

File With

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SECTION 131 FORM

Appeal No

ABP— 318180-23

Defer Re O/H

[Empty box]

Having considered the contents of the submission dated/received 09/11/2023 from Eco Advocacy I recommend that section 131 of the Planning and Development Act, 2000 be/not be invoked at this stage for the following reason(s):

no new material issues

Section 131 not to be invoked at this stage.

[Checked box]

Section 131 to be invoked — allow 2/4 weeks for reply.

[Empty box]

Signed

Pat [Signature]

EO

Date

13/05/2024

Signed

[Empty box]

SEO/SAO

Date

[Empty box]

M

Please prepare BP — Section 131 notice enclosing a copy of the attached submission.

To

[Empty box]

Task No

[Empty box]

Allow 2/3/4 weeks

BP

Signed

[Empty box]

EO

Date

[Empty box]

Signed

[Empty box]

AA

Date

[Empty box]

Patrick.



Planning Appeal Online Observation

Online Reference
NPA-OBS-002718

LDG - 068055 - 23

Online Observation Details

Contact Name Kieran Cummins	Lodgement Date 08/11/2023 16:55:58	Case Number / Description 318180
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Payment Details

Payment Method Online Payment	Cardholder Name Kieran Cummins	Payment Amount €50.00
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Processing Section

S.131 Consideration Required

Yes — See attached 131 Form

N/A — Invalid

Signed

Patrick Be

Date

10/11/2023

EO

BP40 to issue

13/10/23 : 09/11/23 ✓

Fee Refund Requisition

Please Arrange a Refund of Fee of

€

Lodgement No

LDG—

Reason for Refund

Documents Returned to Observer

Yes No

Request Emailed to Senior Executive Officer for Approval

Yes No

Signed

Date

EO

Finance Section

Payment Reference

ch_3OAF2nB1CW0EN5FC0jtps0o5

Checked Against Fee Income Online

EO/AA (Accounts Section)

Amount

€

Refund Date

Authorised By (1)

SEO (Finance)

Authorised By (2)

Chief Officer/Director of Corporate Affairs/SAO/Board Member

Date

Date

Eco Advocacy

Truth | Justice | Sustainability



Trammon,
Rathmolyon,
Enfield,
County Meath,
A83 PW32
Ireland

Tel: +353(0)86-7853333
Email: info@ecoadvocacy.ie
Web: www.ecoadvocacy.ie

Making an Observation: <https://online.pleanala.ie/en-ie/planning-appeals/observation>

Contact reference: Our Ref. 01_8588100, 1890_275175,

Email: bord@pleanala.ie

The Secretary,
An Bord Pleanála,
64 Marlborough Street,
Dublin 1,
D01 V902

PA Reference: FW22A/0308 (Fingal County Council)
PA web portal: <https://planning.agileapplications.ie/fingal/application-details/93949>
Reference: ABP: ABP.318180-23
Reference: ABP: <https://www.pleanala.ie/en-ie/case/318180>
Applicant/s: Universal Developers LLC,
Dev. Address: Cruiserath Road, Dublin 15
Submission Fee: €50

Observation

Dear Sirs

Please find attached observation in respect of a recent appeal of the decision of *Fingal County Council* determination in this case. We understand that the last appeal was received on the 13th October. That being the case the closing date for receipt of submissions would be 9th November 2023.

We hereby make observations regarding the various appeals in respect of the proposals and in respect of the recent determination by the planning authority.

There are **15 pages** in this submission inclusive of cover page.

Yours faithfully,

A handwritten signature in blue ink that reads "Kieran Cummins".

Kieran Cummins

Observation re Appeals to Planning File ref. no. 318180-23 & ABP.318180-23 Universal Developers LLC

APPLICATION

1. The current proposals as stated on described on the website of Meath County Council read as follows: -

“Universal Developers LLC, intend to apply for a seven year planning permission for development on a site at Cruiserath Road, Dublin 15. The application site is located to the north of the data centre permitted / constructed under An Bord Pleanála Reg. Ref.: PLO6F.248544 / Fingal County Council Reg. Ref.: FW17A/0025, to the west of the two data centres permitted under Fingal County Council Reg. Ref.: FW19A/0087, and to the north and west of the 220kV Gas Insulated Switchgear substation permitted under An Bord Pleanála Reg. Ref.: 306834-20. The site is within an overall landholding bound to the south by the R121 / Cruiserath Road, to the west by the R121 / Church Road and to the north by undeveloped land and Cruiserath Drive.

The proposed development consists of the following:

- Construction of three data centre buildings (Data Centre E, Data Centre F, and Data Centre G), with a gross floor area (GFA) of c. 1,425 sq.m, c. 20,582 sq.m, and c. 20,582 sq.m respectively, each over two levels (with Data Centre F and G each including two mezzanine levels);*
- Data Centre F and G will be located in the north-western portion of the overall landholding, with a primary parapet height of c. 19.8 metres and each will accommodate data halls, associated electrical and mechanical plant rooms, a loading bay, maintenance and storage space, office administration areas, with plant and solar panels at roof level;*
- Data Centre E (which will be ancillary to Data Centre F and G) will be located within the south-western portion of the overall landholding, with a primary parapet height of c. 13.1 metres and will accommodate data halls, associated electrical and mechanical plant rooms, a loading bay, maintenance and storage space, office administration areas, with plant at roof level;*
- Emergency generators and associated flues will be provided within compounds adjoining each of the three data centre buildings (1 no. for Data Centre E, 19 no. for Data Centre F, and 19 no. for Data Centre G);*
- The development includes one diesel tank and two filling areas to serve the proposed emergency generators;*
- Provision of ancillary structures including two MV buildings, water storage tanks and three bin stores;*
- Construction of access arrangements and internal road network and circulation areas, footpaths, provision of car parking (105 no. spaces), motorcycle parking (12 no. spaces) and bicycle parking (56 no. spaces), hard and soft landscaping and planting (including alteration to a landscaped berm to the north of proposed Data Centre E), lighting, boundary treatments, and all associated and ancillary works including underground foul and storm water drainage network, and utility cables.*

