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An Coimisiún Pleanála (formally k/a An Bord Pleanála),
64 Marlborough Street,
Dublin 1,
D01 V902

14th August 2025

Planning Reference/s:	PA09.322845, VA09.322843
Received Date:	19/06/2025
Submissions By:	14/08/2025
Operator/s:	North Kildare Wind Farm Limited,
Dev. Address:	within the townlands of Ballynamullagh, Kilmurry, Coolree, Killyon, Mulgeeth and Drehid, County Kildare
Brief Description:	'11 wind turbines and ancillary development'
URL:	https://www.pleanala.ie/en-ie/case/322845 (11 no. Turbines) – PA09.322845
URL:	https://www.pleanala.ie/en-ie/case/322843 (Grid Connection) – VA09.322843
Submission Fee:	€ 50.00

Dear Sir/ Madam

We hereby provide observations on the above referenced files. This submission is being submitted re both files. I am aware that numerous other submissions and reports are also being submitted by or on behalf of other groups including, *Eco Advocacy*, *Lorraine Quinn*, and others. We adopt all of these other submissions as part of our submission.

At the outset, it is considered that this application is **premature** pending the awaited updated **guidelines** for utility scale wind instillations. It is submitted that this is further premature pending a full **national led SEA assessment** of utility scale wind instillations.

There are **42 pages** in this submission inclusive of cover page and attached article.

Yours sincerely,

Kieran Cummins

Kieran Cummins

Enclosures: -

1. Irish Times Article of the 13th August 2025; Living Next Door To ... Ireland's largest onshore wind farm

SUBMISSION re Planning File ref. no. PA09.322845 and VA09.322843
North Kildare Wind Farm Limited LTD / Statkraft

APPLICATION

1. The current proposals as stated on described on the ***An Coimisiún Pleanála*** website read as follows: -

   "i. Construction of 11 no. wind turbines, each with a rotor diameter of 133 m. 10 no. turbines will have a hub height of 100.5 m and a tip height of 167 m; while one turbine (T1, closest to the site entrance) will have a hub height of 81.4 m and a tip height of 147.9 m;
   ii. Construction of permanent turbine foundations and crane pad hard standing areas and associated drainage;
   iii. Construction/upgrade of 1. no. main site entrance (off local road L5025), and 1 no. additional site entrance (off local road L50242);
   iv. Construction of 1. No. temporary site entrance (off local road L5012) to accommodate the delivery of large turbine components;
   v. Use of 1 no. existing Coillte entrance (off local road L5012) for pedestrian/cyclist access to an amenity trail;
   vi. Construction of 9.67 km of new internal access tracks and associated drainage infrastructure;
   vii. Upgrading of 951 m of existing tracks and associated drainage infrastructure;
   viii. Establishment of 2 no. temporary construction site compounds and associated ancillary infrastructure including parking;
   ix. Establishment of 1. No. temporary blade set down area;
   x.Construction of drainage and sediment control systems;
   xi. 3 no. Watercourse Crossings;
   xii. Upgrade and extension to an existing recreation amenity trail and installation of signage, picnic tables and bicycle stands;
   xiii. All related site works and ancillary development including signage, berms, landscaping, and soil excavation;
   xiv. Forestry felling (both permanent and temporary) to facilitate construction and operation
   xv. All associated underground electrical and communications cabling connecting the wind turbines to the proposed Substation including the laying of underground cabling along the local road L50242 which traverses the site."

2. The height of the proposed turbines is stated to be 10 no. x *167 m & 1 no. x 147.9 m*. This is unacceptable and un-in-keeping with this area of the midlands.

3. Wind turbines deliver intermittent energy and have to be backed up by dispatchable sources of energy such as gas, etc. Generations to come will no thank us for our wanton wastage of these resources and leaving them with little or none.

4. The applicants attempt to justify the proposal on the basis that the country must meet renewable energy targets. We take issue with the way this is presented. First and foremost the application is made by a commercial company presumably in the expectation of exploiting the very favorable grant regime whish is currently in place and also to at value to its capital investment. We have previously seen some developments sold on when built. There is also none of the issues of being visually obtrusive.

5. We are disappointed to note that other forms of renewable energy such as Deep Bore Geothermal Energy are not mentioned. We will be talking further about Deep Bore Geothermal Energy later in this submission, but for now it suffices to state that we believe that Deep Bore Geothermal Energy is far more efficient than Wind Energy, the later of which is currently heavily supported by grants which we believe is the real purpose of the current spate of applications here and elsewhere. Curiously we were unable to find ANY reference in the planning application to this form of energy!

6. Please note that we only had a very short timeframe of a few weeks to review the EIAR. Given the size, volume and complexity of the documents presented, we are commenting from a very high level. It is manifestly unfair to expect a community to analyse such a volume of documents in such a short time

frame. This compares with the years the applicants had to prepare such documents coupled with a very large team of paid people. Notwithstanding, we make the below submissions based on a rather cursory review of the EIAR and related documents presented by the applicants.

7. We have repeatedly asserted over the years that EIAR's, which are prepared directly by a developer/ applicant are in our opinion unreliable and self-serving statements in support of their employer. We have found this one to be particularly so in that respect and in our opinion to some extend glamorises an operation that is anything but glamorous. What EIAR's omit to state is also of concern. In this case for example we were unable to find any reference infrasound or the sustainability of finite resources. In summary we remind the statutory authorities of their duty of care to each individual, the wider community and to the environment.

8. **Grants**: We are aware that there are significant grants available for the construction of wind turbines. We believe that they are completely unsustainable without such grant aiding. We therefore submit that it is unethical to use so large amounts of finite natural resources constructing machines, which would otherwise be unviable. We also consider that the provision of grants to aid one form of renewable energy over other forms of meritorious renewable energy gives an unfair advantage and artificially makes one form of energy more attractive than another. We are mindful of the exclusion of Deep Bore Geothermal energy in this context. Available evidence demonstrates that Deep Bore Geothermal energy is far more sustainable than wind.

PROJECT SLICING (SALAMI SLICING)

9. **Project Slicing**: We are also concerned that seeking permission for different wind farms in essentially the same area constitutes project-slicing aka Salami slicing. There is significant EU case law on this issue.

10. This project involves two separate planning applications:
    a. **North Kildare Wind Farm PA09.322845 and**
    b. **North Kildare Substation VA09.322843,**

    Both are part of the one project. Both applications are similar except for a little rewording in places. This may be construed as project splitting, potentially undermining full public scrutiny. It is submitted that this is not in compliance with the principal established in ***O Grianna & ors -v- An Bord Pleanala*** [2014 No. 2014 No.19 JR].

11. The development applied for in the current application is broken into two applications (Wind Farm and Substation), even though both are part of one EIAR. This project involves two separate planning applications (Wind Farm and Substation), despite being part of a single integrated development. This must surely be construed as **project splitting**, which undermines public scrutiny. We question whether this is designed to frustrate pubic participation?

12. It is submitted that this is disorderly development; especially bearing in mind the intermittent nature of wind energy.

13. These applications are grossly unfair and unreasonable on any community. Two simultaneous (but separate) applications have to be assessed in a short space of time. This follows on form 2 earlier planning applications on the same area. Article 6 the Aarhus Convention and of the EIA Directive require early, informed, and effective public participation. Coming back 3 times with similar applications with very similar proposed developments is unfair on a community. This demonstrates a total disregard to the community some of whom would have lodged objections on both previous applications highlighting their concerns. It is arguable that this new application is harassment of the local community. We also question the timing of the applications; during the summer vacation period.

PRELIMINARY LEGAL MATTER – SUBSTITUTE CONSENT

14. We were unable to find any planning consent for the existing development which consists of peat extraction on cut-away raised bog.

15. The case re Derrybrian wind farm should also be noted in this regard.

    C-215/06: Commission v. Ireland: Failure of a Member State to fulfill obligations – No assessment of the environmental effects of projects within the scope of Directive 85/337/EEC – Regularisation after the event not permissible under EU law where E.I.A. and A.A. should have been prepared prior to development. By failing to adopt all measures necessary to ensure that the development consents given for and the execution of wind-farm developments and associated works at Derrybrien, County Galway were preceded by an assessment with regard to their effects in accordance with Articles 5 to 10 of Directive 85/337/EEC, Ireland has failed to comply with the obligations that it has under Articles 2, 4 and 5 to 10 of the said Directive 85/337/EEC.

    An application was later made to *An Bord Pleanála* for substitute consent in an attempt to regularise the issues at the Galway side, but this was ultimately declined and we understand that the wind turbines have since been turned off and are awaiting removal.

    Galway County Council
    Substitute Consent Application
    Bord Pleanála Case reference: SU07.308019
    Applicant: Gort Windfarms Limited
    Lands at: Coppanagh, Slieveanore, Loughatorick North, Boleyneendorrish, Kilbeg, Toormacnevin, Funshadaun, Derrybrien North, Derrybrien South, Bohaboy, Derrybrien West, Derrybrien East, Derreennamucka, County Galway.
    Decision: Application refused
    Date signed: 04/02/2022
    https://www.pleanala.ie/en-ie/case/308019

Cont/d.

Without prejudice to the above and to our view this application cannot be considered until the previous use and the current planning issues have been determined, we now make the following observations on the current application.

16. There was a myriad of other issues, which, we submit this proposals should be declined. Issues which we feel this developments should be refused on include: -

    a. Adverse affect to Tourism and Amenity,
    b. Adverse affect to local amenity and of peoples enjoyment of the area and of their private homes,
    c. HEALTH AND SAFETY: Infrasound, etc
    d. Landscape and Visual across a very wide area,
    e. Biodiversity (in addition to bats),
    f. Archaeology, Architectural and Cultural Heritage,
    g. Landscape Character Assessment,
    h. Various legal issues,
    i. Drainage and wells,
    j. Disruption to Utilities
    k. Devaluation,
    l. THE PROPOSAL is NOT SUSTAINABLE
        i. **STEEL,**
        ii. **CONCRETE,**
        iii. **ROADS,**
        iv. **RARE EARTH METALS (MAGNETS in Machines, etc),**
        v. **Human Rights issues regarding the sourcing of rare-earth metals such as Cobalt, Neodymium, etc**
        vi. **The FUEL (the amount of diesel required in the construction),**
        vii. **Aggregates required for internal road network and foundations,**
        viii. **Sporadic nature of wind power (intermittent energy),**
        ix. **Spinning Reserve,**
        x. **Efficiency of Wind Turbines,**
        xi. **Dependant on Grants/ Subsidies for viability,**
        xii. **RoCoF**
    m. Other Sources of Alternative Energy. Why isn't Deep Bore Geothermal considered?

SOURCES OF AGGRIGATE

17. **Where is the aggregate to come from?**

    a. Further to the above, sourcing such an enormous quantity of aggregate would pose enormous challenges. Aggregate is a major constituent of concrete. Aggregate will also be required to construct all the hard standing areas and access roads. It is submitted that this is squandering of national resources.

    b. Much of the aggregate on the market currently is from unauthorized/ illegal developments. Sources needs to be established with certainly.

    c. The sighting of turbines should be in a situation where naturally occurring bedrock can be utilised, obviating the need for the requirement of such vast amounts of concrete and aggregate. Furthermore, in addition to aggregate, sand and gravel are also component constituents of concrete. Through our experience and understanding of the quarry industry, we know that supplies of sand and gravel are rapidly dwindling. It is therefore essential that such schemes be situate on naturally occurring bedrock!

ESKERS

18. Most of the sand and gravel requirements in Ireland come from Eskers laid down in the last Ice Age. Sadly in the space of no more that about 2 generations, we have near exhausted all our reserves from these eskers without any thought for future generations. The situation is so bad in the UK and China (to mention but two other countries) that they have now resorted to dredging estuaries in an effort to get sand. Being the principle constituent of concrete, to see so much buried under wind turbines which will without any doubt become white elephants is utterly crazy.

HABITAT'S

19. **Stability of Foundations**: We raise concerns about possible adverse affects to the stability of foundations as a result of the proposed excavations necessary to accommodate the proposed wind turbines. This is a significant issue given the low-lying topography of the surrounding landscape. The removal of large parts of the bog and replacement with hard surface will naturally mean that essential soakage area will be removed. Also given the amount of road network required to service the development, it is submitted that newly constructed roads comprising aggregate will largely be impermeable and thereby act as a barrier to drainage. This is a cause of great concern for local residents. We therefore submit that the proposed development is not in accordance with proper planning and sustainable development.

20. It is submitted that the excavations necessary to lay infrastructure i.e. haul routes and service roads together with foundations will likely have an adverse affect on the hydrology of the area. It follows that excavation the naurally occurring porous material and replacing it with hardcore will almost certainly give rise to trapped bodies of water. The large foundations necessary to ground such large turbines may also give rise to displacement of significant volumes of water.

21. Many of the residents also take issue with the amount of traffic that would be necessary to ship so much excavated material out and ship in very significant quantities of aggregate together with the machinery and component parts of the turbines themselves.

22. We must further caution about the removal of peat and interference with bog land. It is not as simple as stating that a certain % of land will be taken up by the wind turbine equipment itself. Interference with a bog may in itself effect the whole bog. We have seen what happened at the Derrybrian site in Galway, were excavations were being conducted to facilitate a wind farm and which caused significant subsidence. This later gave rise to a significant case brought against Ireland by the European commission. We must therefore caution about interference in any way with bogland and the groundwater table.

23. It is appropriate to make a general observation on Atlantic Salmon at this point. We understand that over the last 10 or so years, numbers of returning Atlantic Salmon have been massively dwindling. I had the privilege of meting the late *Éamon de Buitléar* in 2010 and this was the one issue that really concerned him. He spoke at length about this. It is therefore submitted that the wider river catchment area be scrutinised for records and evidence of Atlantic Salmon. We urge the utmost of caution about any development which may in any way negatively impact on Atlantic Salmon.

24. Wind turbines affect bats in a number of different ways. Striking is perhaps the most common and most obvious, but a lesser-known significant issues is that bats lungs may explode under pressure from the turbines. This also causes significant fatalities. Accordingly we raise concerns about the compatibility of the current proposals with flying bats.

25. **Proximity to c.SAC and River Boyne and Blackwrer** c.SAC [002299] and River Boyne and River Blackwater SPA. Site Details. Site code. 004232. It will be further noted that the river **Fear English** are tributaries of the River Boyne. This is very significant in the context of surrounding wildlife habitat.

SCALE of the current proposals

26. It is considered helpful to demonstrate the scale of the proposals by reference by reference to the below photograph.

This is in Bellacorrick, Co. Mayo

27. The above photograph shows wind turbines of 167 meters in height beside the small turbines of the 1992 ESB/ *Bord na Mona* development, situated in forestry on a flat landscape with hills in the distance on this side of the development. The smaller turbines, were decommissioned and removed after the larger ones had been built, are tiny in comparison. The nacelle on the smaller turbine clearly demonstrates the enormity of the scale of these **167-meter** high turbines. It is worth noting that the 2006 guidelines were drafted at a time when turbines were much smaller. Note that the current proposals are for turbines some **200 meters** in height; some 33 meters higher again.

28. It would appear that the proposed turbines would cause significant issues for aviators and airplanes. This is hardly surprising as 200 meters translates into 656 feet. To put that in context, it is worth noting he height of some of Irelands' tall structures: -
    - the very tall spire on Trim Roman Catholic church is 208 feet,
    - Dublin's liberty hall with its 16 floors is 193 feet. The currant proposals amount to about 50-story building (nearly half the height of the Empire Estate building in New York).
    - Dublin's spire is 121 meters or 396 feet.

    Therefore the height of the proposed turbines is completely unacceptable in a rural landscape.

SHADOW FLICKER

29. We have read elsewhere in the EIAR that measures are proposed to limit shadow flicker. Our information from other parts of he country where such measures are installed is that they don't work effectively. Shadow flicker of any type is unacceptable. This supports our view that turbines should not be permitted within 10 rotor diameters of any residence.

