assessment. A development of the proposed size,
 - combined with the cumulative impacts of previous and current developments, would result in a prolonged recovery period for the European eel, as the license area is a known spawning ground for European eels. European eels live and spawn on the seabed in this area and the proposed development represents a real threat to the European eels and their predators. European eels feed off molluscs and crustaceans which will be in decline as the seabed will have been disturbed. European eel is critically endangered and the numbers of juvenile eels reaching the coast have declined in recent years due to barriers to migration and habitat loss. This proposed development will add to the habitat loss and migration barriers of this endangered species and prevent them from reproducing. They are sensitive to sound and vibration. They also have swim bladders and underwater sound pollution significantly affects the behaviour of juvenile eels in as they become disorientated and fall subject to prey, thus reducing the number of their population. European eels are listed on the Irish Red Data Book listed as critically endangered and recognised by the IUCN and OSPAR in Ireland.
 - The AA does not adequately assess or quantify the effect of the proposed development on the Basking Sharks (*Cetorhinus maximus*). Sightings data collected by the Marine Conservation Society (Bloomfield and Solandt, 2008) suggests that the waters in the vicinity of Kish Bank is an area of regular sightings and activity for Basking Sharks. Basking Sharks are endangered and recognised by the IUCN and OSPAR in Ireland. Their slow growth and reproductive rates make them particularly vulnerable to population decline and threats include collision with boats and habitat disturbance.
 - The AA does not adequately assess or quantify the effect of the proposed development on Herring (*clupeiformes*) are listed in the Habitats Directive Annex II. In Kish sprat were the most abundant fish in terms of numbers caught followed by herring and poor cod. Annex II Herring are hearing specialist species of highly sensitive with mechanisms that couple the swim bladder in inner ear. Seabed removal and suspended sediment would lead to loss of habitat preventing the development of juveniles. Noise vibration can affect juveniles, particularly noise sensitive species such as herring and noise generalists such as cod and cause physiological stress. The current application area is a nursery and a spawning ground for cod. The proposed development would have a negative impact on the development of juveniles of co
- Nursery grounds are sites where juveniles occur at higher densities, have reduced rates of predation and have faster growth rates than in other habitats. Seabed disturbance is anticipated to have a potential impact on the nursery grounds where seabed removal and the suspended sediment plume can potentially lead to a loss of habitat, preventing the development of juveniles. Noise and vibration caused by seabed disturbance can also potentially affect juveniles within the localised area, particularly noise sensitive species such as cod (vulnerable), potentially causing physiological stress.

- cod which are hearing generalists where the proposed development is the cod (*Gadus morhua*) is a member of the gadoid fish family. The cod is protected under the Northern Ireland Priority Species List because it meets the following criteria: IUCN Red List status is "vulnerable;"
 - o Listed as a UK priority species;
 - o Declining population.
 - o The cod is also recognized by OSPAR in Ireland.
 -
- - The AA does not adequately assess or quantify the effect of the proposed development Spawning grounds which are recorded within the vicinity of the application area for the key commercial species; spawning grounds are located for the following species: i. Cod; ii. Sandeel; iii. Whiting; iv. Plaice; v. Sole; vi. Ling; and vii. Mackerel.
 - - The AA does not adequately assess or quantify the effect of the proposed development nursery grounds which are located withing the application area for species such as cod, anglerfish, tope shark, spotted ray and whiting.
 - - The AA does not adequately assess or quantify the effect of the proposed development on Annex IV Animals and plant species of community interest in need of strict protection (from Habitat Directive) Sturgeons Annex IV of Habitat Directive (sturgeons are bony fish) and the last sturgeon was identified in the application area and the marlin mapped it in the application area also ([here](#)).
 - - AA does not adequately assess or quantify the effect of the proposed development as a spawning ground for plaice sole; ling; mackerel all which are will be affected.
 - - A number of migratory fish are also known to utilise the rivers and the coastal waters of the east coast of Ireland and hence have the potential to migrate through the general area of the application. These species include Atlantic salmon (*Salmo salar*), trout (*Salmo trutta*), European eel (*Anguilla anguilla*), sea lamprey (*Petromyzon marinus*), European sturgeon (*Acipenser sturio*), twaite shad (*Alosa fallax*) and allis shad (*Alosa alosa*). AA does not adequately assess or quantify the effect of the proposed development on the Atlantic salmon (*Salmon salar*), which is a member of the Salmonidae family. Threats to the Atlantic salmon are habitat degradation and the creation of barriers to migration which will most likely result from this proposed development. The Atlantic salmon is protected under the Northern Ireland Priority Species List because it meets the following criteria: o Declining population;
 - o Listed in Annexes II and V of the Habitats Directive
 -
 - - The potential effects of the proposed disturbance to the seabed are likely to interact with spawning grounds to generate a significant impact due to suspended sediment and seabed disturbance. Therefore, the potential effects of the proposed seabed disturbance are likely to interact with nursery grounds to generate a significant impact.
 - - AA does not adequately assess or quantify the effect of the proposed development potential impacts associated with fisheries relate to habitat removal caused by seabed disturbance and the associated release of the suspended sediment plume, potentially leading to displacement of fish in the vicinity of the sediment plume area. Noise and vibration caused by seabed levelling is also anticipated to impact upon fish species in the localised area, particularly noise specialists such as cod and herring, which are relatively sensitive to sound.