An EPA-Industrial Emissions Directive (IE) licence will be applied for to facilitate the operation of the proposed development. An Environmental Impact Assessment Report (EIAR) will be submitted to the Planning Authority with the planning application and the EIAR will be available for inspection or purchase at a fee not exceeding the reasonable cost of making a copy at the offices of the Planning Authority.”

Cont/d.

APPROPRIATE LAND USE

2. We are most alarmed at the area of land, which is proposed as part of this application. This is considered to be an abuse of finite agricultural land. This proposal is incompatible with proper planning and sustainable development and should be declined.
3. A full analysis of all data centers in the state (including Northern Ireland) should be provided to the authorities and to the public. This should include all existing data centers (up and running), permitted data centers (both under construction and not yet built) and data centers applied for.
4. A full analysis of the energy requirements of all functioning, permitted and proposed data centers. This should also address the electrical infrastructure required together with required back up energy.
5. It is recommended that a complete energy and carbon audit be carried out so as to assess the impact of this proposal. This should account the mining of resources including rare-earth metals and their impact on the environment as source together with shipping to Ireland. It should also account for aggregates, steel together with the quarrying of these resources and their transportation to site. An audit should further include energy requirements re excavations on site together with all aspects of construction including auto-fuel requirements for the workforce to commute to and from the site. This is not intended to be a complete list; an audit should include much more.
6. The surge in data centers is causing a massive draw on energy needs and is driving Irelands energy requirements sky high. The nation is at the same time imposing restrictions on farming in an effort to curtail greenhouse gases. This is a perverse situation. It has been projected that data centers will account for upwards of 30% of Irelands electricity needs in the years to come. This is not sustainable and is therefore unacceptable.
7. We note that there are proposals for a diesel generators together with gas powered energy plant. This is unacceptable in that these are putting further reliance on fossil fuels.
8. Data Centers have a big demand on both energy (power) and coolants to cool down the servers. They take up large amounts of ground and provide very little by way of employment.
9. **Developer Led:** the proposal is a developer led proposal. 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 Data Center proposal needs to be plan led and not developer led, taking into account the common good of all citizens. This proposal is inappropriately developer led acting without any proper national strategic energy planning and/or location selection strategy.
10. A report by the Irish Academy of Engineering (IAE) has estimated data centre expansion will require almost €9bn in new energy infrastructure and add at least 1.5m tonnes to Ireland's carbon emissions by 2030 – up 13% spike on current electricity sector emissions. In fact, the current proposal will add significant amount to the national GHG emissions and is incompatible with our national and international climate commitments.

GOVERNMENT POLICY

11. The Government Statement on The Role of Data Centres in Ireland's Enterprise Strategy (2018) recognises these extreme demands, writing: -

'However, as large consumers of electricity, data centres also pose particular challenges to the future planning and operation of a sustainable power system. The Government recognises these challenges and will take steps to mitigate them. A plan-led approach will develop a range of measures to promote regional options for data centre investment, minimising the need for additional grid infrastructure.'

'Taken as a whole, this plan-led approach will allow Ireland to optimise the benefits that these strategically important investments can bring to our society. This plan-led approach will also ensure that Ireland continues to be an attractive and competitive location for digital economy investments.'

'A plan-led and strategic approach should ensure that suitable locations throughout Ireland are promoted for investment that minimise the need for deep reinforcements on the energy grid'

[Emphasis added].

There does not appear to be any such approach and in the absence of same, it would be premature to grant this application. And these 'plans' omit any consideration of water.

12. Data Centres are essential to the technological development of the Irish and EU Economy.
13. The revised **Renewable Energy Directive III adopted on October 9th 2023** defines Dara Centres as Industrial in Nature (<https://data.consilium.europa.eu/doc/document/PE-36-2023-INIT/en/pdf>)
14. The 2023 Renewable Energy Directive sets out a requirement for Renewable Energy Acceleration areas. The following recitals outline the EUs position. Rapidly adopting and implementing Acceleration Areas will assist the efficient development of the national grid: -

"(25) Member States should support the faster deployment of renewable energy projects by carrying out a coordinated mapping for the deployment of renewable energy and related infrastructure in their territory in coordination with local and regional authorities. Member States should identify the land, surface, sub-surface and sea or inland water areas necessary for the installation of renewable energy plants and related infrastructure in order to meet at least their national contributions towards the revised overall renewable energy target for 2030 set in Article 3(1) of Directive (EU) 2018/2001 and in support of reaching the objective of climate neutrality by 2050 at the latest, in accordance with Regulation (EU) 2021/1119. Member States should be allowed to use existing spatial planning documents for the purpose of identifying those areas. Member States should ensure that such areas reflect their estimated trajectories and total planned installed capacity and should identify specific areas for the different types of renewable energy technology provided for in their integrated national energy and climate plans submitted pursuant to Articles 3 and 14 of Regulation (EU) 2018/1999. The identification of the required land, surface, sub-surface, and sea or inland water areas should take into consideration in particular the availability of energy from renewable sources and the potential offered by the different land and sea areas for renewable energy production of the different types of technology, the projected demand for energy, taking into account energy and system efficiency, overall and in the different regions of the Member State, and the availability of relevant energy infrastructure, storage, and other flexibility tools bearing in mind the capacity needed to cater for the increasing amount of renewable energy, as well as environmental sensitivity in accordance with Annex III to Directive 2011/92/EU of the European Parliament and of the Council1 .