VISUAL

30. The proposed height of the turbines is extremely concerning. We were particularly concerned at the photomontage of the proposed turbines. Meath and Kildare are are well known heritage counties and its views should be protected. Views which should be considered are those from The Royal Canal Way, Tara Hill, Carbury Hill Complex, Newbury Hall, etc. It is clear that the height and number of turbines are very problematic.

31. It is submitted that taller turbines will have an overbearing affect on the landscape. Furthermore, taller turbines have a greater dominating effect on rural dwellings. To suggest that trees could screen structures the equivalent of 50 stories in height is frankly ludicrous. Moreover, trees are often felled to make way for turbines. It should also be borne in mind that the onset of Ash Dieback disease is devastating the population of ash trees in the countryside.

TRAFFIC AND TRANSPORTATION

32. **Diesel** – Particulate matter from diesel fueled trucks; This is considered to be carcinogenic and poses a major health and safety risk to local residents. There will be enormous volumes of diesel consumed both by on-site machinery and by truck movements to and from the proposed development. In addition to the health issues associated with NO2 particulates, there are also significant greenhouse gas emissions.

33. Air Pollution: Particulate Matter [P.M.]. Diesel particulate matter (DPM), sometimes also called diesel exhaust particles (DEP), is the particulate component of diesel exhaust, which includes diesel soot and aerosols such as ash particulates, metallic abrasion particles, sulfates, and silicates. When released into the atmosphere, DPM can take the form of individual particles or chain aggregates, with most in the invisible sub-micrometre range of 100 nanometers, also known as ultrafine particles (UFP) or PM0.1. Exposure to diesel exhaust and diesel particulate matter (DPM) is a known occupational hazard to truckers, railroad workers, and miners using diesel-powered equipment.

34. In 2012, the World Health Organization (WHO) declared the emissions from diesel combustion to be carcinogenic. The WHO also released data showing that more than 7 million deaths are caused by indoor and outdoor air pollution. The black smoke from diesel engines is a part of outdoor air pollution contributed by buses and trucks. A study by a team of international scientists in 2013 noted that diesel smoke consists primarily of black carbon, which has a strong global warming impact on the climate; nearly 3,300 time more than that of carbon dioxide over a 20-year time period. [http://onlinelibrary.wiley.com/store/10.1002/jgrd.50171/asset/jgrd50171.pdf]

35. We were unable to find an analysis of the quantities of diesel fuel (fossil fuel) required together with the environmental and health affects of this. In this regard, we ask the planning authority to conduct a full analysis of these issues. The irony of using so much fossil fuel together with significant quantities of rare earth metals and finite resources to construct an energy source, which is intermittent at best, is not lost on us.

CUMULATIVE EFFECT

36. The cumulative affect of other wind farms in the area should also be considered. In this regard we note the recent grant of planning consent of to the adjoining area of Bracklin (an area that also features in the current application). The one which was recently granted consists of a Wind Farm Development including 9 turbines and all associated works. Specifically we refer to: -
    a. Cloncant; Edenderry
    b. Yellow River
    c. Mount Lucas

37. With regard to **Counties Meath, Westmeath, Kildare, Laois and Offaly**, please clarify what other wind farm applications are: -
    i. applied for ?
    ii. granted ?
    iii. commenced ? and
    iv. in operation ?

38. We raise concerns at the manor in which planning consent for wind turbines is being sought. Other wind farms in north Kildare should not have been considered in isolation to all of the others and is evidence of poor strategic planning on the part of the statutory authorities. This is essentially project splitting often referred to at the ***salami principal***. The current application should be examined in conjunction with others within a radius of c.30km.

HEALTH AND SAFETY

39. There have been many newspaper reports about the safety of industrial wind turbines and indeed there is much available evidence of fires and accidents which can be easily sourced on the internet. We invite the planning authority to see for itself just how unsafe industrial wind turbines can be. The information may be assessed at: http://www.caithnesswindfarms.co.uk/fullaccidents.pdf

40. **Infrasound**: Moreover, there is significant evidence from outside of Ireland that Infrasound is an issue for people who live very close to wind turbines. *Dr Mariana Alves-Pereira* of Portugal has written and talked extensively on this issue. Further evidence is also available from *Bruce Rapley*, *Huub Bakker* and *Rachel Summers*. Curiously we were unable to find any reference in the EIAR to 'Infrasound'.

41. The bog has been dried out over the period of its working life. There have been fires at the bog over the past decades. Post its former use of peat harvesting, non rewetting on turbine sites leading to dry and drained bogs with high growth of highly combustible dry material such as heather scrub. Heather grows taller and more dense in dry bog than it does in wet bog naturally. Consequently, if Bord na Mona/ Powergen are the custodians and operators of this wind-farm, one must inquire as to who is responsible for future fire incidents and how are neighboring properties protected against this expanded and increased risk ? Moreover, if the bog is already historically susceptible to fires in its current state so this proposal must now consider this potential extreme hazard capacity on local dwelling/property holders and the health of the people that live within proximity to this bog if a fire broke out through the inhalation of smoke pollutants. Furthermore, fires on a bog would also pose a risk for the turbines themselves. All the available evidence would lead us to the conclusion that a rewetting of the bog (or large parts of it) would be the more sustainable option and also provide a valuable carbon sink.

42. Have all related **health and safety** issues been reviewed? This should include lightening strikes, storm damage, glare, etc. Are there batteries to be installed? We understand that transformers are often colossal and often weigh up to 70 tons and more. Is the local fire services equipped to deal with fires at the proposed instillation? Please establish risks associated with the following hazards: -
    a. Hazard 1. Shock or electrocution from energized conductors
    b. Hazard 2. Arc faults that spark fires
    c. Hazard 3. Arc flash leading to explosions

AVIATION

43. Please consider safety issues for airfields having regard to the proposed turbines.

TOURISM AND AMENITY

44. A landscape blighted with wind turbines is unattractive to tourists. The proposed height of the turbines in the current application will make them all the more imposing. Parts of Scotland have suffered enormously from inappropriate and indiscriminate sighting of wind turbines, which is having a significant negative affect on their tourism industry. We do not wish to see Ireland follow in he same direction. When people visit such beauty spots, they typically want to view an un-spoilt Ireland.

45. Industrial wind turbines are overbearing and adversely interfere with the landscape visually: this is clearly contrary to Irelands touristic objectives, which have been driven in recent years by Irelands Ancient East together with the Wild Atlantic Way. There is nothing ancient about industrial wind turbines. If tourists wished to see industry, we are sure they would be visiting places such as the Ruhr valley in Germany and such like. Giant industrial wind turbines are clearly incompatible with this objective.

DECOMMISSIONING

46. Of concern is that the large concrete bases to support the turbines are to be left in situ following the end of life and decommissioning of the proposed wind turbines. Such wanton destruction of the landscape is utterly unacceptable.

47. Given the finite nature of sand and gravel which is required to construct the foundations for wind turbines in the first place, it is completely unacceptable that they would be just left there following the end of life of the turbines. We have elsewhere in this submission dealt with the finite nature of sand and gravel, but to reiterate, foundations will have been made up of very large amounts of finite resources including sand and gravel, the later of which come from eskers laid down in he last glaciation. Eskers are rapidly disappearing through extremely aggressive quarrying (much of it unauthorised) to feed the insatiable demand for developments such as wind turbines, which is in of itself; totally unsustainable. Moreover it should be noted that large amounts of rebar will also have been buried in the foundations to strengthen them.

48. Wind turbine blades cannot be easily disposed of. There is evidence from he United States of America where these are cut up and land filled. This can hardly be described as beneficial to he environment. We invite you to check out the following link in this regard: https://www.bloomberg.com/news/features/2020-02-05/wind-turbine-blades-can-t-be-recycled-so-they-re-piling-up-in-landfills

REFUSALS

49. It is considered helpful to examine refusals for similar instillations.

50. **MEATH**: PL 17.238669: Highpoint Communications Limited: *Construction of a 30 metre high lattice telecommunications/3G Broadband support structure, carrying 6 number panel antennas and 4 number RT link dishes, with associated telecommunication cabinets and equipment located at ground level, all enclosed in chainlink fencing and all associated works, plus new section of access track, all at Blackshade Townland, Clonard, County Meath.*

51. REFUSE permission. By comparison to the proposed turbines, the mast alluded to in the above was a minnow. The site was also close to the Royal Canal and was refused *'By virtue of its location adjacent to the Royal Canal'*
    a. *REASONS AND CONSIDERATIONS: By virtue of its location adjacent to the Royal Canal, the proposed development would seriously injure the visual character and scenic amenities of the area in general and the canal in particular. As such it would be contrary to the advice given at section 4.3 of the Guidelines for Planning Authorities on Telecommunications Antennae and Support Structures issued by the Depatment of the Environment and Local Government in July 1996 that care should be taken over sensitive landscapes, and policy HER 40 of the Meath County Development Plan, 2007-2013 to protect and enhance the heritage and recreational potential of the Royal Canal. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.* [Emphasis added]

    This single solitary mast equated to a mere 98.42'. The current proposals are for turbines of 200 meters (656 feet). It follows that would cause a massive intrusion on the landscape and are therefore unacceptable.

52. **WESTMEATH:** PL.237728: Galetech Energy Developments (GED Limited): *Construction of 12 number wind turbines of hub height 85 metres and rotor diameter 100 metres, with an overall height not exceeding 135 metres...situate at Gaybrook Demesne, Mahonstown, Gibbonstown, Ballintlevy, Bellfield or Brannockstown and Gallstown, Mullingar, County Westmeath.*

    NOTE: The lands re this planning file are situate very close to the lands re the current file.
    REFUSE permission. The proposed windfarm was refused mainly on the basis of landscape quality.

a. *REASONS AND CONSIDERATIONS: The site of the proposed windfarm development is located in the vicinity of Lough Ennell, in an area of good quality, small scale landscape, containing the remnants of 18/19th century demesnes of particular significance in terms of amenity, tourism and heritage. The area also contains a large number of new houses. It is the policy of the planning authority to assess any development proposals in areas of demesne landscape according to best practice guidelines for historic landscapes. It is considered that insertion of a windfarm into this landscape would constitute a dominant and obtrusive feature in the area, which would interfere with the character of the landscape which it is necessary to preserve. Furthermore, having regard to the statements in the current Westmeath County Development Plan 2008-2014, generally advocating accommodation of windfarms in the extensive cut-over peatland areas of the county and also having regard to the sensitivities of the area and its environs, it is considered that the proposed development, notwithstanding its location in an area of "medium capacity" in the Windfarm Capacity Map of the said Development Plan, would not be in accordance with the overall development objectives of the current County Development Plan. The proposed development would, therefore, be contrary to the proper planning and sustainable development of the area.* [Emphasis added]

These turbines equated to 442.91'. Therefore, how did the current proposers consider that turbines of some 607' would somehow be acceptable?

53. **MEATH**: PL 17.203801: PROPOSED DEVELOPMENT: Application by Thornton Waste in 2005: Provision of circa 3.1 hectares of landfill area comprising parts of Phases 1 and 2 of an overall proposed landfill area (25.4 hectares) and the diversion of the southern stream around the perimeter of the landfill area, six metres wide road around landfill area, separate foul and surface water drainage networks, landscaping, berming, screen planting, fencing, boundary treatment and all site development works on a 31.9 hectares site at Boolykeagh, County Meath. These works comprise part of an overall proposed development of an integrated waste management facility comprising a recycling centre and non-hazardous residual waste landfill on a circa 82.5 hectares site at Calf Field, Ballynadrumny, County Kildare near Longwood, County Meath. The overall development site comprises lands in County Meath and County Kildare as follows: circa 31.9 hectares is located in the townland of Boolykeagh, County Meath and circa 50.6 hectares is located in the townlands of Calf Field and Ballynakill in County Kildare. A separate planning application has been lodged with Kildare County Council for the remaining components of the development, which includes: (1) access to the site for all purposes shall be from a new access road on the R160 Regional Road in County Kildare; (2) Phases 3 to 6 and the parts of Phases 1 and 2 of the landfill area in County Kildare, comprising circa 22.3 hectares. (The overall landfill comprises approximately 25.4 hectares to be development in six phases over 13 years at the rate of 220,000 tonnes per annum of residual non-hazardous household, commercial, industrial and construction and demolition wastes); (3) the proposed integrated waste management facility in the County Kildare section of the lands (50.6 hectares).

    a. REFUSE permission: Having regard to the complex hydrological and hydrogeological conditions obtaining on-site, to the limited investigation carried out of those conditions and hence to the potentially inadequate mitigation impacts associated with the proposed development, it is considered that the development site is unsuitable for a development of the nature and scale proposed, having regard to the proximity of the site to the Boyne River, a designated Special Area of Conservation and a source of water supply for the County of Meath. The proposed development would, therefore, have a significant adverse effect on the conservation and protection of the River Boyne, a Special Area of Conservation, would be prejudicial to public health and would be contrary to the proper planning and sustainable development of the area. [Emphasis added]

Note also the earlier grounds on which **Meath County Council** refused the Waste facility, which amongst other issues, stated *"by reason of its siting, context, scale, height and bulk ... would have a detrimental impact on visual amenity, heritage, tourism, recreational and environmental values of designated areas of visual quality identified in the Meath County Development Plan"*.

54. MEATH: 22/552: 2023-02-21: OBTON – Application for solar farm on 124 Hectares at Hawkinstown, Riverstown (ED Ardcath), Scatternagh, Balgeeth, Ardcath, Co. Meath. Application was refused by Meath County Council in March 2023 by reason that: -

> HER POL 52 of the Meath County Development Plan 2021 - 2027 sets out the policy to protect and enhance the quality, character, and distinctiveness of the landscapes of the county in accordance with the national policy and guidelines and the recommendations of the Landscape Character Assessment to ensure that new development meets high standards of siting and design. As set out in the applicable Landscape Character Assessment for County Meath (Appendix 5) and associated maps, the proposed development would be partially sited in Landscape Character Assessment (LCA) 06 Central Lowlands, a landscape of High Landscape Character Value, Moderate Sensitivity and is of Regional Landscape Importance and with a recommendation to maintain the visual quality of the landscape by avoiding development that would adversely affect short range views between drumlins and to have particular regard to the retention of high quality landscapes on the tops of drumlins which are inter-visible with the Hills of Tara and Skryne in LCA 12. Based on the information submitted with the application, it is considered that, by reason of its nature, scale, massing and location, the Planning Authority is not satisfied that the proposed development sufficiently protects and enhances the quality, character, and distinctiveness of this high landscape value. The proposed development would, therefore, be contrary to the above referenced Development plan policy and would not be in accordance with the proper planning and sustainable development of the area.

55. KILDARE: PL 09.243523 [13/702] – PROPOSED DEVELOPMENT: Erection of a guyed wind monitoring mast with instruments up to 100 metres in height. The purpose of the proposed mast is to assess the suitability of the company's adjacent lands for wind farm development, all on lands at Timahoe South Bog, Coolcarrigan, County Kildare.
    a. The proposed development by reason of negative impact which the mast would have on the air navigability of the area, would decrease the utility of the area for flight operations and training. Furthermore, the proposed development would indirectly cause an increased risk of airspace infringements, which would result in a risk to the safety of air traffic. It is considered that the proposed development would endanger and interfere with the safety of aircraft and the safe and efficient navigation thereof, and would, therefore, be contrary to the proper planning and sustainable development of the area.

GRANTS/ SUBSIDIES

56. We are aware that there are significant grants available for the construction of wind turbines. We believe that they are completely unsustainable without such grant aiding. We therefore submit that it is unethical to use so much finite natural resources constructing machines, which would otherwise be unviable.

57. It is also considered that the provision of grants to aid one form of renewable energy over other forms of meritorious renewable energy gives an unfair advantage and artificially makes one form of energy more attractive than another. We are mindful of the exclusion of Deep Bore Geothermal energy in this context. Our research finds that Deep Bore Geothermal energy is far more sustainable than wind.