- AA does not adequately assess or quantify the effect of the proposed development the food chain.

- Benthic flora and fauna are anticipated to be directly impacted by seabed disturbance. Habitat removal will result in the loss of benthic communities within the application area including the removal of both infauna and epifauna. Potential impacts on benthic communities will also have secondary impacts on species which prey upon benthic invertebrates further up the food chain such as eels.

Sandeels are keystone species found on codling sand bank and sandeel abundance have been shown to have direct effect on some seabird population and the breeding success of kittiwakes (red listed), terns (amber), fulmars (amber listed) and shags (amber listed). Sandeels are part of many food webs for other fish species and seabird

- AA does not adequately assess or quantify the effect of the proposed development on the Annex IV atheriniformes Ray finned fish atherina presbyter sand smelt (bony fish) listed in the Habitat Directive and goby fish listed in Annex II of habitats directive.

- AA does not adequately assess or quantify the effect of the proposed development the emission of methane gas as a result of working or being in the vicinity of the application area due to the known kish bank reserves in the application area.

- The Habitats Directive and OSPAR are intended to protect species that are at risk of Extinction; they protect the habitat in which they exist. The application area is the habitat of threatened, endangered and critically endangered species and the AA does not adequately assess this. This proposed development should be prevented under the Wildlife (Ireland) Acts, 1976 & 2000 as “wilful interferences with the breeding place of a protected species.” In order to fulfil Ireland’s obligations under the Habitats Directive, OSPAR, and its own laws, the proposed development should be declined as it’s AA does not adequately assess or quantify the effect of the proposed development.

- The AA does not adequately assess or quantify the effect of the proposed development on the Allis shad (*Alosa alosa*) is a member of the herring family. The fish lives in coastal waters and estuaries for most of its life but migrates into rivers to spawn. Threats to the Allis shad include the construction in their migratory paths, habitat degradation and water pollution, all of which will result from this proposed development. The Allis shad is listed under the Northern Ireland Priority List because it meets the following criteria:

- Listed as a UK priority species;

- Irish Red Data Book classified as vulnerable

- The Allis shad is also recognized by the Habitats Directive and OSPAR.

- The twaite shad (scientific name: *Alosa fallax*) is a member of the herring family,

- similar in appearance to the Allis shad. Spending most of its life in coastal waters, the

- fish migrates upstream in the spring to spawn. Like the Allis shad, threats to the twaite

- shad include disruption to the seabed and other migratory route obstructions, habitat degradation,

- pollution all of which will result from the proposed development.