(26) Member States should designate as a sub-set of those areas, specific land (including surfaces and sub-surfaces) and sea or inland water areas as renewables acceleration areas. Those areas should be particularly suitable for the purpose of developing renewable energy projects, differentiating between types of technology, on the basis that the deployment of the specific type of renewable energy source is not expected to have a significant environmental impact. In the designation of renewables acceleration areas, Member States should avoid protected areas and consider restoration plans and appropriate mitigation measures. Member States should be able to designate renewables acceleration areas

specifically for one or more types of renewable energy plants and should indicate the type or types of energy from renewable sources that are suitable to be produced in such renewables acceleration areas. Member States should designate such renewables acceleration areas for at least one type of technology and should decide the size of such renewables acceleration areas, in view of the specificities and requirements of the type or types of technology for which they set up renewables acceleration areas. In doing so, Member States should aim to ensure that the combined size of those areas is significant and that they contribute to the achievement of the objectives set out in Directive (EU) 2018/2001.

(33) In the renewables acceleration areas, renewable energy projects that comply with the rules and measures identified in the plans prepared by Member States, should benefit from a presumption of not having significant effects on the environment. Therefore, such projects should be exempt from the obligation to carry out a specific environmental impact assessment at project level within the meaning of Directive 2011/92/EU, with the exception of projects where Member State has determined to require an environmental impact assessment in its national mandatory list of projects and of projects which are likely to have significant effects on the environment in another Member State or where a Member State that is likely to be significantly affected so requests. The obligations under the Convention on environmental impact assessment in a transboundary context¹, signed in Espoo on 25 February 1991, should remain applicable to Member States where the project is likely to cause a significant transboundary impact in a third country.

(35) The designation of renewables acceleration areas should allow renewable energy plants and co-located energy storage, as well as the connection of such plants and storage to the grid, to benefit from predictability and streamlined administrative permit-granting procedures. In particular, projects located in renewables acceleration areas should benefit from accelerated administrative permit-granting procedures, including a tacit approval in the case of a lack of reply by the competent authority on an intermediary administrative step by the established deadline, unless the specific project is subject to an environmental impact assessment or where the principle of administrative tacit approval does not exist in the national law of the Member State concerned. Those projects should also benefit from clear deadlines and legal certainty as regards the expected outcome of the permit-granting procedure. Once an application for a project in a renewables acceleration area is submitted, the Member State should carry out a fast screening process with the aim of identifying whether the project is highly likely to give rise to significant unforeseen adverse effects in view of the environmental sensitivity of the geographical area where it is located and which were not identified during the environmental assessment of the plans designating renewables acceleration areas carried out pursuant to Directive 2001/42/EC and whether the project falls within the scope of Article 7 of Directive 2011/92/EU on the basis of the likelihood of its having significant effects on the environment in another Member State or on the basis of a request of a Member State which is likely to be significantly affected. For the purpose of such a screening process, the competent authority should be able to request the applicant to provide additional available information without requiring a new assessment or data collection. All projects located in renewables acceleration areas that comply with the rules and measures identified in the plans prepared by Member States should be deemed to be approved at the end of such a screening process. Provided that Member States have clear evidence to consider that a specific project is highly likely to give rise to such significant unforeseen adverse effects, Member States should, following such a screening process, subject the project to an environmental impact assessment pursuant to Directive 2011/92/EU and, where relevant, an assessment pursuant to Council Directive 92/43/EEC¹. Member States should provide reasons for their decisions to subject projects to such assessments before those assessments are carried out. Such assessments should be carried out within six months of such decisions, with the possibility of extending that deadline on the ground of extraordinary circumstances. It is appropriate to allow Member States to introduce derogations from the obligation to carry out such assessments for wind and solar photovoltaic projects in justified circumstances, because such projects are expected to provide a vast majority of the renewable electricity by 2030. In such a case, the project developer should adopt proportionate mitigation measures or, if not available, compensatory measures, which, if other proportionate compensatory measures are not available, may take the form of monetary compensation, in order to address those significant unforeseen adverse effects identified during the screening process.”

15. Article 16f of the RED III effectively declares an emergency to deliver more renewables and storage Overriding public interest By ... [three months after the date of entry into force of this amending Directive], until climate neutrality is achieved, Member States shall ensure that, in the permit-granting procedure, the planning, construction and operation of renewable energy plants, the connection of such plants to the grid, the related grid itself, and storage assets are presumed as being in the overriding public interest and serving public health and safety when balancing legal interests in individual cases for the purposes of Article 6(4) and Article 16(1), point (c), of Directive 92/43/EEC, Article 4(7) of Directive 2000/60/EC and Article 9(1), point (a), of Directive 2009/147/EC. Member States may, in duly justified and specific circumstances, restrict the application of this Article to certain parts of their territory, to certain types of technology or to projects with certain technical characteristics in accordance with the priorities set out in their integrated national energy and climate plans submitted pursuant to Articles 3 and 14 of Regulation (EU) 2018/1999. Member States shall inform the Commission of such restrictions, together with the reasons therefor.'