58. The evidence available suggests that the wind industry have lobbied extensively to retain this subsidy both in Ireland and in the UK. In our view grants to wind and solar instillations is misguided and short-sighted in view of the many other more promising and sustainable energy sources. **Chasing grants/ subsidies makes for very poor planning law and should have no place in any society.**

EU and IRISH LAW

SEA DIRECTIVE

59. We further believe that this contrary to the SEA Directive (Strategic Environmental Assessment); which provides that Programs / Plans / Projects should be conducted as a whole and not in isolation. The current application is a project. It is considered that one cannot jump straight into projects without first having conduced the two earlier stages in the process; i.e. Programmes and Plans.

60. In light of new information we have received; we inquire whether the applicants are embarking on scoping for other Wind Farm Projects in and around the east and midlands regions of the country? It is our belief that they are. In doing so, it is considered that they have completely ignored the requirements of the SEA Directive with regard to plans and programmes.

61. The SEA Directive is to ensure that "plans & programmes" which are likely to have sufficient effects on the environment are subject to an Environmental Assessment when they are prepared and prior to their adoption (note judgment of 28th February 2012, **Inter – Environnement wallonie** and **Terre wallonne,** C41 / 11, EU: C: 2012:103, paragraph 40 and the case – law cited).

62. Article 6(2) of the SEA Directive furthermore tells us that the environmental assessment should be carried out at the earliest possible stage so that the results of that assessment are still capable of influencing any decisions. Indeed it is at that stage that the various elements of an alternative may be analysed and strategic choices made. It is submitted therefore that the current planning application is in fact a project.

63. We contend that no overall plan or programme was prepared by the applicant; Statkraft or Element Power for its projects in Ireland. A project comes out of plans and programmes. Plans are flexible. A programme is comprised of multiple projects that aim at outcomes.

64. We contend that the applicant has ignored its obligations under the SEA Directive and has forged ahead with multiple projects, which in fact should never have been built without fulfilling its obligation with regard to the SEA Directive at the plans and programme level.

EIA and HABITATS DIRECTIVES

65. **EIA Directive and ECJ case law**: we are concerned that the currant application doesn't comply with Article 6 of the Habitats Directive 92/43/EEC. Please establish that the proposal is compatible with **EU law** including case law from the ECJ. The following cases from the **European Court of Justice** [ECJ] may be relevant: -
    a. Case C-258/11, Peter Sweetman and Others v An Bord Pleanála
    b. Case C-164/17, Edel Grace and Peter Sweetman v An Bord Pleanála
    c. Case C-323/17, People Over Wind and Peter Sweetman v Coillte Teoranta
    d. Case C-461/17, Brian Holohan and Others v An Bord Pleanála,

DEVALUATION

66. In most cases a person's private house represents most of that persons/ family's assets and it would be grossly unfair that the local people should suffer as a result of anthers private gain. The Board's attention is specifically drawn to **Section 10. (c) Schedule Four of the 2000 Planning Act** which provides that planning permission may be refused were it would *"seriously injure the amenities, or depreciate the value, of property in the vicinity"*. The Board is therefore requested refuse permission based on the said grounds. Wind turbine industry representatives have claimed that only limited areas of the country would be available to them if significantly longer separation distances than 500m were recommended. That of course is not an argument with any merit if there are objective reasons for the separation distance in the first place. Developers have no right to claim precedence over people's property and family rights.

IRISH CASE LAW

67. There have been health issues for residents in other parts of the country and beyond.

68. We are also aware of the case of **Shivnen & Ors -V- Enercon Wind Farm Services Ireland Ltd & Anor 2011/9955 P**. Seven families from Banteer, North County Cork claimed they had been severely impacted, particularly through noise pollution, since the turbines began operating in November 2011. The case was ultimately settled out of court order stated: '*and the court records that liability has been admitted by the defendants in the action listed in he schedule here-after.*'

69. In February 2020 we read of the case of **Laura, David and Jack Kelleher v. Green Energy Supply Ltd**. The later of which owned and operated a wind turbine installation known as Knockduff Wind Farm in Cork. The applicants claimed that the noise, vibrations and shadow flicker from the turbines, located just over 700m from their family farm resulted in them suffering from various illnesses. These included nosebleeds, ear aches, skin rashes, swollen and painful hands, loss of power in their limbs, sleep disturbance, and headaches.
'Counsel told the court that the settlement, including the ruling of the awards, arose following mediation between the parties conducted by retired Judge Paul Gilligan. He said that given the circumstances, especially given that the medical evidence was hotly contested, he was recommending that the settlement offers be approved by the court. Counsel said that as part of the settlement Laura (aged 15) whose ailments were more severe compared to her brothers was to receive €125,000. Her brothers David (aged 17) and Jack (aged 10) were to receive €50,000, counsel added.'

    We submit that the above case is very relevant. While we are unaware of any underlying issues with regard to the Kelleher children (above), this is all the more cause for concern given that local children have underling issues [autism] and would be much more vulnerable. Furthermore, we understand that the turbines in County Cork were smaller than those proposed for this area thereby adding weight to our concerns.

We append Irish Times article dated **13th August 2025**, outlining the experiences of neighbours Living Next Door To ... Ireland's largest onshore wind farm;
Oweninny Wind Farm in Co Mayo meets the power needs of some 140,000 homes a year
Áine Ryan, Wed 13th August 2025
https://www.irishtimes.com/ireland/2025/08/13/living-next-door-to-irelands-largest-onshore-wind-farm/

TO BE ESTABLISHED

70. With regard to any wind farms, which have already come on line, please clarify the **amount of energy actually being delivered** on a per annum basis. Information should include the number of turbines, the area over which they have been installed, the type of turbines involved and compared with any previously stated aspirations in planning documentation.

71. Has a full **SEA (Strategic Environmental Assessment)** analysis been conducted? The SEA Directive provides that Programs / Plans / Projects should be conducted as a whole and not in isolation. Therefore it is essential that all related wind farm applications in this and other counties be examined as part of the broader mix. Has Directive 2001/42/EC been complied with?

72. We note that an **Environmental Impact Assessment** has been submitted with the application. Please establish its adequacy and whether this application in compliance with EU Directives including Directive 85/337/EEC?

73. We note that an **Natura Impact Assessment / Appropriate Assessment** has been submitted with the application. Please establish its adequacy and whether this application in compliance with EU Directives including Directive 92/43/EEC?

74. Please established whether all aspects of the **machinery directive** [2006/42/EC] have been complied with?

75. Having regard to the **county development plans**, we ask the planning authority and ultimately *An Coimisiún Pleanála* to establish whether the proposals are compliant with the country development plans? We believe that they are contrary to proper planning and sustainable development and that they contravene many aspects of the county development plan such as objectives re preservation of heritage and the promotion of tourism. The proposal would also place enormous demand of finite natural resources. In addition we believe that views and prospects as outlined in the county development plan would be heavily compromised.

76. Please establish whether the proposal compatible with the **European Landscape Convention**? The UK and Ireland ratified the convention and it became binding on 1st March 2007.

77. The composition of the proposed turbines will need to be established. This should include all rare earth metals involved in their manufacture. All **runoff** possibilities should be examined having regard to metals/contaminants contained in the proposed machines. Could runoff to nearby watercourses and or seep into the aquifer? Furthermore, in the event of a storm event and proposed wind turbines get damaged; is there a possibility of chemical/ metal escape and contamination of the groundwater aquifer?

78. Significant resources are required to enable this development. Please ensure that there is a full assessment of **all materials required in the construction this development**? Please also quantify the amounts of materials required to construct this proposed development with specific reference to rare earth metals?

79. Has other forms of energy such as **Deep Bore Geothermal Energy** been considered? Unlike solar, Deep Bore Geothermal Energy can deliver **constant energy** and is considered better value for money.

80. Wind technology is rapidly changing. It is highly likely that the turbines of today will be obsolete in a few years. It will be necessary therefore to establish the **afterlife of these turbines** together with the cost factor of disposing of same given the amount of rare earth metals in their construction. The applicants will need to address these issues. It is considered that a significant sum of money would need to be lodged in an escrow account to cover disposal and reinstatement.

81. We recommend that a **full cost/ benefit analysis** be conducted to establish value for money given the resources required to construct. This should also take into account the intermittent nature of wind and solar energy. Additionally this should include comparisons with other forms of sustainable energy with particular reference to Deep-bore geothermal energy, which is fully dispatchable and not intermittent. Such an analysis should ignore completely any artificial grant incentives and focus purely on the real cost of the development together with an assessment of what can realistically be expected in terms of deliverable energy generation at these northerly latitudes. This should also factor in worst-case scenario climatic conditions (light levels) with extensive periods of cloud cover.

82. Furthermore, a full analysis of **impacts upon the surrounding community** should be conducted.

83. Please clarify whether SF6 gas is to be used as an insulant? SF6 Gas is 23,500 times more warming than carbon dioxide (CO_2). Sulfur hexafluoride or sulphur hexafluoride is an extremely potent and persistent greenhouse gas that is primarily utilized as an electrical insulator and arc suppressant. The European Commission has proposed that SF6, a fluorinated greenhouse gases with a potency 25,000 times that of carbon dioxide, be banned from new electrical equipment as of 2031, as part of a broader tightening of limits on F-gases. See https://www.bbc.com/news/science-environment-49567197

84. On balance it is considered that this development would create an undesirable precedent and should ultimately be declined.

85. Both Wind and Solar energy are intermittent and not dispatchable. *(Dispatchable generation refers to sources of electricity that can be used on demand and dispatched at the request of power grid operators and according to market needs. Dispatchable generators can be turned on or off, or can adjust their power output according to an order.)*

EMPLOYMNENT

86. **Assertions re Employment**: the EIAR alludes to an alleged employment benefit quiet frequently in an apparent attempt to in part justify the proposed development and were told that there may be up to 20 jobs. That said this was contradicted else where in the EIAR where it stated that *'Human activity associated with the maintenance of the operational windfarm will be infrequent and minimal.'* **Notwithstanding we understand that there are only 2 fulltime employees on the MounLucas Wind farm which has some 28 wind turbines.**

87. Such arguments are of course completely erroneous, as the issues to be determined are compatibility with established planning principles and compliance with EU law and International Conventions.

88. Assertions re Employment: from a cursory search of the E.I.S., the applicants allude to an alleged employment benefit, which would derive from its operation in an apparent attempt to in part justify the proposed development.

    a. **Such arguments are of course completely erroneous, as the issues to be determined are compatibility with established planning principles and compliance with EU law and International Conventions**.
    b. Furthermore, employment results from the requirement of one party to hire another in order to make a profit for the employer and not out of some benevolent motive.
    c. If employment were a genuine concern, then the operator/s would be well advised to explore an intensive industry such as a more labor intensive horticultural development, which would sustain far greater employment over a similar land mass. Furthermore, a horticultural land use would provide sustainable employment unlike construction of a wind farm, which only provides short-term employment.
    d. The use of employment as a justification is regrettable and somewhat of a distraction. Engagement with the planning issues would be far more constructive. In light of the lengthy discourse on this issue, one must be skeptical and therefore proceed with an abundance of caution.
    e. Finally, employment by wind instillations in minimal once constructed.

89. **Effect of wind on other alternative energy sources**: we understand that on occasion Hydropower has to be turned off to let wind energy in. This could be established by appropriate questions directed to the managers of the grid?

CARBON ACCOUNTING

90. **The FUEL**: The sheer volumes of concrete required together with access roads and hard standing areas, which in turn would require massive quantities of infilling to facilitate the construction of the proposed turbines is vast. It follows that the amount of diesel fuel necessary to fuel the truck to haul all this material on site would be enormous. This too must be factored into the carbon footprint equation together with the sustainability of consuming so much fossil fuel in the construction of the proposed wind turbines.

91. The manufacture of cement requires significant temperatures. The carbon footprint / ton is therefore very significant. It is submitted that the use of such a vast quantity of concrete would give rise to an unacceptably high carbon footprint. The reality is that construction and erection of wind turbines will give rise to significant and unsustainable resource consumption.

THE PROPOSAL / SUSTAINABILITY

92. **Developer Led**: the proposal is developer led. The effect of this proposal has already been to divide the local community between landowners benefiting from the revenue from turbine sites on the one hand and others on the other. This is inappropriate developer-led rather than national and strategic based planning. Any future Irish wind energy proposal needs to be plan led and not developer led. This proposal is inappropriately developer-led acting without any proper national and location selection strategy.

93. **The TURBINES**: The manufacture of steel and other components to assemble a turbine (particularly on the scale proposed) must also be assessed as regards its impact on the environment *vis à vis* carbon footprint and environmental sustainability of natural and finite resources.

94. **Carbon footprint of wind energy**: The manufacture of cement requires significant temperatures. The carbon footprint / ton is therefore very significant. It is submitted that the use of such a vast quantity of concrete would give rise to an unacceptably high carbon footprint. The reality is that construction and erection of wind turbines will give rise to significant and unsustainable resource consumption.

95. We were unable to easily find exact grade of aggregate, steel or nm of concrete in any of the works be it bases, culverts, manholes, etc. It would be essential that the applicants provide a table of figures for the amounts of aggregate required to construct the network of access roads.

MATERIALS USED

96. It is considered helpful to provide a short analysis of some of the components of wind turbines, which we will now outline.

97. **STEEL**: To create 1,000 Kg of pig iron, you start with 1,800 Kg of iron ore, 900 Kg of coking coal 450 Kg of limestone. The blast furnace consumes 4,500 Kg of air. The temperature at the core of the blast furnace reaches nearly 1,600 degrees C. The pig iron is then transferred to the basic oxygen furnace to make steel. 1,350 Kg of CO2 is emitted per 1,000 Kg pig iron produced. A further 1,460 Kg CO2 is emitted per 1,000 Kg of Steel produced so all up 2,810 Kg CO2 is emitted. 45 tons of rebar (steel) are required so that equals 126.45 tons of CO2 are emitted.

98. **CONCRETE**: To create a 1,000 Kg of Portland cement, calcium carbonate (60%), silicon (20%), aluminum (10%), iron (10%) and very small amounts of other ingredients are heated in a large kiln to over 1,500 degrees C to convert the raw materials into clinker. The clinker is then interground with other ingredients to produce the final cement product. When cement is mixed with water, sand and gravel forms the rock-like mass know as concrete. For the turbines currently being proposed, upwards of 200 lorry loads of readymix calculate are required to anchor each turbine (in addition to lots of reinforcing steel).

99. **ROADS**: Infill for access roads: sourced from crushed rock derived from quarrying are also required.

100. **The FUEL**: The sheer volumes of concrete required together with access roads and hard standing areas, which in turn would require massive quantities of infilling to facilitate the construction of the proposed turbines is vast. It follows that the amount of diesel fuel necessary to fuel the truck to haul all this material on site would be enormous. This too must be factored into the carbon footprint equation together with the sustainability of consuming so much fossil fuel in the construction of the proposed wind turbines.

101. **Where does the aggregate come from?**

Further to the above, sourcing such an enormous quantity of aggregate would pose enormous challenges. Aggregate is a major constituent of concrete. Aggregate will also be required to construct all the hard standing areas and access roads. It is submitted that this is squandering of national resources.

The sighting of turbines should be in a situation where naturally occurring bedrock can be utilized, obviating the need for the requirement of such vast amounts of concrete and aggregate. Furthermore, in addition to aggregate, sand and gravel are also component constituents of concrete. Through our

experience and understanding of the quarry industry, we know that supplies of sand and gravel are rapidly dwindling. It is therefore essential that such schemes be situate on naturally occurring bedrock!

102. **Sporadic nature of wind power**: terrestrial based wind power is historically very sporadic and erratic. To state the obvious, in periods of static airflow, no wind is produced. This causes all sorts of challenges for management of the grid in that it must be replaced by alternative sources of energy. Alternative Energy Sources are discussed separately in this submission, as are issues pertaining to the management of the grid.