- o because it meets the following criteria:
- o Listed as a UK priority species
- o Irish Red Data Book classified as vulnerable

The twaite shad is also recognized by the Habitats Directive and IUCN in Ireland. The twaite shad is protected under the Northern Ireland Priority Species List

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From: SECPA <info@secpa.ie>

Sent: Friday 29 July 2022 17:08

To: Housing ForeShoreORE <foreshoreORE@housing.gov.ie>

Subject: FS007188 RWE SI - Consultation on Stage 2 AA

Please see correspondence attached



South East Coastal Protection Alliance DAC

Submission by SEPCA

on

INVITATION FOR PUBLIC SUBMISSIONS FOR PURPOSES OF CONDUCTING STAGE 2 APPROPRIATE ASSESSMENT

29th July 2022

Foreshore Unit,

Department of Housing, Local Government and Heritage,
Newtown Road,
Wexford,
Co Wexford.

By email to foreshoreORE@housing.gov.ie

**Re: Consultation regarding application by RWE Renewables Ireland Limited in respect of the
Dublin Array for a Foreshore Licence for Site Investigations**

FS007188 RWE SI - Consultation on Stage 2 AA

To whom it concerns,

This submission is on behalf of South East Coastal Protection Alliance (SECPA) to express our concern regarding the development of the Dublin Array Wind Farm on sand banks off the east coast of Ireland. We believe that the development of this wind farm on the sand banks will have an entirely negative effect on the sand bank itself and the proximate coastline.

While we support the concept of wind energy and the opportunities it may bring, We believe that the proposal dating from the mid-1990s to develop offshore wind arrays on Ireland's near shore sandbank habitats is outdated in view of more recent engineering developments in floating turbine technology and the ongoing recognition of the importance of the sandbank habitat for marine life and as a feeding ground for birds and also their contribution to the

natural supply of replacement sand for beaches and sand dunes and the habitats and species they support.

Our concern is that If wind turbines are erected on these sandbanks, it will seriously interfere with natural process and lead to the decimation of beaches and sand dunes.

We believe that it is inappropriate for this large-scale industrial development to be developed.

- Sandbanks are conservation sites and are an important habitat which are listed under Annex I of the EU Habitats Directive.
- an industrial complex of this size should not be located so close to the shore.
- this is environmentally unsafe development and poses a threat to the existence of the sandbank itself.
- there is insufficient knowledge of the impact that developments of this nature will have on the sandbank and the proximate shoreline.
- this development poses a threat to the natural habitats that exists on the sandbank.
- this development is premature as grid connections will not be available.
- this important sandbank habitat should be preserved. These sandbanks are natural formations and a recognised marine habitat; two of these sand banks (Longbank & Blackwater) are designated as a Marine Special Area of Conservation.
- Sandbanks should be designated as a Marine Protected area and be free from industrial development.
- no research has been carried out on the impact that the existing 7 turbines have had on the Arklow sandbank.
- The engineering and or other difficulties encountered by the existing 7 turbines on the Arklow Bank which led to the granting by the Environmental Protection Agency of a Dumping at Sea Permit to Arklow Energy Limited on 20 October 2017 for a period up to 31 May 2025 for the purpose of moving up to 99,999 tonnes of sand from the vicinity of those turbines, has not been adequately explained in this application and there has been inadequate assessment of the in-combination effects of the activities permitted under the Dumping at Sea Permit.
- Sandbanks are a habitat for Phytoplankton and consequently are a significant carbon store.

The vast scale of this development is totally inappropriate to the sensitive near shore site selected. Indeed, based on current permitting practice in EU, a development of this scale in such a sensitive location would be highly unlikely to be even proposed in any other country in Western Europe. The Dublin Array project is too big and too close to shore and located off one of the highest amenity unspoilt coastlines in Ireland. The average distance from shore of offshore wind farms under construction in the EU last year was 59km.

We support the need for changing to renewable energy instead of using fossil fuels but are concerned about the environmental impact of this development in its current form.

South East Coastal Protection (SECPA) is a voluntary group composed of local residents and concerned individuals who are worried about the possible devastating impact that developing a wind farm on sandbanks, including its grid connection, will have on the environment. The primary objectives of our organisation are to ensure protection of all ecosystems along the shorelines including all sand dunes, fens and SAC/SPA areas, to ensure protection of offshore and estuarine habitats including sandbanks, natural flora and fauna, marine habitats including all fish species, birds, seals and dolphins and to prevent further coastal erosion and degradation of the environment.



■ Kingston Park, Ballinteer, Dublin 16

South East Coastal Protection Alliance

www.secpa.ie