[Emphasis added]

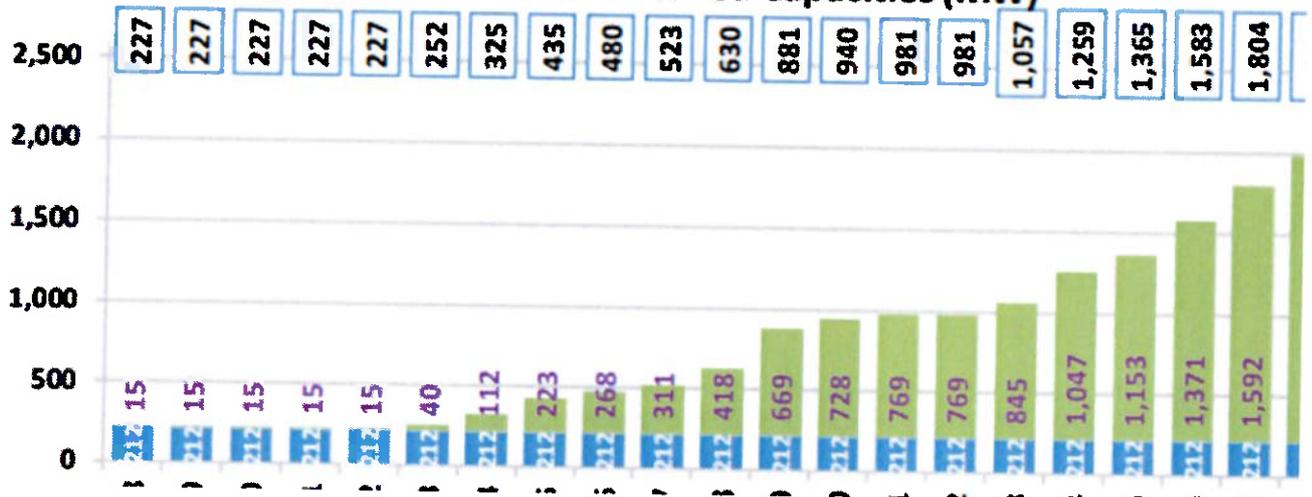
16. Any addition to demand from the industrial sector, which is not 100% renewable, increases the decarbonisation burden on others. The EIAR does not deal with this issue. Effectively Ireland has a capped carbon budget which must decrease year on year.

"Article 22a Mainstreaming renewable energy in industry 1. Member States shall endeavour to increase the share of renewable sources in the amount of energy sources used for final energy and non-energy purposes in the industry sector by an indicative increase of at least 1,6 percentage points as an annual average calculated for the periods 2021 to 2025 and 2026 to 2030. Member States may count waste heat and cold towards the average annual increases referred to in the first subparagraph up to a limit of 0,4 percentage points, provided that the waste heat and cold is supplied from efficient district heating and cooling, excluding networks which supply heat to only one building or where all thermal energy is consumed only on-site and where the thermal energy is not sold. If they decide to do so, the average annual increase referred to in the first subparagraph shall increase by half of the waste heat and cold percentage points counted. Member States shall include the policies and measures planned and taken to achieve such indicative increase in their integrated national energy and climate plans submitted pursuant to Articles 3 and 14 of Regulation (EU) 2018/1999 and their integrated national energy and climate progress reports submitted pursuant to Article 17 of that Regulation When electrification is considered to be a cost-effective option, those policies and measures shall promote the renewable-based electrification of industrial processes. Those policies and measures shall endeavour to create conducive market conditions for the availability of economically viable and technically feasible renewable energy alternatives to replace fossil fuels used for industrial heating with the aim of reducing the use of fossil fuels used for heating in which the temperature is below 200 °C. When adopting those policies and measures, Member States shall take into account the energy efficiency first principle, effectiveness and international competitiveness and the need to tackle regulatory, administrative and economic barriers. Member States shall ensure that the contribution of renewable fuels of non-biological origin used for final energy and non-energy purposes shall be at least 42 % of the hydrogen used for final energy and non-energy purposes in industry by 2030, and 60 % by 2035. For the calculation of that percentage, the following rules shall apply: (a) for the calculation of the denominator, the energy content of hydrogen for final energy and non-energy purposes shall be taken into account, excluding: (i) hydrogen used as intermediate products for the production of conventional transport fuels and biofuels; (ii) hydrogen that is produced by decarbonising industrial residual gas and that is used to replace the specific gas from which it is produced; (iii) hydrogen produced as a by-product or derived from by-products in industrial installations; (b) for the calculation of the numerator, the energy content of the renewable fuels of non-biological origin consumed in the industry sector for final energy and non-energy purposes shall be taken into account, excluding renewable fuels of non-biological origin used as intermediate products for the production of conventional transport fuels and biofuels; (c) for the calculation of the numerator and the denominator, the values regarding the energy content of fuels set out in Annex III shall be used. For the purposes of point (c) of the fifth subparagraph of this paragraph,, in order to determine the energy content of fuels not included in Annex III, the Member States shall use the relevant European standards for the determination of the calorific values of fuels, or where no European standard has been adopted for that purpose, the relevant ISO standards. 2. Member States shall promote voluntary labelling schemes for industrial products that are claimed to be produced with renewable energy and renewable fuels of nonbiological origin. Such voluntary labelling schemes shall

indicate the percentage of renewable energy used or renewable fuels of non-biological origin used in the raw material acquisition and pre-processing, manufacturing and distribution stage, calculated on the basis of the methodologies laid down either in Commission Recommendation (EU) 2021/2279* or in ISO 14067:2018."