RARE EARTHS

103. **RARE METALS**: Most turbines are fitted with magnets made of a metal called neodymium. The mining and refining of neodymium extraordinarily dirty and toxic – involving repeated boiling in acid, with radioactive thorium as a waste product – 90% of it comes from – Baotou, China. Neodymium is a rare earth metal, which is generally sourced in China and which is causing. There are c. 4 tons of neodymium magnets in each turbine for example. China's Ministry of Industry and Information Technology estimated that the cleanup bill for southern Jiangxi Province could amount to 38 billion yuan, or around $5.5 billion. Only a fraction of that amount has so far been spent.

104. We are obliged to deal with the position *vis à vis* Rare Earth Mining in China. There are very bleak social and environmental costs. The turbines themselves come from a process, which cannot be considered sustainable. In fact the trail of destruction and environmental pollution, which is left behind, is shameful.

105. To quote from one source: - *'Neodymium is commonly used as part of a Neodymium-Iron-Boron alloy (Nd2Fe14B) which, thanks to its tetragonal crystal structure, is used to make the most powerful magnets in the world...There's not one step of the rare earth mining process that is not disastrous for the environment. Ores are being extracted by pumping acid into the ground, and then they are processed using more acid and chemicals. The fact that the wind-turbine industry relies on neodymium, which even in legal factories has a catastrophic environmental impact...Finally they are dumped into tailing lakes that are often very poorly constructed and maintained. And throughout this process, large amounts of highly toxic acids, heavy metals and other chemicals are emitted into the air that people breathe, and leak into surface and ground water. Villagers rely on this for irrigation of their crops and for drinking water. 'Whenever we purchase products that contain rare earth metals, we are unknowingly taking part in massive environmental degradation and the destruction of communities.*

106. Aside from the manufacture of the magnets alluded to above and in the appended enclosure, World Report alluded to the manufacture of Blades for wind turbines together with solar panels. Some statistics about Baoding were that the skies are constantly full of smog from pollution and thus far this year, they had only got 16 days smog free as of [31st May 2015]. The listener was informed that Blue skies are seldom seen. Fine particles (PM 2.5) are double that of recommended levels and the population have respiratory problems/ breathing difficulties and facemasks are frequently worn in an attempt to protect oneself. It is estimated that air pollution is responsible for 100,000 deaths each year. Because of Chinas Censorship, it is difficult to obtain detailed data. To make maters worse, at decommissioning stage, the blades are being chopped up and being land filled. See: https://www.bloomberg.com/news/features/2020-02-05/wind-turbine-blades-can-t-be-recycled-so-they-re-piling-up-in-landfills

107. **The MAGNETS**: The turbines themselves come from a process, which cannot be considered sustainable. In fact the trail of destruction and environmental pollution, which is left behind, is shameful.

To quote from the enclosed article on the issue *'Neodymium is commonly used as part of a Neodymium-Iron-Boron alloy (Nd2Fe14B) which, thanks to its tetragonal crystal structure, is used to make the most powerful magnets in the world...There's not one step of the rare earth mining process that is not disastrous for the environment. Ores are being extracted by pumping acid into the ground, and then they are processed using more acid and chemicals. The fact that the wind-turbine industry relies on neodymium, which even in legal factories has a catastrophic environmental impact...Finally they are dumped into tailing lakes that are often very poorly constructed and maintained. And throughout this process, large amounts of highly toxic acids, heavy metals and other chemicals are emitted into the air*

that people breathe, and leak into surface and ground water. Villagers rely on this for irrigation of their crops and for drinking water. 'Whenever we purchase products that contain rare earth metals, we are unknowingly taking part in massive environmental degradation and the destruction of communities."

Aside from the manufacture of the magnets alluded to above and in the appended enclosure, RTE World Report alluded to the manufacture of Blades for wind turbines together with solar panels. Some statistics about Baoding were that the skies are constantly full of smog from pollution and thus far this year, they had only got 16 days smog free as of [31st May 2015]. The listener was informed that Blue skies are seldom seen. Fine particles (PM 2.5) are double that of recommended levels and the population have respiratory problems/ breathing difficulties and facemasks are frequently worn in an attempt to protect oneself. It is estimated that air pollution is responsible for 100,000 deaths each year. Because of Chinas Censorship, it is difficult to obtain detailed data. To make maters worse, at decommissioning stage, the blades are being chopped up and being land filled. See:
https://www.bloomberg.com/news/features/2020-02-05/wind-turbine-blades-can-t-be-recycled-so-they-re-piling-up-in-landfills

We invite you to review the following links to substantiate what we have outlined above: -

108. China produces 85% of global supply of the 17 chemically similar elements crucial to smartphone, camera lens and magnet manufacture – and half that output is from the city of Baotou
Jonathan Kaiman in Baotou
Thu 20 Mar 2014 14.30 GMT
https://www.theguardian.com/sustainable-business/rare-earth-mining-china-social-environmental-costs

109. **Rare-earth mining in China comes at a heavy cost for local villages**
Pollution is poisoning the farms and villages of the region that processes the precious minerals
Cécile Bontron
Tue 7 Aug 2012 13.59 BST
https://www.theguardian.com/environment/2012/aug/07/china-rare-earth-village-pollution

110. **China Wrestles with the Toxic Aftermath of Rare Earth Mining**
China has been a major source of rare earth metals used in high-tech products, from smartphones to wind turbines. As cleanup of these mining sites begins, experts argue that global companies that have benefited from access to these metals should help foot the bill.
BY MICHAEL STANDAERT
JULY 2, 2019
https://e360.yale.edu/features/china-wrestles-with-the-toxic-aftermath-of-rare-earth-mining

111. **The dystopian lake filled by the world's tech lust**
By Tim Maughan
2nd April 2015
https://www.bbc.com/future/article/20150402-the-worst-place-on-earth

112. RTE's weekly 'World Report programe also alluded to the issues presented in Baoding, China on 31st May 2015; http://www.rte.ie/radio1/world-report/ It was referred to as Chinas most polluted city.

113. **Rare earth mining in China: the bleak social and environmental costs**
China produces 85% of global supply of the 17 chemically similar elements crucial to smartphone, camera lens and magnet manufacture – and half that output is from the city of Baotou
Jonathan Kaiman in Baotou
Thu 20 Mar 2014 14.30 GMT
https://www.theguardian.com/sustainable-business/rare-earth-mining-china-social-environmental-costs

HUMAN RIGHTS

114. In addition to the issue of sustainability raised above, there are clearly significant Human Rights issues to consider here. This is an important area, which is always overlooked. It is submitted therefore that detail be provided on the sourcing of the raw materials together with the component parts required to pull together the proposed instillation. It is therefore unconscionable that the practices alluded to in the appended article should be supported in any way.

115. **Spinning Reserve:**

It follows that alternative sources of energy must be constantly available to provide power when wind isn't blowing. This can be referred to as cycling up and cycling down. During periods of static air mass and nil generation of wind energy, power must be generated from other sources.

Currently the main energy source is at the Moneypoint station in County Clare. Is it not the case that this must be kept burning in order to take up the slack when there is no wind energy coming on stream? We understand that it and similar power plants cannot be turned off, as they take too long to power up (48 hours), which for obvious reasons would not be feasible when wind energy falls off. We further understand that this has been very problematic in Scotland where there are a large numbers of wind turbines. '

The Limits of Wind Power [by William Korchinski] states: - '***The analysis reported in this study indicates that 20% would be the extreme upper limit for wind penetration... Very high wind penetrations are not achievable in practice due to the increased need for power storage, the decrease in grid reliability, and the increased operating costs. Given these constraints, this study concludes that a more practical upper limit for wind penetration is 10%. At 10% wind penetration, the CO2 emissions reduction due to wind is approximately 45g CO2 equivalent/kWh, or about 9% of total.***' [Source: The Limits of Wind Power [by William Korchinski]

In 2012, Ireland was already at 15.3% from wind. This figure is almost certainly higher now with the advent of more energy streams (including wind) since then. '*The Department of Energy figures also show that in 2012 19.6 per cent of our gross electricity production was by renewables. 15.3 per cent of this was wind, followed by 2.7 per cent by hydroelectricity.*'

116. **Efficiency of Wind Turbines:**

'*Not all the energy of blowing wind can be harvested, since conservation of mass requires that as much mass of air exits the turbine as enters it. Betz's law gives the maximal achievable extraction of wind power by a wind turbine as 59% of the total kinetic energy of the air flowing through the turbine*' [Harvesting the Wind: The Physics of Wind Turbines Kira Grogg – 2005]

'*Further inefficiencies, such as rotor blade friction and drag, gearbox losses, generator and converter losses, reduce the power delivered by a wind turbine. Commercial utility-connected turbines deliver 75% to 80% of the Betz limit of power extractable from the wind, at rated operating speed.*' [Tony Burton et al., (ed), Wind Energy Handbook, John Wiley and Sons 2001], See also http://en.wikipedia.org/wiki/Wind_turbine#Efficiency

117. **Sea based Alternatives:**

Having regard to the fact that there is far more wind at sea and as such the sea is a far more suitable location for such units (Subject of course to appropriate citing).

Transporting power from sea-based instillations is also much easier in that there is no 3rd party landowners or upset residents with which to be concerned. Curiously we were unable to find any discussion on locating this project at sea in the non-technical summary of the E.I.S. conducting a simple word search.

Therefore, the discussion on alternative sites without discussion of sea-based turbines significantly calls into question the completeness of the E.I.A.R., which demeans the application in our view. It would therefore appear that the limited discussion on alternatives is more of a box ticking exercise rather than of any real engagement with the spirit of the E.I.A. directive.

RoCoF

118. **RoCoF**: Rate of Change of Frequency (islanding detection method for decentralised generation units). Because wind fluctuates electricity generated changes regularly which can cause problems o the grid. This is difficult to manage on the grid. It follows that the more wind that is put on, the more difficult it is to manage. i.e. the more wind we get the more likely the grid will have problems in managing the fluctuating power intake. We have inserted some quotes taken from a document published in 2011 by the University of Manchester entitled 'Loss of Mains Protection':

'Loss of Mains (or islanding) occurs when part of the public utility network (incorporating generation) loses connection with the rest of the system
If LOM is not detected, then the generator could remain connected, causing a safety hazard within the network.
Automatic reconnection of the generator to the network may occur causing damage to the generator and the network
Islanding is not permitted in most countries. The most challenging scenario is when the local load closely follows the generator output both in terms of active and reactive power.
LOM performance requirements – stability
LOM should be stable under remote faults cleared by the utility system.
It is undesirable to issue a false trip as it leads to the unnecessary disconnection of the generator.'

WIND ENERGY [6.15.3.2]

119. The current wind energy strategy is driven by Irelands National Renewable Energy Action Plan [NREAP], which was submitted to the EU in July 2010 and details the renewable energy plant up to 2020. This is revised every 2 years based on whether Ireland is meeting its targets. As we understand it, currently renewable electricity ambitions are 40% of which 90% is to come from wind, which is ludicrous in the knowledge that there is a much more sustainable and less intrusive solution in the form of Deep-Geothermal.

HAZZARDS

120. **Safety**: There has been a litany of safety issues with wind turbines. One in Tyrone came down despite very little wind. One in Donegal also blew down in a gale. Another in West Cork went on fire. There are numerous other incidents reported on. There is also evidence of oil leaks from wind turbines, which pose a threat to contamination of the groundwater aquifer.

121. **Mental Health**: if people are subjected to constant swishing and flicker, one must have a very real concern for mental health issues. Large-scale wind-energy projects (turbines) may be compared to a neighbour who is always noisy and in your face. This neighbour never once ruptured your eardrums but that neighbour slowly drives you crazy. These turbines are those nightmare neighbours. One must prove it will harm them, whereas conversely a drug company would have to prove they were safe. The promoters of a wind development should likewise be required to prove that. Is even one death worth foisting such an unwanted development on a community?

122. **Physical Health**: On the wider issue of health, there is growing evidence that physical health is effected by nearby Wind Turbines. I refer specifically to recent reports on the matter by Dr. Alun Evan of Queen's University, Belfast. Moreover, the UN Committee Against Torture has explicitly identified prolonged sleep deprivation as a method of torture. The Committee had this to say about the impact of prolonged sleep deprivation: "*The Committee against Torture (CAT) has noted that sleep deprivation used for prolonged periods constitutes a breach of the CAT, and is primarily used to break down the will of the detainee. Sleep deprivation can cause impaired memory and cognitive functioning, decreased short term memory, speech impairment, hallucinations, psychosis, lowered immunity, headaches, high blood pressure, cardiovascular disease, stress, anxiety and depression.*" Source: http://thejusticecampaign.org/?page_id=273#T2

123. **Electromagnetic fields**: a development such as the one proposed will necessitate a significant amount of cabling. This together with the energy fields from the turbines themselves will give rise to significant electromagnetic fields. Given the proximity of the turbines themselves together with the cabling so close to residential and commercial development, there is great concern for the health and welfare of human beings.

124. **Air amenity**: The height of the turbines is alarming. The skies are enjoyed by numerous flying enthusiasts ranging from light aircraft to motorized para-gliders and hot-air ballooning and so on. These flay at much lower altitudes than commercial aircraft. The proposed turbines would with near certainty pose significant health and safety issues. Heretofore, turbines were typically situate on mountain tops and at sea where little or no recreational activity took place.

125. **Entrance onto roads**: In addition to the hazard caused by such entrances to both pedestrians and to road users, it is submitted that service entrances would represent a loss of amenity to local residents.

126. **Infrasound**: There has been many academic papers on the subject of infrasound. Infrasound, sometimes referred to as low-frequency sound, describes sound waves with a frequency below the lower limit of human audibility (generally 20 Hz). A scientist working at Sydney University's Auditory Neuroscience Laboratory reports growing evidence that infrasound may affect some people's nervous system by stimulating the vestibular system, and this has shown in animal models an effect similar to sea-sickness. There is growing evidence that wind turbines are a major source of infrasound and that they have an adverse affect on human health for many miles around as infrasound travels long distances.

127. **Interference with TV reception**: The residents are understandably most concerned that his TV reception would be interfered with. Moreover, some have installed security systems and concern is expressed for fear there may be any interference.

128. **Cabelling**: It is submitted that the cabelling carrying the electricity, would: -

a. Interferer with future planning prospects for certain residents and businesses in the area.
b. Moreover, Pylons would undoubtedly have to be erected to carry the cable, which in turn gives rise to further visually obtrusive issues.

IMPACTS on BIODIVERSITY

129. **Wildlife**: It is submitted that both the EU Birds and Habitats Directives are also, would have a significant impact on the small-scale diverse landscape. [DIRECTIVE 2009/147/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 30 November 2009 on the conservation of wild birds (codified version) of Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds] together with Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora of 21 May 1992 (Habitats Directive)]. The RSPB state that '*The available evidence suggests that wind farms can harm birds in three possible ways – disturbance, habitat loss (both direct and/or indirect) and collision. Some poorly sited wind farms have caused major bird casualties, particularly at Tarifa and Navarra in Spain, and the Altamont Pass in California. At these sites, planners failed to consider adequately the likely impact of putting hundreds, or even thousands, of turbines in areas that are important for birds of prey.*'

130. BIRDS: Wind turbines if located in this flat low-lying terrene may pose issues for birds. This area is in the path of migrating birds, which can with regularity be seen at specific times of the year on their route North or South depending on the season.

131. BATS: Moreover, the proposed location is in low-lying countryside, which is a habitat for bats. Bats confuse wind turbines for trees. Most of the bats die because their lungs collapse when they run into low air pressure around the tips of the wind turbines — not because they hit the towers or blades.

