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For a fossil free future for Ireland

The Secretary,
Planning Department,
Cork County Council,
County Hall,
Cork

Planning Application Reference Number: 21/5574

Applicant: Tapella Ltd

Location: Hoffmann Park Inchera Little Island Co. Cork

Description: "Proposed change of use/alterations of an existing pharmaceutical facility building to a data centre including ground and first floor extension to the existing building. The proposed development will include demolition of an existing storage shed, connection to existing mains services and provision of ancillary plant/services including 3 no. chillers, 1 no. fuel storage tank, 3 no. generators, 1 no. medium voltage electrical substation, and 3 no. switch rooms, together with all associated site works."

This submission is made on behalf of Not Here Not Anywhere (NHNA), a nationwide, grassroots, non-partisan group campaigning to end fossil fuel exploration and the development of new fossil fuel infrastructure in Ireland. To avoid the most severe impacts of climate change, global temperatures must be kept below 1.5C above pre-industrialised levels, and we will need rapid and deep action to decarbonise our energy systems. Burning fossil fuels is the single biggest cause of climate change, and taking climate action means newly built energy infrastructure in Ireland must be fossil free. Planning is a key area of influence, and county councils have a major role in establishing the transition from fossil fuels to renewable energy. This encompasses processes for carbon-proofing major decisions, programmes and projects.

Regarding the application to Cork County Council for the transformation of a pharmaceutical building into a data centre, we make the following recommendations:

- 1. New data centres must be powered entirely by onsite or new off site renewable energy in order to reduce, rather than increase Ireland's CO² emissions, consistent with the Climate Action Plan and commitments under the Paris Agreement. This planning application features generators and fuel tanks, which raises concerns that fossil fuels, such as Diesel, will be used to either power the data centre directly, or act as a back-up energy source. We observe no plans to provide for the generation of renewable energy to compensate for the increased energy demand which the data centre will place on the grid. The applicant should be required to either provide for its own renewable energy generation (on or off site) and/or use fuel from renewable sources for storage or back-up generation.
- 2. Where technically possible, heat generated from a data centre should be utilised for district heating systems. We found no evidence in the application of technology provided for this, but existing technology (such as heat pumps) to capture excess heat is required to increase the energy efficiency and prevent enormous waste of data centres.
- 3. Due to the significant impact of data centres on energy consumption, which we will expand upon in this submission, we strongly urge that both EIAR and NIS assessments are comprehensively carried out before granting planning permission for any data centres, including the present application.

Eirgrid estimates that data centres could account for up to 27% of Ireland's electricity demand by 2028, and up to 50% of new electricity demand growth {i}. The Irish Academy of Engineering predicts that data centre development will add at least 1.5 million tonnes to Ireland's carbon emissions by 2030, a 13% increase on current electricity sector emissions, and will require an investment in energy generation and storage of €9 billion by 2027 {ii}.

For example, if Amazon's eight centre project in Mulhuddart, Dublin 15, is realised, by 2026 it would use c. 4.4% per cent of the State's entire energy capacity, the equivalent of Galway city, but employ only 30 people post-construction, largely in facility maintenance {iii}. The Apple data centre proposed for Athenry, Co. Galway, would have ultimately used "over 8% of the national capacity [...], more than the daily entire usage of Dublin", and "would require 144 large diesel generators as back-up" {iv}.

The government has acknowledged that "data centres pose considerable challenges to the future planning and operation of Ireland's power system" {v}. These challenges include higher electricity costs for consumers {vi}. The Danish Council on Climate Change recommended in April 2019 that the Danish government legally binds data centre owners and developers to contribute to the infrastructure required to supply the centres with renewable energy, such as wind and solar farms {vii}.

Currently, many companies claim to operate data centres powered by 100% renewable energy. However, the energy is largely sourced indirectly through Renewable Energy Certificates or Purchase Power Agreements {viii}, which means that the energy is sourced from the grid, which in Ireland is 69% fossil fuel-powered {viv}. If we continue to allow companies to virtually purchase clean energy where it is cheapest to create, while actually using and increasing demand for dirty energy in Ireland, we allow them to profit while our real emissions continue to rise. It is crucial therefore that data centres are powered directly by onsite renewable energy generation such as rooftop solar farms or genuinely new offsite generation such as offshore wind or solar farms. Data Centres also generate large quantities of waste heat which could be utilised in district heating systems {x}.

To meet the greenhouse gas emissions targets set out in the Paris Agreement, and in the newly published Climate Act, it is paramount that ABP examines the impact that energy supply of data centres will have on net emissions. Furthermore, it is crucial that ABP takes into consideration the cumulative impact of data centres' energy demand on a nationwide basis, as opposed to examining impact solely on a case-by-case basis.

Thank you in advance for your consideration.

Regards, Míde Power and Britta Thiemt 11 Aldergrove, Highfield West, Glasheen Road, Cork

On behalf of Not Here Not Anywhere

References

Eirgrid. (2020). All Ireland Generation Capacity Statement. Dublin: Eirgrid. Available: https://www.eirgridgroup.com/site-files/library/EirGrid/All-Island-Generation-Capacity-Statement-2020-2029.pdf (Accessed 2021, May 16) {i}

Irish Academy of Engineering. (2019). Electricity Sector Investment for Data Centres in Ireland. Available: http://iae.ie/wp-content/uploads/2019/08/Data-Centres-July-2019.pdf (Accessed 2019, September 22) {ii}

Lillington, K. (2018). Net Results: Data centres need to power down their energy requirements.

Available:

https://www.irishtimes.com/business/technology/net-results-data-centres-need-to-power-down-theirenergy-requirements-1.3561745 (Accessed 2019, September 22) {iii}

Climate Home News. (2017). 'Tsunami of data' could consume one fifth of global electricity by 2025. Available:

https://www.theguardian.com/environment/2017/dec/11/tsunami-of-data-could-consume-fifth-global-electricity-by-2025 (Accessed 2019, September 22) {iv}

Department of Business, Enterprise and Innovation. (2018). Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy. Available: https://enterprise.gov.ie/en/Publications/Publication-files/Government-Statement-Data-C entres-Enterprise-Strategy.pdf (Accessed 2019, September 22) {v}

Taylor, C. (2018). Data centre demand to lead to higher energy prices. Available: https://www.irishtimes.com/business/energy-and-resources/data-centre-demand-to-lead-to-higher-energyprices-1.3581998 (Accessed 2019, September 22) {vi}

Tech told pay for wind farms. (2020). Irish Examiner. https://www.irishexaminer.com/business/arid-30917493.html {vii}

Chernicoff, D. (2016). How data centers pay for renewable energy. Available: https://www.datacenterdynamics.com/analysis/how-data-centers-pay-for-renewable-energy (Accessed 2019, September 22) {viii}

Sustainable Energy Authority of Ireland. (2019). Renewables. Available: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwi69MPZiPTuAhUvThUIHXzMA9wQFjADegQIARAD&url=https%3A%2F%2Fwww.seai.ie%2Fpublications%2FRenewable-Energy-in-Ireland-2019.pdf&usg=AOvVaw0H1q38mxqi3ITr3FrjO8O8 (Accessed 2019, September 22) {ix}

Ramboll Group. (2019). Unprecedented data centre surplus heat recovery to fuel district heat network.

https://ramboll.com/projects/rdk/unprecedented-data-centre-surplus-heat-recovery {x}