- 17. Little progress is being made in adding new wind power to the transmission system. Just 11MW of wind generation was added to the transmission system between 2020 and 2021. Projects like Grid West and the North-South Interconnector have not been built.

TSO Connected Renewable Generation in Ireland Total Installed Capacities (MW)



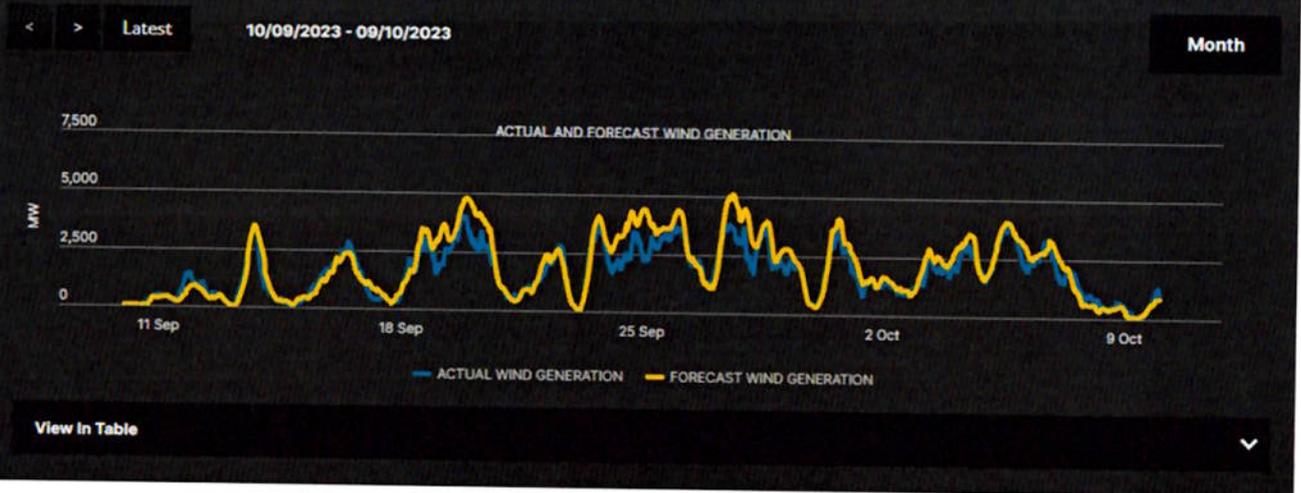
See Contracted TSO Wind Farms (Correct as of 07/09/2023): -

<https://www.eirgridgroup.com/site-files/library/EirGrid/ContractedTSO-Wind-Farms.pdf>

Wind power typically has a capacity factor of 35% with some years as low as 27%. Renewable Generators are not allowed to connect hybrid generators, which use 2 or more technologies to bring renewable output to a capacity factor closer to 100%

Actual and Forecast Wind Generation

Wind Generation is an estimate of the total electrical output of all wind farms on the system. Actual and Forecast Wind Generation are shown in 15 minute intervals.



18. Section 34 of the Planning Act prohibits a grant of permission relating to development that does not accord with Government or Ministerial policy.

“(2) (a) When making its decision in relation to an application under this section, the planning authority shall be restricted to considering the proper planning and sustainable development of the area, regard being had to—

(i) the provisions of the development plan,

F325[(ia) any guidelines issued by the Minister under section 28,]

(ii) the provisions of any special amenity area order relating to the area,

(iii) any European site or other area prescribed for the purposes of section 10(2)(c),

(iv) where relevant, the policy of the Government, the Minister or any other Minister of the Government,

(v) the matters referred to in subsection (4), F326[...]

F327[(va) previous developments by the applicant which have not been satisfactorily completed,

(vb) previous convictions against the applicant for non-compliance with this Act, the Building Control Act 2007 or the Fire Services Act 1981, and]

(vi) any other relevant provision or requirement of this Act, and any regulations made thereunder.

F325[(aa) When making its decision in relation to an application under this section, the planning authority shall apply, where relevant, specific planning policy requirements of guidelines issued by the Minister under section 28.]”

19. Reasonable Planning Conditions to permit the Development: Buying renewable energy on another continent and offsetting against power used in Ireland is not transparent or effective. Power Purchase agreements must be compliant with the EU RED III
To limit the life of the development to 10 years pending full compliance with the National 2030 Energy & Climate Targets.
The Government has issued a policy statement on Power Purchase Agreements "Renewable Electricity Corporate Power Purchase Agreements Roadmap March 2022" file:///C:/Users/GGMachines Gaming/OneDrive/2023%20Planning/Cork/220107_ed5977f3-76a4-42c4-b2b7-dd5c4c4d7002.pdf

Policy Priorities to Ensure Beneficial CPPAs

While CPPAs can play a key role in the decarbonisation of the electricity system and in supporting the delivery of renewable energy generation, there are a number of considerations that need to be addressed to ensure that CPPAs align with wider policy, targets and measures set out in the Climate Action Plan 2021.