132. **Loss of Trees**: We understand that a significant quantum of trees would need to be removed to facilitate the current proposal. As things stand, Ireland is already one of the worst countries in Europe for tree cover. Ireland lost most of its residual and indigenous woodland over the centuries. Further felling of trees is absolutely unacceptable. Moreover trees act as a Carbon sink. In addition to the carbon footprint issues alluded to above, the removal of all these trees also raises issues regarding loss of habitat and in consequence biodiversity.

133. **Loss of Agricultural Land**: Be it raised bog or agricultural land, the loss of biodiversity and the disturbance to both nature and humanity is considered unacceptable. Agricultural land and or raised bog is a very valuable resource. This is very evident when one visits other countries such as Spain, where the arid landscape is in stark contrast to the lush green productive landscape that we take for granted here in Ireland. Therefore the proposal to site turbines in the midst of bog or agricultural lands is considered irresponsible. Furthermore, in addition to the actual footprint of the turbines, significant tracts of land will be lost to access roads and the like.

134. There are numerous references to a 500 m buffer zone. A 500m 'buffer zone' cannot be regarded as a buffer at all. No one could be expected to tolerate a turbine of this size and scale so close to their property/ residence. The suggestion is so ridiculous that further comment is considered unnecessary.

135. **Proximity to c.SAC**: It will be further noted that the **River Boyne and Blackwrer** c.SAC [002299] is in relatively close proximity to the proposed development. This is significant in the context of surrounding wildlife habitat.

136. **Disruption**: Apart from the operational issues, the residents of the area and surrounding areas, would suffer all manor of disruption ranging from: -

a. Construction Traffic
b. Service Entrances
c. Caballing from the proposed turbines would almost certainly need to traverse other properties.

Other Sources of Alternative Energy

137. **Alternative Energy Sources**: Renewable Energy comes in many forms including: - Biomass, Geothermal, Solar Energy, Wave Energy, Tidal Energy, Hydroelectricity, etc. It is appropriate that we should give a brief analysis of each below.

138. **Solar power**: Is the conversion of sunlight into electricity. This is somewhat dependent on technical advances in the conversion rates of the photovoltaic (PV) cells that convert sunlight into electricity. Moreover, battery power would be required during night hours or when there is poor sun during daylight hours.

139. **Biomass:** usually refers to plants, which are specifically grown as a crop for the purposes of energy generation. **Often available in the form of wood pellets that can be produced from crops of plants such as willow. Given the existing Moneypoint Power plant in County Clare, there is potential to convert this plant from burning coal (fossil fuel) to burning biomass.**

140. **Biofuels**: Biofuels have been proposed as an alternative by some commentators. Bioethanol is made by fermenting plant materials and biodiesel is made from vegetable oils, animal fats or recycled grease. Biofuels typically include Biodiesel and Ethanol. In 2008 biofuels provided a mere 1.8% of the world's transport fuel. Bioethanol production relies on the cultivation of large amounts of plant material. A major issue with biofuels is that arable land would have to be taken out of food production to produce bio fuels. Given that the human population of the world is increasing at a rate never before seen, little of no land could be made available for production of biofuels. Moreover, there is a danger that more tropical rain forest would disappear to satisfy the demands for same.

141. **Hydrogen**: Hydrogen can be used to power future transportation and may be the power of the future given that hydrogen is the most common element in the Universe. Power can either be through the use of electric motors powered by fuel cell technology or by improved internal combustion engines. In both cases emissions would be zero. The difficulty is that Hydrogen power is currently prohibitively expensive, but progress is being made in the technology to achieve this. A big challenge is to source the hydrogen from renewable resources. Honda has produced the first 'commercial' hydrogen powered vehicle in the form of the Honda FCX Clarity, although this has limited availability.

142. **Tidal**: Tidal energy capture usually consists of the construction of barrage dam type structures is being examined as a means of converting tidal movements into energy. Turbines installed in the barrage wall generate power as water flows in and out of the estuary basin, bay, or river. There are downsides to this though, the most obvious one being that the structures in themselves are visually obtrusive. There are also ecosystem considerations as the flooding of mud-flats within the estuary together with altered saltwater flow which changes the hydrology and salinity within. That said, they are not near as visually obtrusive as large land based wind turbines.

143. **Wave**: Wave Energy refers to the capture of energy from the motion of surface waves of the ocean. This is still a developing science, which is still in experimental stage but looks promising.

144. **Hydroelectric**: Hydroelectric: the capture of energy from running water such as in a river is perhaps among the oldest of the alternative energy's as was seen in the 17-1800's when countless water mills were erected on river banks to power massive mechanical apparatus. In the 1900's this was developed into a far more commercial scale energy capture with the construction of massive dams. Examples being the famed Hoover Dam on the Colorado River in the USA, The Three Georges Dam on the Yangtze River in China, the Golden Dam situate on the Golden River, in Tasmania, Australia and Ardnacrusha power plant situate on the Shannon River in Ireland.

145. **Geothermal**: Geothermal: work on this form of energy generation is much more advanced that other alternatives. Energy capture ranges from installing a series of pipes in the upper layers of the earths crust typically about a meter deep in domestic type situations. On a commercial basis, exploitation of hot springs, which often occur on fault lines is usually indicative of thermal energy close to the surface.

146. **Deep Bore Geothermal**: This is essentially 'free' energy contained within the earths crust. Briefly, it entails boring to depths of between 2 and 3 miles and harnessing energy from the natural heat contained within the earth's crust where temperatures of between 100°c and 200°c can be easily achieved. This is done by circulating water down and back up (rather like a heating system). A very small plant is all that is required on the surface to convert the energy into electricity. There are many examples around Paris, Austria, Germany, Iceland and so on. The Eden Project in Cornwall published plans for such a plant in October of 2019. See: https://www.dailymail.co.uk/sciencetech/article-7571129/Eden-Project-ahead-17m-geothermal-energy-revolution.html

147. **Wind at Sea**: There is a far more constant wind flow at sea which makes sighting them at sea far more advantageous than on land. In addition and subject to appropriate sitting, there isn't near the same visually obtrusive issues. There is also the advantage of utilizing the bedrock and cutting out the cost and wastage of vast amounts of concrete. Apart from fixing them to the seabed as in the case of the Arklow Bank, County Wicklow, there is also the possibility of floating wind farms. See appended article: -

148. Having regard to the foregoing, it is manifestly obvious that wind energy is not a long-term runner and is currently being artificially driven by significant grants, which serve only to create a rush for grants by investors and corporate's driven purely by 'returns' piggybacking on the 'Green' label.

149. Moreover the sighting of the wind turbines in a county that markets itself on its heritage is utterly crazy and unacceptable. The midlands have significant populations, together with significant heritage sites, which is of enormous touristic potential.

150. **If one were to persist with wind energy (even in some small manner), they should at the very least be prohibited in the populated and predominantly flat landscape of the midland counties.**

151. We can understand why Wind Energy became the front-runner as it was perhaps the most visually obvious. However, when all the facts are viewed objectively, it is utterly crazy to persist with this strategy. As we have seen above, this is badly flawed. Moreover, the emphasis on wind is largely derived from a lack of public consultation early on in this debate, which is contrary to basic democratic principles and more recently to the Aarhus convention and the Public Participation Directive.

DEEP BORE GEOTHERMAL

152. Off all the points listed above, Deep Geothermal is extremely promising and warrants further discussion having regard to the local context. Our research as shown this to be by far the most promising. For compression purposes, we thought it would be helpful if we compare Deep Bore Geothermal Energy.

153. This is essentially 'free' energy contained within the earths crust. Briefly, it entails boring 2 boreholes to depths of between 2 and 3 miles. It is dependant on the existence of a particular type of rock to conduct water from A to B. The water coming back up is superheated to temperatures of between 100°c and 200°c. A very small plant is all that is required on the surface to convert the energy into electricity. There are many examples around Paris, Austria, Germany, Iceland and so on. There is comparatively small investment in this energy when compared with that required to site a wind turbine.

154. The Caledonian fault line traverses the Irish and English landscape in a rough line from Limerick Dundalk – Newcastle in the UK. Either side of this, there are two different rock formations on two different tectonic plates. The differences in rock fossils in Scotland and England are well documented. Thermal energy tends to be much closer to the surface on such fault lines. In Ireland a fault line stretching from Limerick to Louth [the Caledonian fault line] where this heat is much closer to the earth's surface than elsewhere. This is where two tectonic plates collided many millions of years ago. All along this fault line there are numerous mines, the most notable being 'Tara Mines' in County Meath. Indeed the management at Tara have shared there knowledge on temperatures/ rock formations, etc to researchers of Deep-geothermal which was most helpful. The correct rock formation [Kentstown Rock Formation] lies beneath this area. Moreover there are numerous 'hot springs' all along this line and there is in fact a townland near Enfield, County Meath known as 'Hotwell'. At times of significant rainfall events, water comes up boreholes at c.22°c, such is the geothermal activity beneath.

155. The irony with the current planning proposal is that alternative energy is virtually underneath the proposed sites. Moreover, as an energy source, it's far more stable and reliable than wind energy. This has been used as an energy source in Austria and other countries. We can inform that legislation is currently being drafted to facilitate this energy source in an Irish context. Therefore, leaving aside all the other planning and related issues, it is submitted that the erection of turbines in the current context is rather ironic. It is unlikely that there would be the same challenging issues re **RoCoF** with the use of Deep Geothermal

156. GT Energy (a specialist Geothermal energy company) had raised capital investment and was ready to begin work here in Ireland in 2011, but due to a minor legal technicality they were unable to proceed. The legislation was to be changed to facilitate this, but sadly this has not thus far happened.

157. The ADVANATAGES of Deep Geothermal over Wind are many and may be summarised as follows: -

a. no visually obtrusive issues,
b. no property devaluation,
c. no health issues,
d. no fluctuations in the availability of energy,
e. no spinning reserve (backup) requirement,
f. no wastage of finite natural resources such as sand and gravel, steel and so fourth.
g. There are numerous suitable geological bedrock areas in Ireland.

158. There has been major progress in the UK regarding this form of energy and I refer the reader to the following links: -

Eden Project: Drilling starts for geothermal power
The 450-tonne research rig is working to drill down 4.5km (2.8 miles) into granite to test potential power at the Cornwall site as part of a £17m scheme.
19th May 2021
https://www.bbc.com/news/uk-england-cornwall-57171058

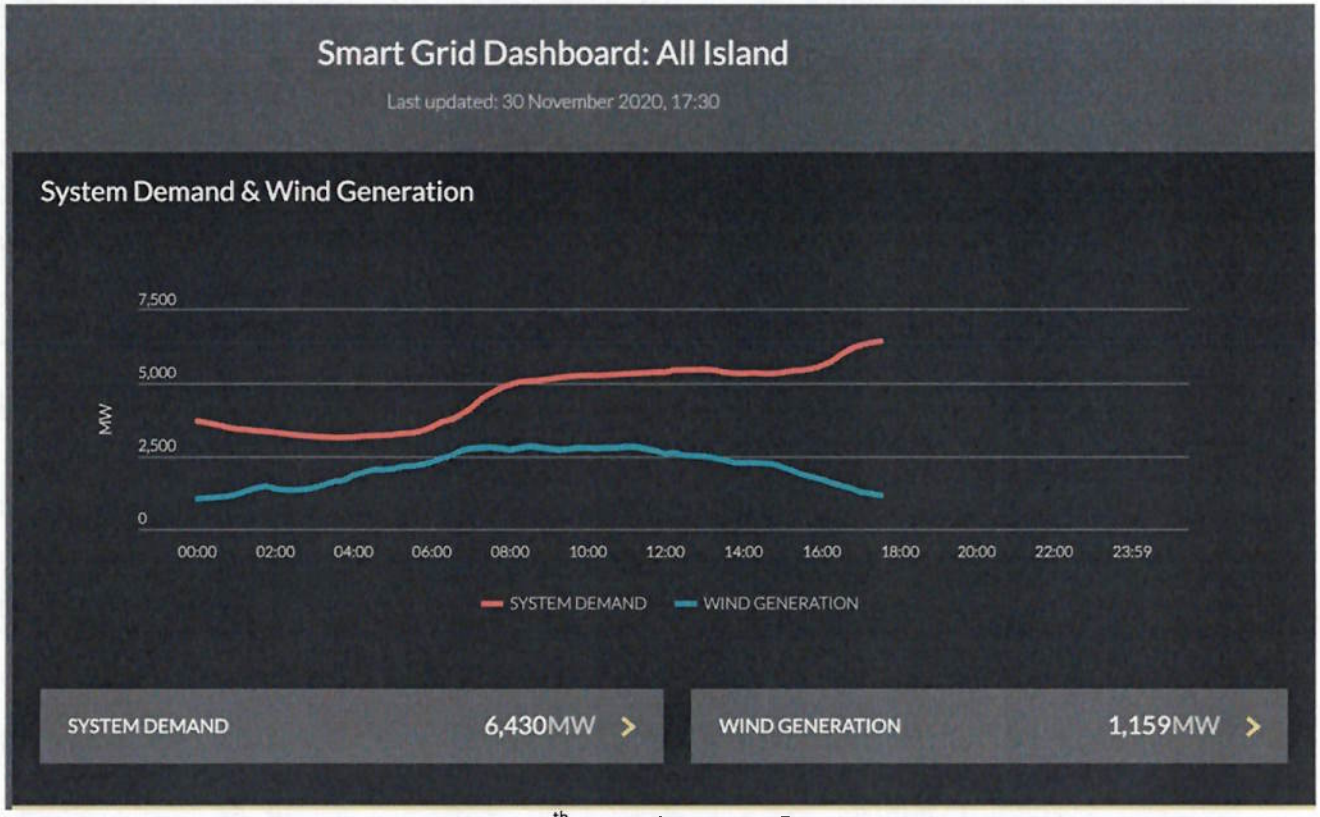
Scientists searching for 'Holy Grail' of energy begin drilling into Earth's crust to power Eden Project
Geothermal energy is energy generated and stored in the earth's crust and the Eden Project site could heat 4,000 local homes.
Thomas Moore
Thursday 20 May 2021
https://news.sky.com/story/scientists-searching-for-holy-grail-of-energy-begin-drilling-into-earths-crust-to-power-eden-project-12311065