These include: -

Additionality and Avoiding Greenwashing: If CPPAs simply purchase certificates from projects that would have existed anyway, especially those that have already been funded under schemes supported by the PSO levy (REFIT schemes or the RESS), they may not contribute to additional decarbonisation, which would not achieve the benefits of such contracts for all electricity users and harm public trust. CPPAs for new non-subsidised or repowered projects should be prioritised.

Total System Costs: The full costs associated with CPPA-funded projects, such as any required network reinforcement, congestion and balancing) may not be borne by the CPPA counterparty, so these projects could increase costs for other electricity consumers. Therefore, temporal and spatial matching of the contracted renewable electricity generation and corporate demand should be prioritised, to maximise grid efficiency, mitigate grid investment costs and achieve otherwise unattainable emissions reductions for the sector and electricity system.

Price risk to consumers: CPPAs allow LEUs to hedge their exposure to high wholesale electricity prices through contracting renewable electricity projects over

long periods of time; when electricity market prices are high this might therefore allow them to pay a lower rate than the prevailing wholesale market rate. It is important that other electricity consumers (domestic and SMEs) do not then face concomitantly higher prices as a result of these projects being unavailable to participate in the RESS. It will be important therefore to ensure availability of a sufficient and competitive pipeline of renewable generation projects, and in the medium-term, align RESS and CPPA policies to deliver lowest total costs for all electricity consumers

Mismatch of Supply and Demand: emissions reporting rules allow companies to claim to use "100% renewable electricity" when their electricity demand is matched with supply on an annual basis, even though in practice their demand will frequently exceed the renewable supply and be met by carbon-emitting generation. This can lead to overestimates of the carbon reductions from CPPAs and may not incentivise the actions that can most cost effectively reduce emissions. Therefore, hour-by-hour grid emissions transparency, and facilitating LEUs to monitor, optimise and report the carbon intensity of their energy use is a priority.

Plan-led investment/Locational signals: CPPA supported renewable generation may be located in a grid constrained area distant from the location of the CPPA counterparty's demand, leading to curtailment of the renewable generation. Locating future demand close to where the renewable generation is deployed will be important. In addition to considering real carbon intensity across their electricity use across time and geographic locations, CPPAs should facilitate locating energy demand where existing or future electricity grid is available and close to renewable energy generation including through energy parks.

Demand Side Emissions Reduction Measures: While Electricity sector emissions trading focuses upon emissions reduction on the supply side this does not consider the impact that altering the characteristics of demand may have upon electricity sector emissions intensity. This may present a barrier to the adoption of demand-side technologies which may be a more cost-effective way of reducing electricity systems emissions. A new demand side strategy is required, and technical and market measures identified to enable and incentivise demand-side side flexibility – as set out under Action 100 and 101 in Climate Action Plan 2021.

20. Having regard to the facts before us, it is considered that there is insufficient information in the application to afford the Board jurisdiction to determine the application.
21. There is insufficient information on the cumulative use of energy by the data sector in Ireland including energy consumed by on-site generation as Eirgrid is connecting on a non-firm basis.
22. There is insufficient information to assess the application in accordance with the EIA Directive, and the Energy Efficiency Directive. The Board must determine the application on a de novo or first instance basis.
 - Where will the additional thermal power plant that this development will require be located?
 - Will waste heat from the additional thermal power demand be usefully used as wind has a capacity factor of 30-35% and Solar PV without storage circa 10%?
 - Could alternative locations deliver increased decarbonisation?
 - Were power purchase agreements for green hydrogen or green biogas considered that would be geographically and temporally compatible with the power demand?
23. It is considered that there is insufficient information in the application to determine if other data installations and industrial facilities, already granted planning permission will be delayed in connecting to the grid on a firm or non-firm basis causing increased and prolonged emissions everywhere as an impact of this development.

SUSTAINABILITY

24. From a very high level assessment, we were unable to easily find grade of aggregate, steel or amount 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.

AGGRIGATES

25. We question where the aggregates are to be sourced for the construction of the proposed facility?
26. While some aggregates come from limestone (crushed rock), sand and gravel often come from eskers, which are an important part of our natural heritage. Eskers have been a feature of our landscape but sadly many are rapidly disappearing and for the most part this has been due to unauthorised quarrying. We know of some eskers which had p.NHA status, but that didn't save them from unscrupulous quarry operators.
27. Unauthorised developments destroy the landscape and irrevocably remove important features as well as taking large swathes of land out of agricultural use. Moreover, as they are not subject to planning consent, they avoid the usual conditions imposed on operations and work at all hours of the day and night. They likewise avoid reinstatement conditions. Crucially they also avoid the usually financial conditions imposed on such developments.

MATERIALS USED

28. **RARE EARTH METALS:** We ask the planning authority to examine and seek a complete breakdown of component parts including how they were manufactured. We are particularly concerned about the use of finite natural resources' such as rear earth metals and so on.
29. **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.
30. **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).
31. **Eskers:** 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 foundations which we submit will without any doubt become white elephants is utterly crazy.

32. We refer the reader to a recent article in the Irish Times, which pretty much sums up the issues with regard to Data Centers. Below are some excerpts from that article.

Data centres reveal truth of Ireland's climate double-speak
These energy vampires will drain already lacklustre efforts to meet climate targets
Mon, Jul 19, 2021
Una Mullally

Before the decade is out, it is estimated that 27 per cent of all the electricity we produce will be needed to power these data centres. Varadkar said he had seen figures that put the electricity demands of data centres at as much as a third of all our electricity.

Over the past year alone, the number of operational data centres here increased 25 per cent. There are now 70 operational data centres here. The Greater Dublin Area is now the largest hub for data centres in Europe. Amazon's latest plans for Mulhuddart will need the same amount of electricity as a small city. Increasingly, EirGrid, which runs the national grid, sounds like it's freaking out, understandably. They say data centres are "having a major impact on the Irish electricity system currently and into the foreseeable future".

Last summer an analysis by Killian Woods in the Business Post showed that data centres were using the same amount of water as some of our largest towns. Athlone, he wrote, uses about 2.6 million litres of water a day. Irish Water say that an average data centre uses 500,000 to five million litres a day, the high end of that scale being rare but possible. Green-washing

When it comes to the huge amounts of electricity (for powering) and water (for cooling) data centres use, big tech companies are keen to green-wash, and talk about green and renewable energy, and say things like their emissions are "net-zero".

But that doesn't mean that they aren't using colossal amounts of energy and water. What's happening is, tech companies are buying and building wind farms. Why are we now in a situation, having never fully capitalised on the potential of renewable energy on this island, where wind farms are being built and bought to offset big tech energy demands?

The Irish Academy of Engineering has estimated that the rapid expansion of data centres we're seeing will require €9 billion in new energy infrastructure, adding an extra 1.5 million tonnes to our carbon emissions by the end of the decade.

Being sustainable is not about creating more energy to use more. Allowing this free-for-all on the construction of data centres is regressive, myopic and an exploitation of our nation's water and electricity. Equating data to some kind of natural resource that we've suddenly discovered in them there hills is ridiculous. Ireland is not mining data. Data, in this form, is mining Ireland.

Source: -

<https://www.irishtimes.com/opinion/una-mullally-data-centres-reveal-truth-of-ireland-s-climate-double-speak-1.4623929>

WATER

33. We ask the authorities to make appropriate assessments of water demand whether it be for cooling or other purposes. Data Centre's are known to use significant amounts of water to cool them.
34. We further ask the planning authorities to examine the source of the water and establish whether it is likely to affect the groundwater aquifer together with potable water supplies. We also ask it to establish whether the water required will be treated?
35. The authorities should also examine the discharge points. Will warm water be discharged? Will this affect the ecology of the receiving watercourse?

The below article is useful in highlighting the issue.

The Secret Cost of Google's Data Centers: Billions of Gallons of Water to Cool Servers
BY NIKITHA SATTIRAJU / BLOOMBERG
APRIL 2, 2020
<https://time.com/5814276/google-data-centers-water/>

36. It is difficult to find appropriate and up-to-date information on the actual consumption figures from comparable installations. It is considered appropriate that the authorities conduct further research into this issue to establish beyond all reasonable doubt that what the energy and cooling requirements are.

37. The Irish Times recently reported that: -

'There are now 70 operational data centres in Ireland using 900 megawatts (MW), with eight under construction with 250MW usage. Most are concentrated around Dublin which has become the largest data centre hub in Europe.'

'...the data centre industry which currently consumes 11 per cent of the energy generation on the grid today'

'we expect this number to increase to 19 per cent in 2026. While this represents an 8 per cent increase in the proportion of data centre megawatt power consumption versus the available energy generation, it is important to note in this same five-year timeframe data centre growth is expected to double'

Source: -

Number of operational data centers in Ireland up by quarter, report finds

Carbon emissions arising from data centers was 1.85% of Ireland's total carbon emissions in 2020

Tue, May 11, 2021, 19:18

Kevin O'Sullivan

<https://www.irishtimes.com/business/energy-and-resources/number-of-operational-data-centres-in-ireland-up-by-quarter-report-finds-1.4562274>

AMENITY & TOURISM

38. Irelands Ancient East and Wild Atlantic Way have been rolled out in recent years in an effort to encourage tourism. Blue ways have been established and planned for watercourses. It is submitted that sighting data centers in this area is not conducive to tourism.
39. Activities such as walking, cycling, kayaking, boating, bird-watching, fishing, and water sports are central to much of the tourism strategy, along with the chance for visitors to engage with local communities, their culture, crafts and local food.

DIRECTIVES

40. **EIA Directive, the Habitats Directive and ECJ case law:** We ask the planning authority to satisfy itself that the planning application complies with EU law and specifically the EIA Directive and with Article 6 of the **Habitats Directive 92/43/EEC**. We doubt that it does. The following cases from the **European Court of Justice [ECJ]** are relevant: -
- a. **C-117/00:** Commission v. Ireland (Owenduff-Nephin Beg Complex) [2002] ECR I-5335,
 - b. **Case C- 127/02:** (Waddenzee Judgment),
 - c. **Case 418/04:** Commission v. Ireland,
 - d. **C-6/04:** Commission v. United Kingdom,
 - e. **Case C-258/11,** Peter Sweetman and Others v An Bord Pleanála,
 - f. **Case C-164/17,** Edel Grace and Peter Sweetman v An Bord Pleanála,
 - g. **Case C-323/17** People Over Wind and Peter Sweetman v Coillte Teoranta,
 - h. **Case C-461/17** Brian Holohan and Others v An Bord Pleanála,
 - i. **C-215/06:** Commission v. Ireland: Failure of a Member State to fulfill obligations,
 - j. **Case C-261/18:** 12 November 2019: Failure to fulfill obligations — Failure to comply with the judgment of 3 July 2008, Commission v Ireland (C-215/16) — Application for an order to pay a penalty payment and a lump sum.