UK Geothermal: boiling beneath the surface?
By Scarlett Evans
11 Dec 2019
A new report from the British Geological Survey (BGS) says that the only way the UK can reach its target of net zero emissions by 2050 is to explore below the earth's surface - harnessing geothermal energy to achieve its goal. But just how much geothermal energy is the UK sitting on? We investigate.
https://www.power-technology.com/features/uk-geothermal-boiling-beneath-the-surface/

https://pubs.geoscienceworld.org/pg/article-lookup?doi=10.1144/petgeo2019-084

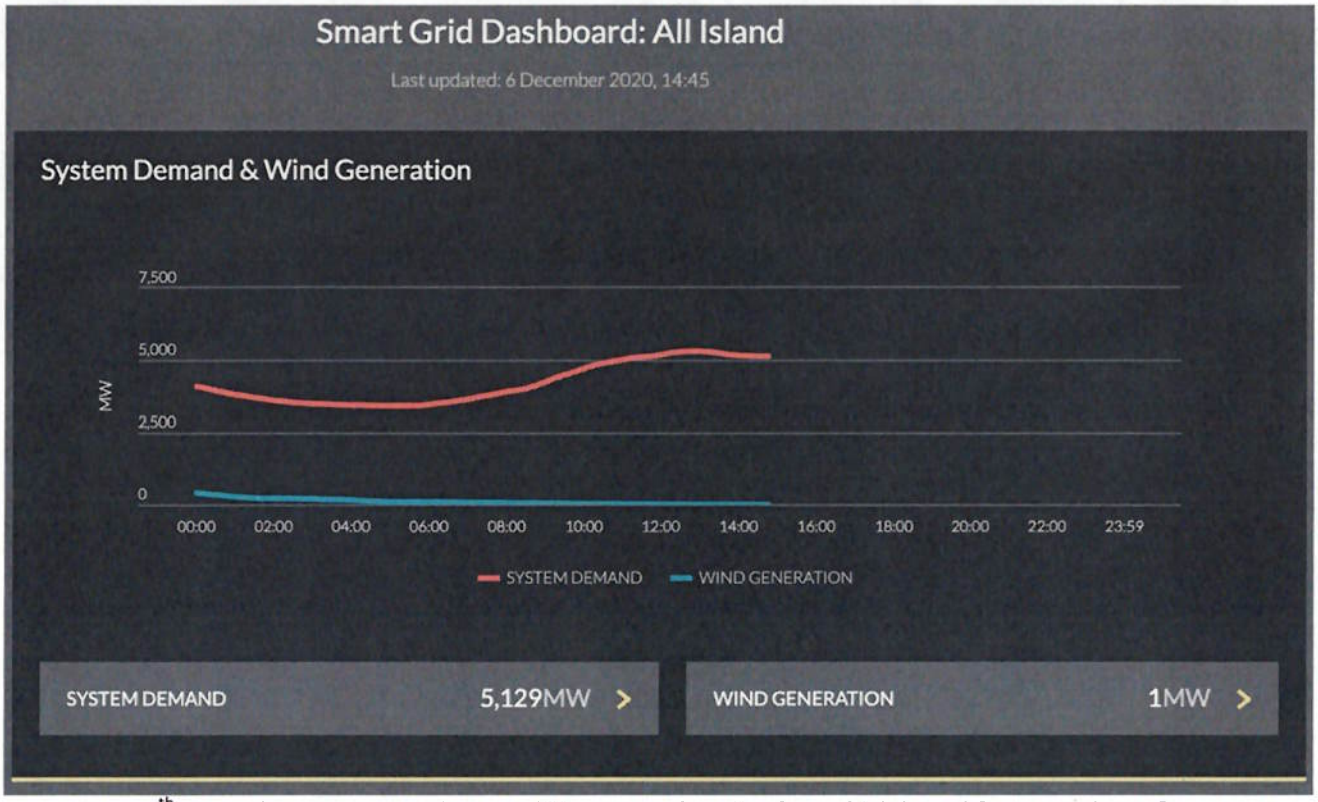
ENERGY MATRIX on RANDOM DATES

To demonstrate just how undependable and unsustainable wind is, I am attaching photographs from various dates since November 2020 which were taken from the Eirgrid Dashboard and which show the system demand together with the contribution from wind energy. These are but a small sample; I have many more [https://www.smartgriddashboard.com]

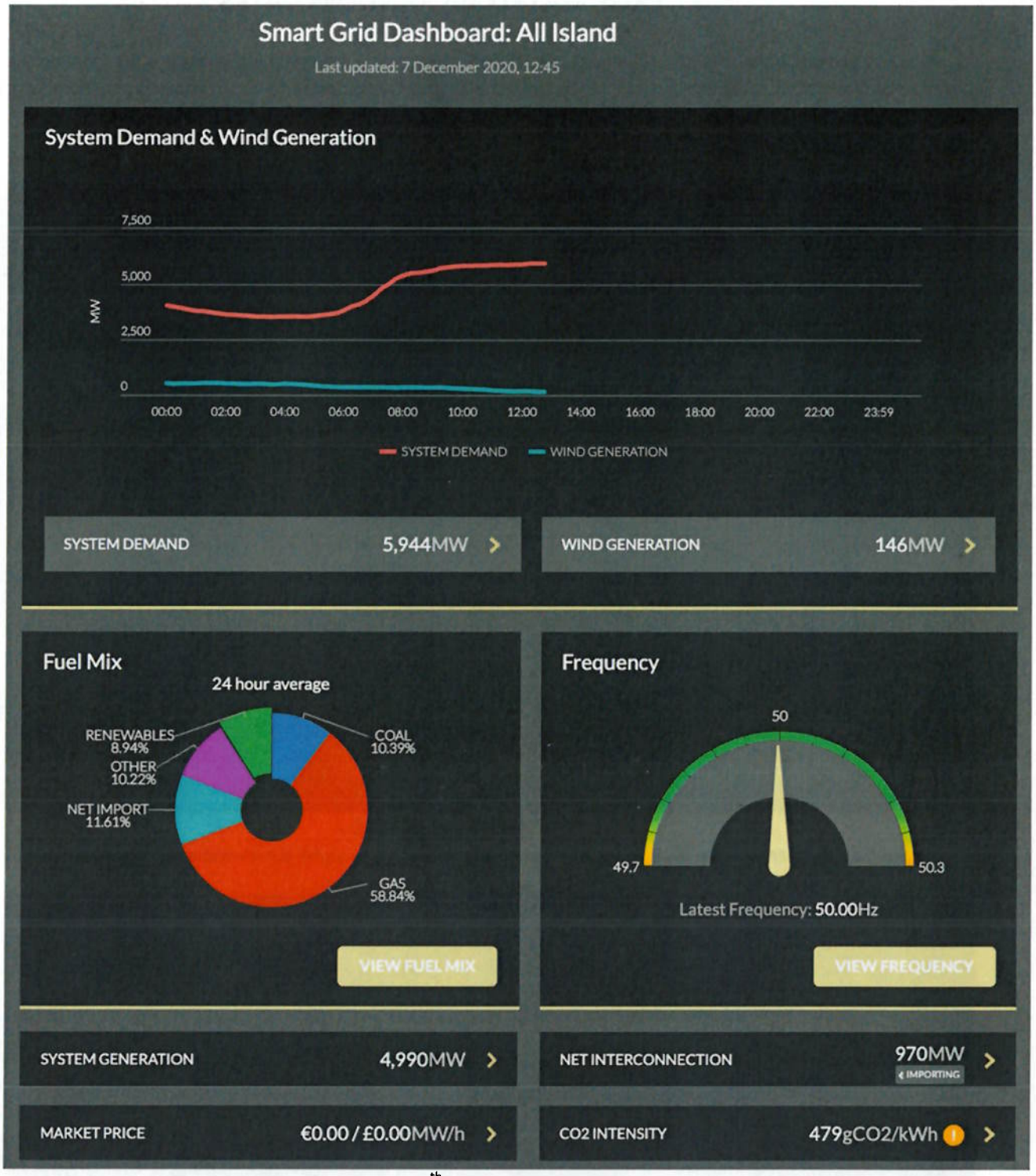


30th November 2020. ©

Note that the demand for electricity was increasing while at the same time wind supply was decreasing.



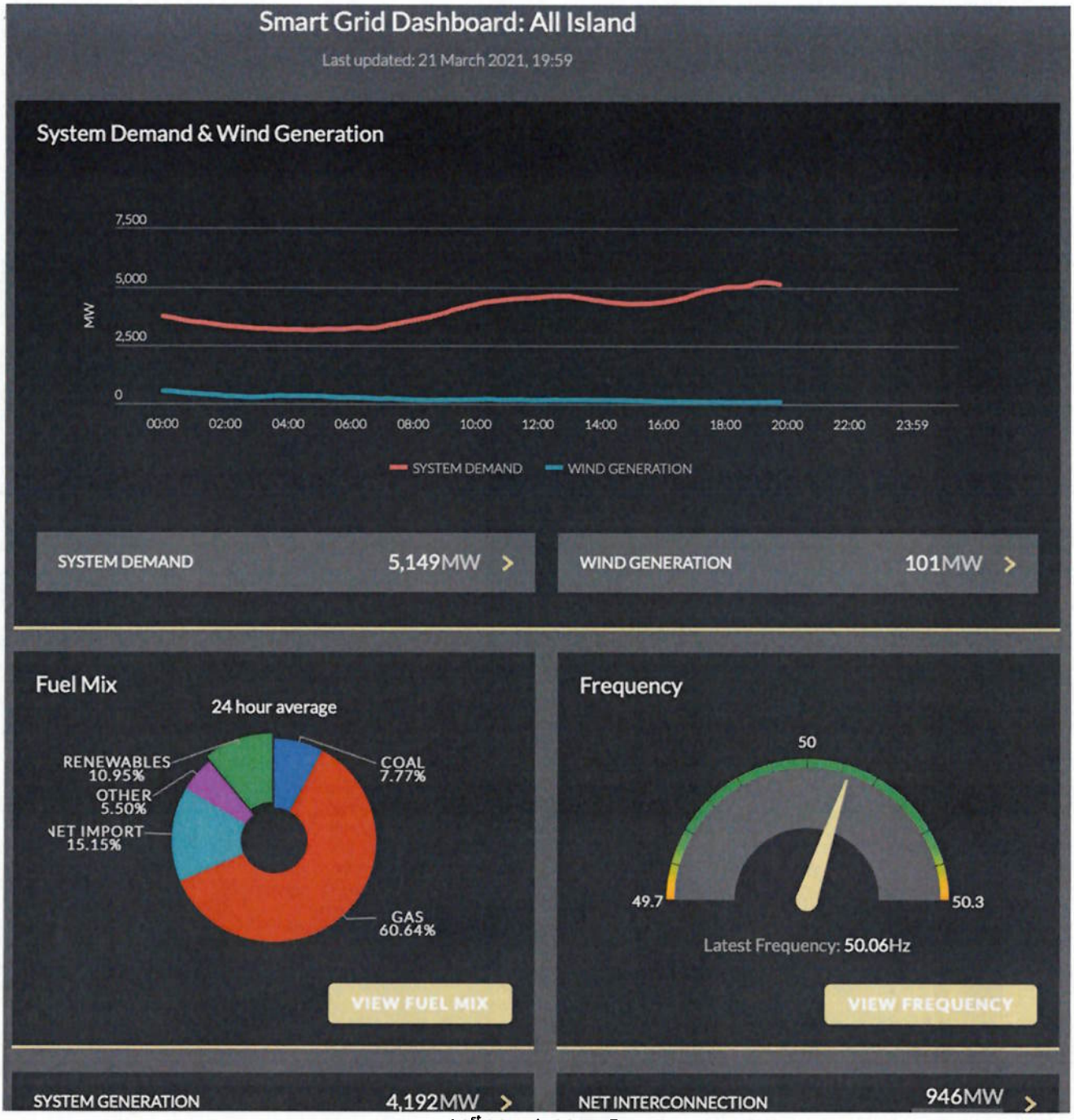
6th December 2020: Weather conditions were freezing fog, which lasted for some days. ©



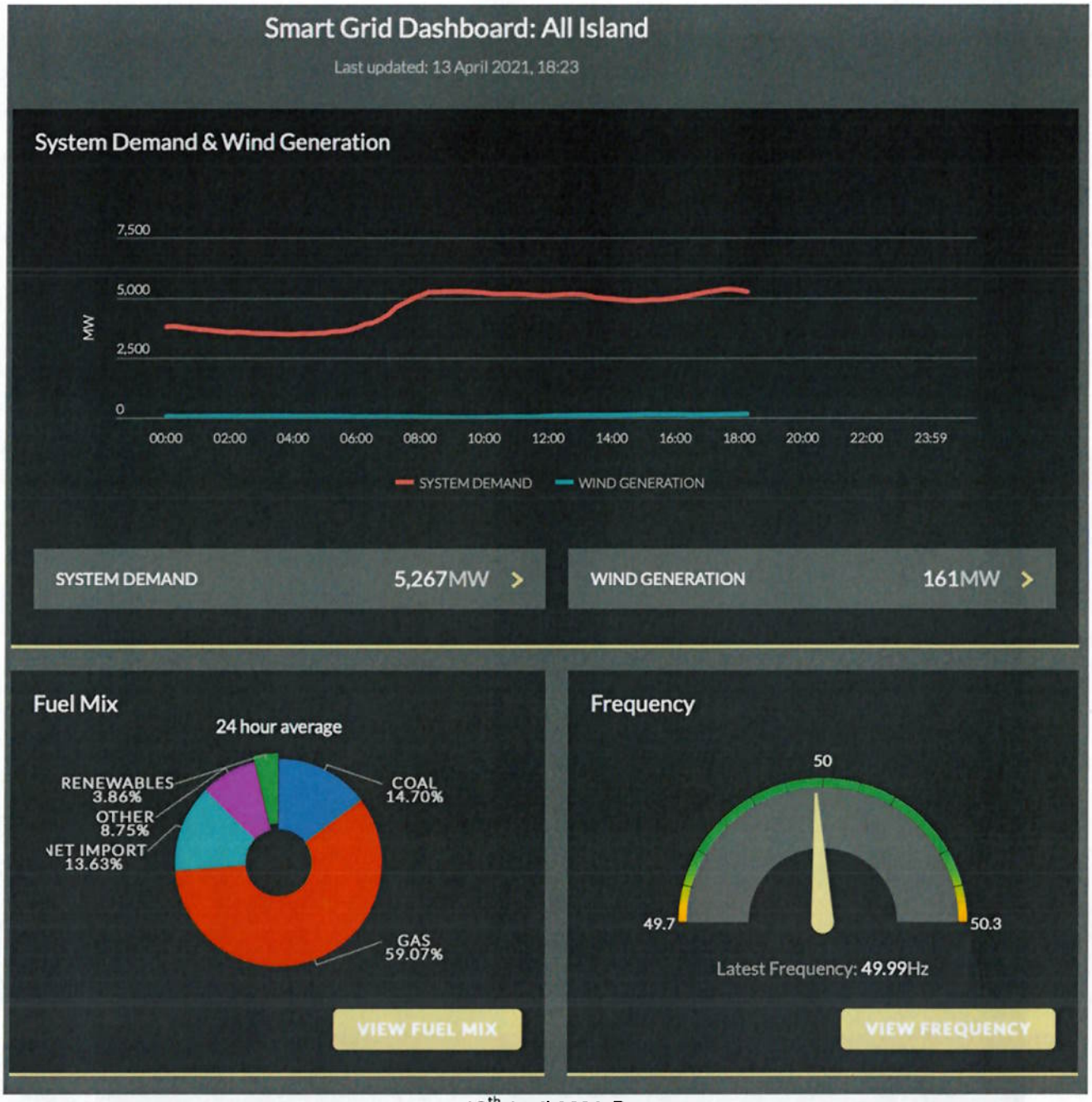
7th December 2020 ©

30th December 2020 ©

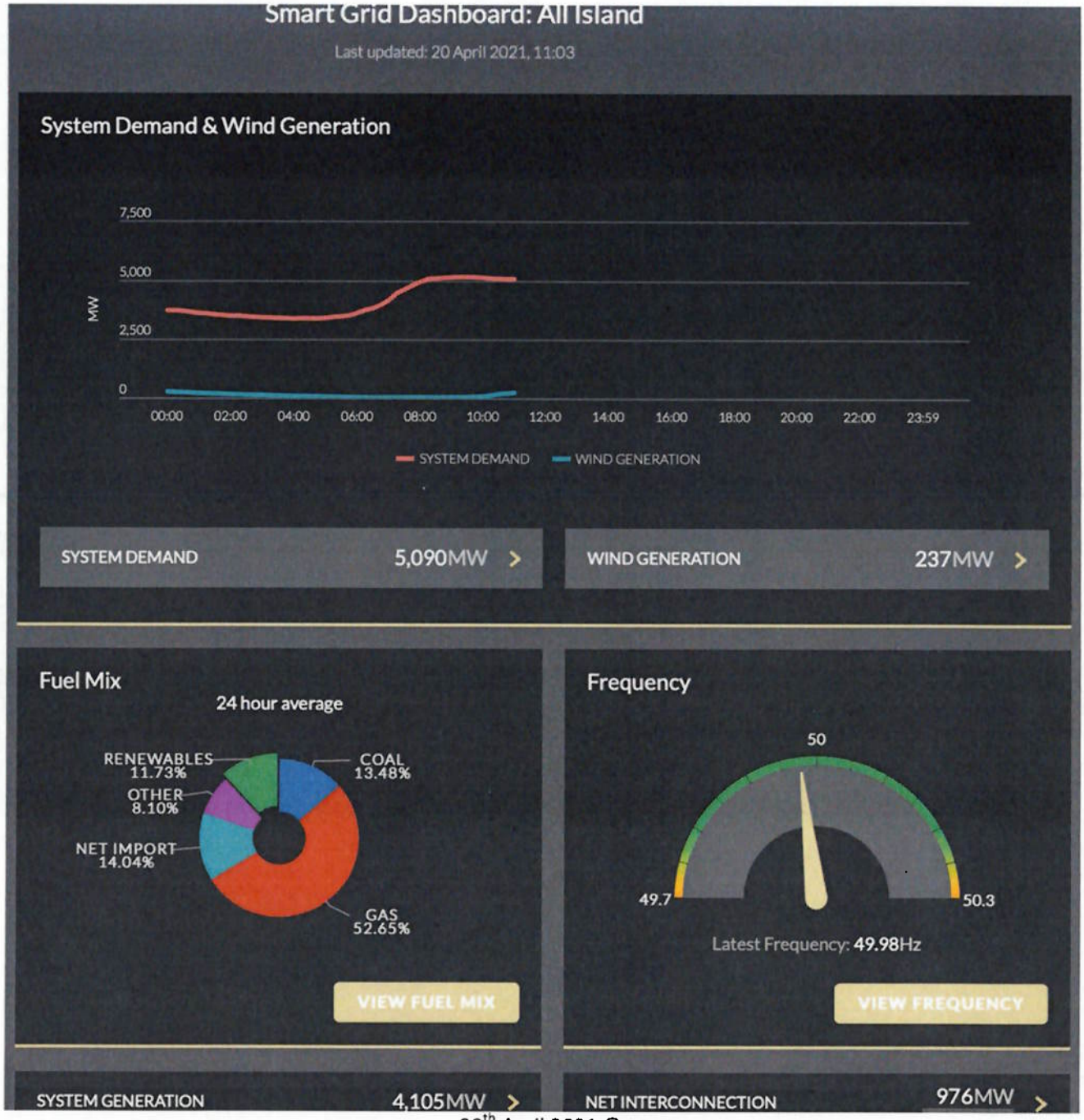
7th March 2021 ©



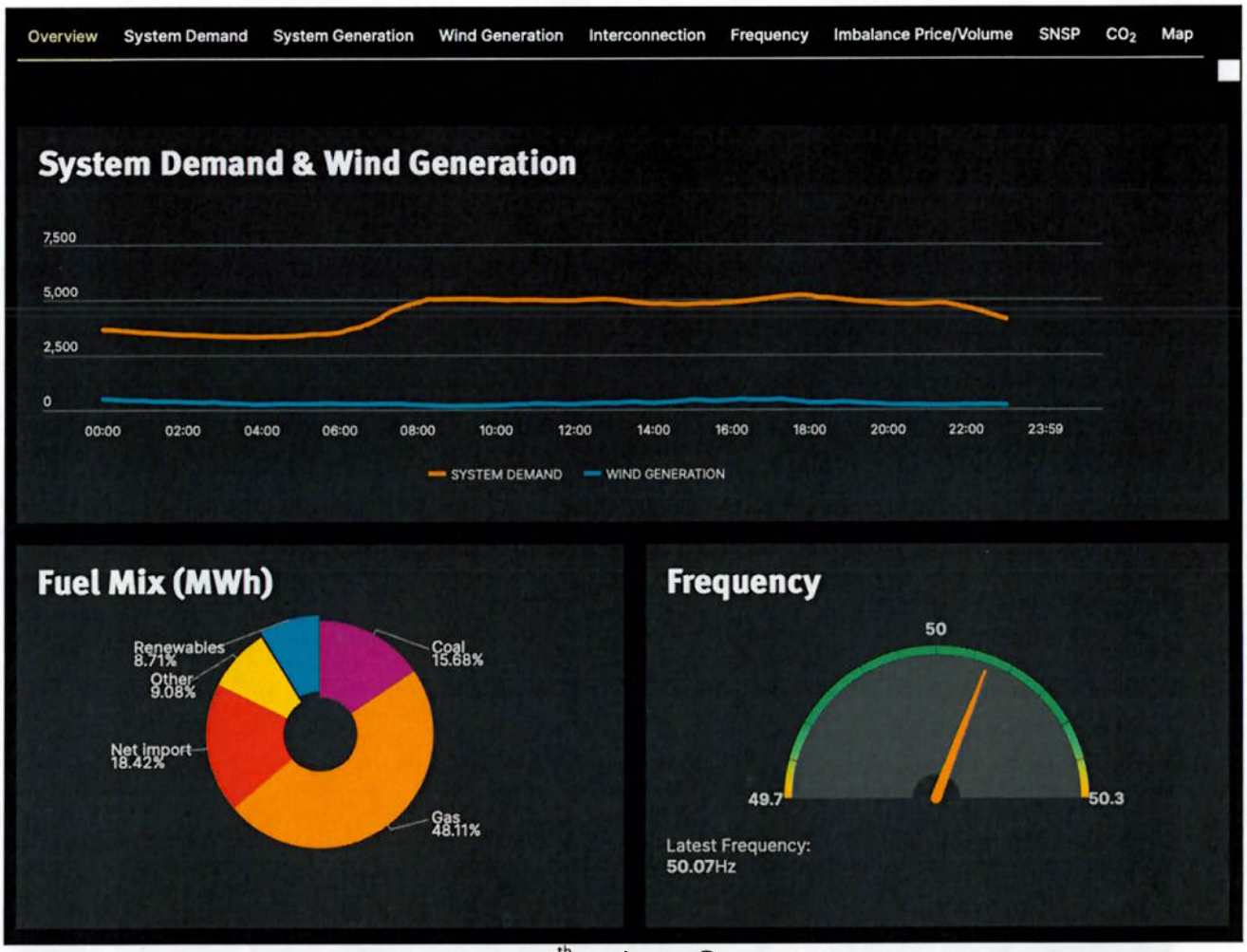
21st March 2021 ©



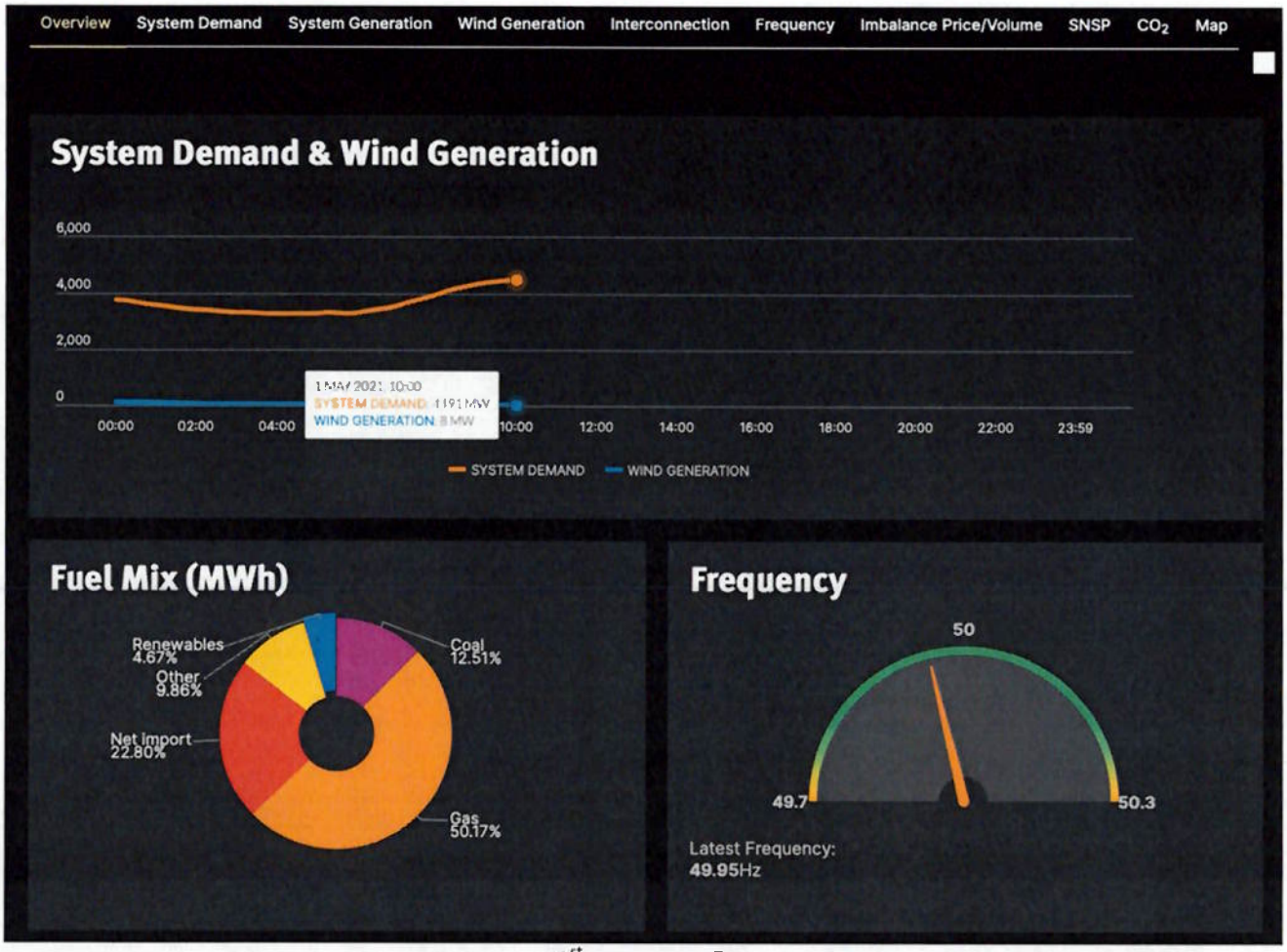
13th April 2021 ©



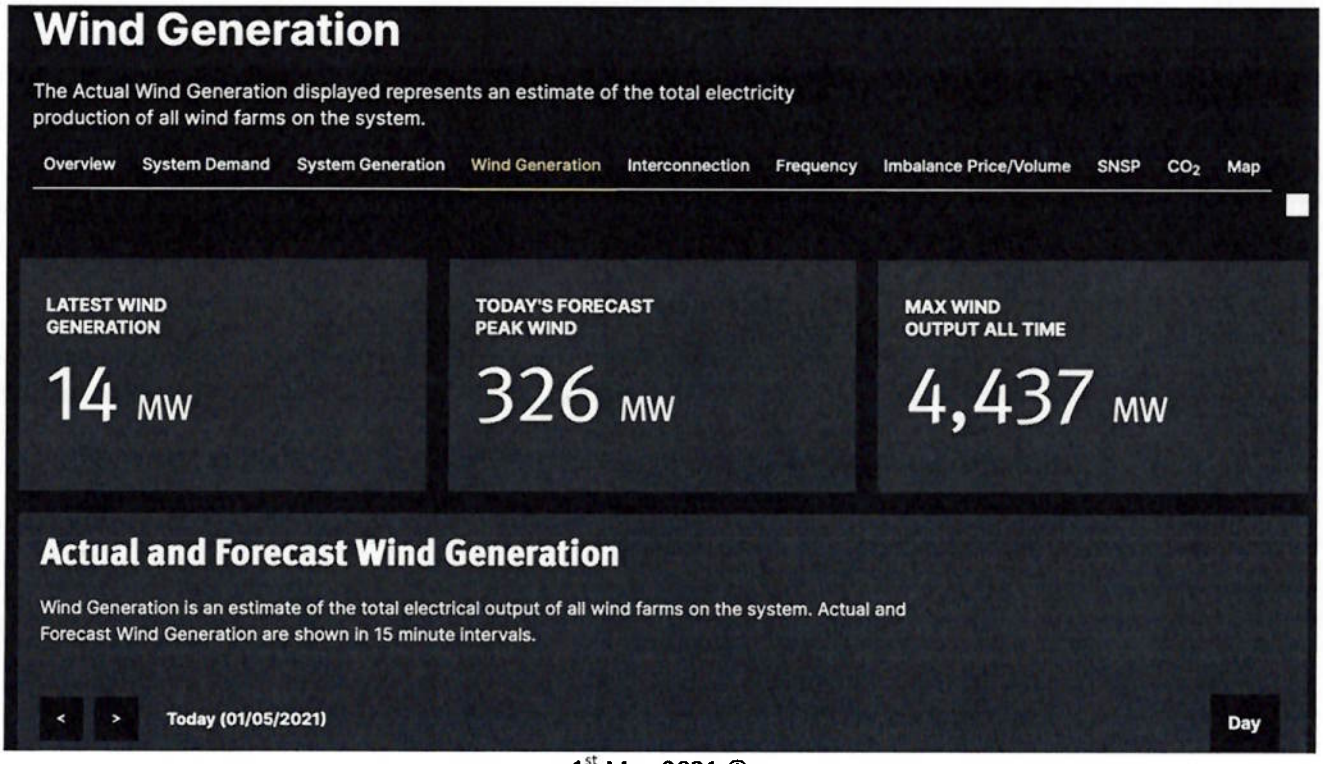
20th April 2021 ©



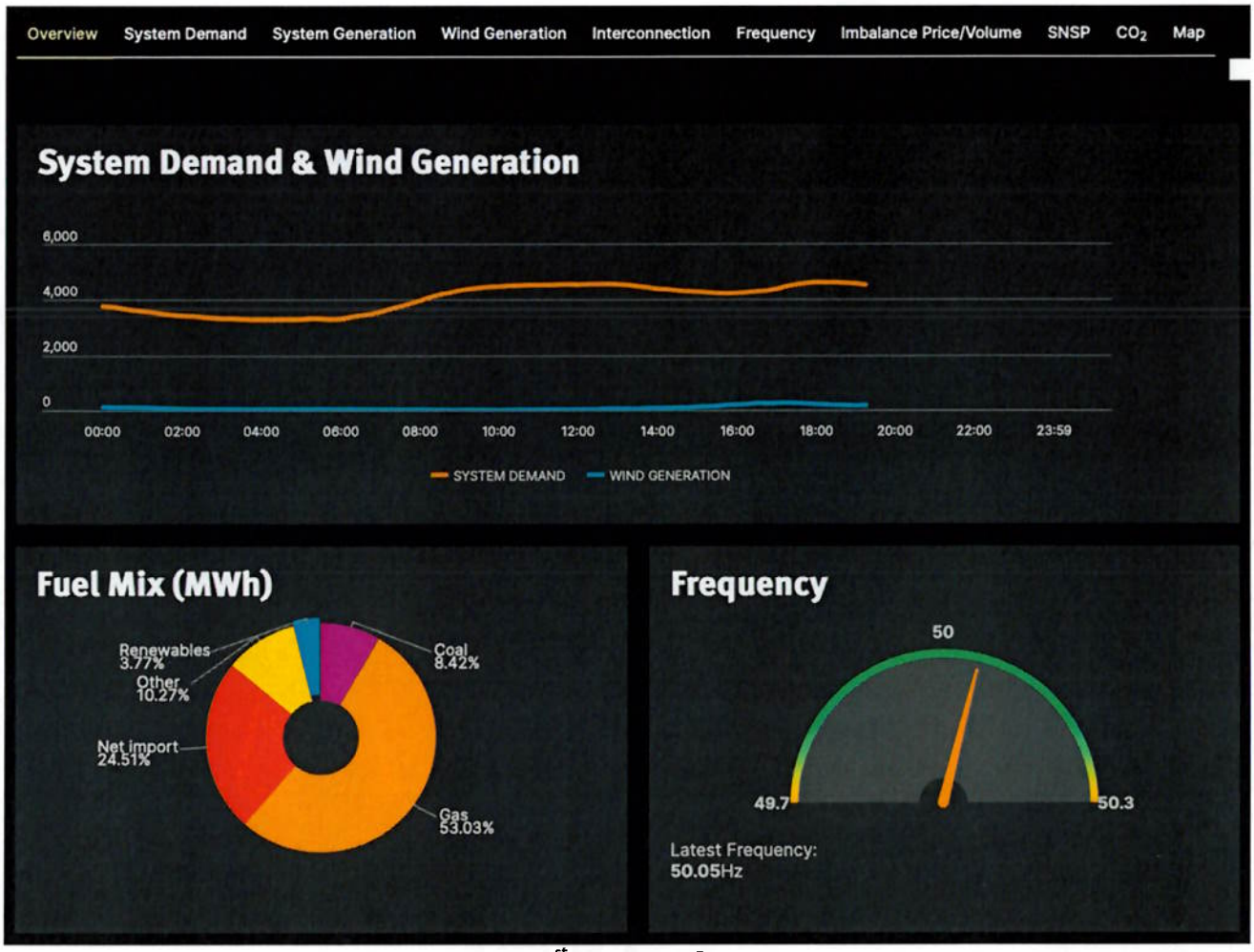
29th April 2021 ©



1st May 2021 ©



1st May 2021 ©



1st May 2021 ©

159. It is remarkable that during times of frosty weather when electricity is at a premium, wind delivers little or nothing. The same can be said when the country is basking in sunshine and there is little or no wind. The converse then occurs with heavy demand on Air Condition units put a heavy draw on electricity and it having to be provided by gas fired plants. This is a ludicrous situation.