POWER REQUIREMENT

41. We understand that the proposed data centre has a significant Mw load. This is a massive energy requirement and it has been suggested that this is the equivalent to the electricity consumption of hundreds of thousands of homes. This would be the equivalent of the total number of homes in some counties. We understand that fossil fuels will be burnt to power this data centre during an energy outage emergency. This at a time when Ireland has aspirations of reducing national emissions by 51% under the Climate Action and Low Carbon Development (Amendment) Bill. The proposed development will increase our fossil fuel emissions and is therefore unsustainable and incompatible with national targets.
42. Data centers of the type proposed are also giving rise to inappropriate wind turbine and solar applications across the country. Both are non-dispatchable forms of energy and are resource hungry and therefore unsustainable and unacceptable.

EU SITES

43. It is imperative that the various EU Directives are respected. These include the EU Habitats Directive, the Birds Directive, EIA Directive, etc. The integrity of European sites such as SAC's, SPA's, NHA's must not be compromised in any way. It is essential that all scientific evidence is properly examined to ensure that there is no danger that a plan or project will give rise to significant adverse direct, indirect or secondary effects. It is crucial that any proposed development must fully demonstrate that it would not give rise to ecological impacts or significantly affect the local watercourses and their conservation efforts (if any).
44. **Runoff:** the planning authority will need to examine the issue of runoff possibilities. Are there metals/contaminants contained in roof surfaces that could runoff and seep into the aquifer? In the event of a storm event and solar panels get damaged; is there a possibility of chemical/ metal escape and contamination of the groundwater aquifer?

VISUAL

45. We raise concerns about the visual impact of such a large-scale proposal in this area. This is in an area steeped with heritage. Indeed many local monuments feature on both Ireland's Wild Atlantic Way and also along Ireland's Ancient East initiative. Please clarify whether the proposed development compromise local vistas either directly or indirectly? By indirect wider factors such as sources of aggregate and so forth should be considered.
46. We raise concerns about the adequacy of the assessments having regard to the impacts of the proposals on the local environment.
47. *Due to time constraints, it has not been possible to conduct the research necessary to further expand on this point in this submission, so all we can do is flag this as an issue.*

SEA DIRECTIVE

48. We further believe that this is 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 conducted the two earlier stages in the process; i.e. Programmes and Plans.
49. 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.

ALTERNATIVE SOURCE OF ENERGY

50. Being conscious of the energy requirement for Data Centers, it is enquired whether they examined the potential for deep-bore geothermal energy to power the proposed development? Unlike wind and solar, Deep-bore Geothermal energy is dispatchable and would eliminate the reliance on fossil fuels.

GRID CONNECTION

51. Has grid connection been considered? We request the statutory authorities to satisfy themselves on this point.

ROOF SPACE

52. We note a reference to solar on roofs. Please clarify whether this is to cover the entire roof space of the proposed development/s ?

SECURITY

53. Data Centres also pose a major security issue and an analysis. The warning is contained in a new National Cyber Security Strategy, published by the Department of Communications in 2019, which also calls for widespread reforms to protect critical infrastructure from serious cyber threats. We have known for some time that data centers are a terrorist target and would endanger the residents of an area. This must also be taken into account by the planning authorities.

EMPLOYMENT

54. **Employment and prospect of construction jobs:** 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. Notwithstanding construction jobs are short term and employment thereafter is no significant. Moreover, Data Centers are not known to provide much employment when they are up and running.

SAFETY

55. Is it proposed to install batteries? We understand that battery related fires generate enormous amounts of heat and require specialised fire fighting equipment. Are any lithium-ion batteries to be installed? There have been numerous reported incidents of combustion and fires associated with batteries in recent times. These fires are extremely difficult to control. We urge the authorities to make appropriate enquiries and satisfy themselves on this issue.
56. Have the applicants consulted with the local fire services? Are they equipped to deal with a fire at the proposed data centers?

CONCLUSIONS

57. Ireland does not have the capacity to meet its **Paris Agreement 2015** and forthcoming national obligations under the Climate Action and Low Carbon Development (Amendment) Act 2021 if continued permissions are granted for data centres increasing the demand on the national grid and thereby increasing fossil energy use and diluting renewable energy targets.
58. That Government Statement governing the development of data centres has not been subjected to **Strategic Environment Assessment**. Accordingly, no reliance can be placed upon it. The proposal has not been addressed under the Water Framework Directive. Therefore, considering the huge concerns of the relevant State agencies EirGrid and the Commission for Regulation of Utilities in relation to the unrestricted growth of data centres, there is no national policy supporting this development and accordingly it is premature and should be refused.
59. The direct and indirect cumulative affects are considered to be unsustainable and wholly inappropriate. There are also significant lacunas in Irelands national policy. We therefore recommend a refusal of this application.

ENDS