160. It is inappropriate that wind should be prioritised over other forms of renewable energy. Why not for example Deep Bore Geothermal energy which is less invasive on humanity and the environment?

161. We recommend that a **full cost/ benefit analysis** be conducted to establish value for money given the resources required taking into account the intermittent nature of solar energy. This should include comparisons with other forms of sustainable energy with particular reference to **Deep-bore geothermal** energy, which is fully dispatchable and not intermittent. Such an analysis should ignore completely any artificial grant incentives and focus purely on the real cost of the development together with an assessment of what can realistically be expected in terms of deliverable energy generation at these northerly latitudes. This should also factor in worst-case scenario climatic conditions (light levels) with extensive periods of cloud cover.

162. Furthermore, a full analysis of **impacts upon the surrounding community** should be conducted.

163. Agricultural/ arable land is an extremely valuable resource for the production of crops. The importance of sustainable homegrown crops has recently come to the fore in light of the war in Ukraine. It transpired that Ukraine was supplying vast quantities of cereals to Europe and there is now a very strong likelihood of food shortages as a result of the Russian aggression towards its neighbor Ukraine. It will be noted that Irish farmers were in the spring of 2022 encouraged to sow more cereals to help bridge the gap. In the circumstances, to use up so much finite agricultural land with solar panels would be irresponsible and wrong. Given that so much roof spaces is available to support solar panels, there are alternatives.

164. On balance it is considered that this development would create an undesirable precedent and should ultimately be declined.

165. **Both Wind and Solar energy is intermittent and not dispatchable.** ***(Dispatchable generation refers to sources of electricity that can be used on demand and dispatched at the request of power grid operators and according to market needs. Dispatchable generators can be turned on or off, or can adjust their power output according to an order.)***

PLANNING ENFORCEMENT/ POLICING

166. Without prejudice to the main rationale advanced in this submission that the current proposal is contrary to numerous planning principles, we are obliged to point out that it has been our experience in a long course of dealings with the enforcement departments of numerous municipal authorities, that enforcement of the planning laws has been poor and lethargic.

167. We regularly, encounter a plethora of conditions pertaining to a given planning permission, which are not enforced or followed up on. This continues to be the case even after specific concerns and issues have been raised. It follows that we would have similar concerns in the current context and other future developments.

168. Moreover, the concept of self-policing, which is where operators are mandated to submit various results to planning authorities on a specified regular basis, has also proved to be extremely problematic. Our experience has been that compliance with such requirements has been poor. Therefore it would be remiss of us not to express similar concerns for this and all other proposed developments of a significant or industrial nature.

GREEN WASHING

169. Having regard to the foregoing, it is submitted that wind energy is not a long-term runner and is currently being artificially driven by significant grants, which serve only to create a rush for grants by investors and corporate's driven purely by 'returns' piggybacking on the 'Green' label.

170. We can understand why Wind Energy became the front-runner as it was perhaps the most visually obvious. However, when all the facts are viewed objectively, it is utterly crazy to persist with this strategy. As we have seen above, this is badly flawed. Moreover, the emphasis on wind is largely derived from a lack of public consultation early on in this debate, which is contrary to basic democratic principles and more recently to the Aarhus convention and the Public Participation Directive.

171. Applicant's assertions about objectives of national policies in so far as they related to energy are nothing short of green washing. Proposals must be looked at in a planning context; all other issues are superfluous. Notwithstanding, we believe that other forms of sustainable energy are far better placed to fulfill national objectives.

172. Significant resources are required to enable this development. Please ensure that there is a full assessment of **all materials required in the construction this development**? Please also quantify the amounts of materials required to construct this proposed development with specific reference to rare earth metals?

CONCLUSIONS

173. **Social**: The proposed development/s are most undesirable from a community perspective. Quite aside from the planning issues which are detailed in this submission, the social effect of such a proposal on a community is unacceptable in that it is very divisive and causes all sorts of unewarrented upset.

174. Having regard to the principles of proper planning and sustainable development, and of the provisions of the Fourth Schedule of the 2000 Planning Act, it is submitted that the proposed development should declined for the foregoing reasons.

175. It is submitted that the proposals would represent disorderluy development.

176. There is no established use in this area for Turbines and certainly not the height and scale proposed.

177. The proposed service entrances would endanger public safety and create a hazard to residents and other road users. [**Section 4. Schedule Four of the 2000 Planning Act**]

178. The proposed development would adversely impact on the property value in the area and would seriously injure the amenity in the vicinity. [**Section 10. Schedule Four of the 2000 Planning Act**]

179. The proposed development would interfere with the character of the landscape and also with the views and prospects, which are considered to be of special amenity value and of natural interest and beauty. [**Section 8. Schedule Four of the 2000 Planning Act**]

180. The road network servasing much of the the proposed development is inadequate to accomadate the large volumes of construction traffic.

181. Having regard to the level of permitted residential development in the area, the proposed development would seriously damage the amenities of properties in the vicinity and would have a negative impact on the quality of life and the residential amenity of those living in the area.

182. The relatively flat landscape of Meath and Kildare is totally unsuitable for this type of development which would be visually obtrusive.

183. Furthermore, having regard to the agricultural and tourestic value of this landscape which has a high density of heritage sites together with the new 'Ireland's Ancient East' initiative (launched 14th April 2015), the proposed development is incompatible.

184. Having regard to previous decisions of An Bord Pleanála at nearby locations [aluded to above], the current proposal should be REFUSED. We coupd provide many more examples too.

185. It is desirous that the landscape which amongst other things comprises the Royal Canal, must be considered a unique national resource should be guarded for future generations.

186. The removal of such a large quantity of trees together with the importation of such a large quantum of concrete and aggregate is considered to be an unsustainable development.

187. The proposed development would give rise to degregation of an environment elswhere and indirectly inflict hardship on human beings in another part of the global community

188. The proposed development would contribute to an unsustainable use of natural resources.

189. It is considered that there is currently over capacity of wind on the national grid and that alternative energy sources such as Deep Geothermal would be more suitable and sympathetic to the lush green Irish landscape character.

190. The Proposed Development is incompatible with the County Development Plan.

191. Having regard to the foregoing it is manifestly obvious that wind energy is not a long-term runner and is currently being artificially driven by significant grants, which serve only to create a rush for grants by investors and corporate's driven purely by 'returns' piggybacking on the 'Green' label.

192. Moreover the sighting of the wind turbines in a county that markets itself on its heritage is utterly crazy and unacceptable. The midlands have significant populations, together with important heritage sites, which are of enormous touristic potential.

193. When all the facts are viewed objectively, it is utterly crazy to persist with this current wind energy policy, which having regard to the above is badly flawed. As we have seen above, this is badly flawed. Moreover, the emphasis on wind is largely derived from a lack of public consultation early on in this debate, which is contrary to basic democratic principles and more recently to the Aarhus convention and the Public Participation Directive.

194. Notwithstanding the above, it is considered that all existing roof space should be utilised before using valuable landmass and this important bog land habitat. As such, this application is considered inappropriate for this site.

Having regard to the foregoing, the proposed development is therefore considered wholly incompatible to this area and it follows that *An Coimisiún Pleanála* should therefore REFUSE the proposals and are requested to do so. We trust that the issues highlighted herein, sufficiently clarifies the position of the local community.

ENDS

ENCLOSURES

1. Irish Times Article dated 13th August 2025 (appended hereto).

We append Irish Times article dated **13th August 2025**, outlining the experiences of neighbours Living Next Door To ... Ireland's largest onshore wind farm;
Oweninny Wind Farm in Co Mayo meets the power needs of some 140,000 homes a year
Áine Ryan, Wed 13th August 2025
https://www.irishtimes.com/ireland/2025/08/13/living-next-door-to-irelands-largest-onshore-wind-farm/

Full article is reproduced hereunder (attached to this document).

Living Next Door To ... Ireland's largest onshore wind farm

Oweninny Wind Farm in Co Mayo meets the power needs of some 140,000 homes a year

Áine Ryan
Wed 13th August 2025
https://www.irishtimes.com/ireland/2025/08/13/living-next-door-to-irelands-largest-onshore-wind-farm/

Eileen and Alan Mullarkey would never have considered extending their remote home in Erris, Co Mayo, if they had known it would be surrounded by turbines from Ireland's largest wind farm a decade later.

Oweninny Wind Farm is being built in three phases as a joint venture between the ESB and Bord na Móna at a cost to date of €320 million.

The second phase of the farm entered commercial operation in the spring of 2024, with an installed capacity now of 192mw which meets the power needs of some 140,000 homes a year.

With the third phase having received planning permission earlier this year, the Mullarkeys say an estate agent has told them their eight-bedroom house, which they extended in 2016 and once considered opening as a B&B, is now effectively worthless.

The couple saved hard in order to build their dream home, with Alan working in the UK before they were married. It is on a narrow road in the townland of Shanakilla, beside the once booming village of Bellacorick, on a plot of land next to the remote farmhouse where Eileen was reared and where her brother still lives.

The couple, in their early 50s, have five children, aged from 13 to 25, who are still living at home.
"We never had a problem with the original wind farm which has 'toy turbines', as we call them, and are further from the house," Eileen says.

Built in 1992, this was Ireland's first commercial wind farm and it adjoins the new development. Due to be decommissioned in the coming months, 18 new turbines are scheduled to replace the original 21, completing the three phases of the Oweninny project and its 78 turbines.
Speaking last year after the opening of phase two, then minister for energy and Green Party TD Eamon Ryan called it "a significant day for Ireland and for Mayo" in terms of delivering clean energy.

For decades anyone who travelled from Ballina to Belmullet would recall how this vast, bare and boggy landscape was once dominated by the 300ft high (88.82m) Bellacorick Generating Station's cooling tower.
Today, this landscape is dominated by wind turbines double the tower's size, standing 176m (577ft) high.
When the cooling tower was demolished by a controlled explosion in 2007, thousands watched from afar, comparing it to "a wake" for the community.

It serviced Bord na Móna and the ESB's last old-style peat-fired electricity generating plant. Situated north of the N59 between Crossmolina and Bangor Erris, the station burned milled peat from 2,400 hectares (24sq km) of developed bogland which helped to power the national grid from 1962 until 2003.
For an area blighted by emigration driven by economics, the industry, when at peak production, provided employment for up to 500 locals.

'We feel we have been branded as troublemakers just because we didn't agree with everything'

"Back then I worked down in the pub," Eileen says. "It was full of life and there was loads of money around the area. Then, bang – it was gone. We lost the pub. We lost the post office. We lost the petrol pumps. We lost everything once the power station shut down.

"There is almost no direct employment from this project," Alan says of the wind farm. "Its contractors come in, do their maintenance work and disappear again."

The lack of local employment is one of many criticisms the Mullarkeys have about living beside the project.
"When the turbines are running at a high speed, the swishing noise is going to be louder but then during the winter gales and storms you've got the clash of the wind with the blades," says Alan.
The couple claim the project was rushed through the planning process before they realised what was happening.

"When the rumours became a reality, we did object on the grounds that the project was too close to our house, that there would be noise intrusion and our view would be blocked," says Alan.
"At the time we didn't know about shadow flicker," Eileen adds. "That's when the blades are going around and they cast a moving shadow through the house that every now and then obstructs the sunlight ... darkening the rooms.

Eileen said theirs is the only house that has shadow flicker and it occurs in the mornings and the evenings.
"Even the first time we reported shadow flicker, they told us this wouldn't happen, saying there was a sensor on the turbine that shuts it down but I can assure you that is not the case."

It is important to note, says Eileen, that none of their objections and queries were ever about money.
"We feel we have been branded as troublemakers just because we didn't agree with everything. We just want people to understand the realities of wind farms," she says.

"After all, the only compensation households within the 1,000-metre zone get is €1,000 a year, for phase two only, and for 15 years. Ironically, it doesn't even pay our electricity bill for the year. Wouldn't it have been a positive community gesture to allow one of the turbines to generate local electricity?"
Accountant Tommy McHugh's home, in Ballymunnelly, is another of the 22 houses deemed "near neighbours" of the project.

"There were a lot of promises made before the wind turbines were installed and we thought we would be able to negotiate for better compensation but the developer has hidden behind the legislation and has only been open to giving us the minimum amount," says McHugh.

"Our properties have been devalued by at least 50 per cent while the developer has amassed multimillion euro profits."

His neighbour, Madeleine Gallagher, who works as a nurse in Castlebar, has the same criticisms.
"I also understand we need green power and as I drive home from Castlebar at night I find all the lights in the sky from the turbines comforting, even if they look like great grey statues during the day," she says. "But the reality is that we have a very elderly population, no employment in the area and the company could have treated us better."

Locals agree that a €600,000 community benefit fund and educational scholarship scheme have been welcome.
"In 2024 four scholarships were awarded to applicants who live within 5km of Oweninny Wind Farm Phase 2. The scheme may be used towards course fees, accommodation, tools and transport costs," an ESB spokeswoman said.

Some 1,462 pupils from 34 schools have attended the educational programme at the visitor centre, which covers "the history of power generation, peat production, wind energy development, the bog rehabilitation programme, ecological interests and the social history of the area".

Alan and Eileen Mularkey live with the daily hum and flicker of Ireland's largest onshore wind farm

Addressing some of the criticisms made by locals, the spokeswoman stated that the developer was "committed to and rigorously adhering to" all the planning conditions.
She said the wind farm supports 14 direct jobs, employed more than 100 people during construction and that local contractors and service providers "continue to support the operation of the visitor centre on a weekly basis".

For local Fianna Fáil councillor Michael Loftus, the bottom line is that the project has gone through the full planning process and been granted permission.
"The community made their feelings known at the time and some are for it and some are against it but the big win is the community gain fund," he said. "There will be more employment when phase three starts and there is huge potential for employment through the visitor centre."

However, he agrees there should be free electricity for the project's "near neighbours" under that scheme and their annual compensation should be greater than €1,000 per year.
Meanwhile, the Mullarkeys are concerned about practicalities such as their narrow roadway up to the N59 becoming flooded as a result of the huge construction project having involved deep excavation of the bog.

"A bog is like a sponge: they took the bog away to put stone and steel into it to build these monstrosities," says Eileen.

"During the building of the turbines, the big machinery did so much damage to the bog and now they are telling us that people cutting a few yards of turf are damaging the environment," Alan says.
With the construction of phase three of the wind farm in the offing, the Mullarkeys say they are too tired to continue asking questions and putting in queries about the project.

"Last year there was a major cable fault in the system and the turbines were shut down for 12 weeks," says Eileen.

"It was like winning the lotto for us. The silence was just like heaven and most importantly, as we worked in our garden, we could hear the birds singing again."