Not Here Not Anywhere
℅ Angela Deegan
58 Dowth Ave
Dublin D07 H9F2

Mayo County Council
Áras an Chontae
The Mall, Castlebar
County Mayo, Ireland

Planning Application Reference Number: 2460708
Applicant: Mayo Data Hub Limited
Location: Mullafarry and Tawnaghmore Upper, Killala, Co. Mayo

Description:

 "The construction of a single data centre building located to the north of the site, with an overall gross floor area of c. 29,076 sq.m across two levels and an overall maximum height of c. 22.764m at parapet level. The data centre building includes data halls and associated electrical and mechanical plant rooms (c. 23,908 sq.m), an administrative and staff services block (c. 5,052 sq.m) and circulation and stairs (c. 116 sq.m). 2 no. external terraces are proposed to the east of the building (c. 309 sq.m) and an external generator yard to the south of the building (c. 5,205 sq.m) accommodating 25. no. backup / dispatchable generators and associated flues (to a height of c. 21.164m) within an enclosed compound. The construction of a sprinkler tank and pump house to the northeast of the site, the sprinkler tank is an overall height of c. 7.2 m and the pump house is a single storey building with an overall height of c. 4.15m and area GFA of c. 40.23 sq.m. The construction of an entrance hut at the main access to the south of the site, the hut is an overall height of c. 3.225m and area GFA of c. 11.6 sq.m. Construction of 2 no. site access points from the south and internal road network and circulation areas, footpaths, cyclist infrastructure, the provision of 56 no. car parking spaces (including 12 EV charging spaces and 7 disabled spaces, 3 of them EV), 20 no. cycle parking spaces, hard and soft landscaping and planting, site lighting, PV panels and plant at roof level, foul water connection connecting to existing WWTP in Killala Business Park, boundary treatments, green walls and all associated and ancillary works including underground foul and storm water drainage network and utility cables and all ancillary works and services. 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) and a Natura Impact Statement (NIS) will be submitted to the Planning Authority with the planning application and the EIAR and NIS 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."

This submission is made on behalf of Not Here Not Anywhere (NHNA), a nationwide, all-volunteer, grassroots, non-partisan group campaigning to end fossil fuel exploration and the development of new fossil fuel infrastructure in Ireland. We advocate for a just transition to publicly-owned renewable energy systems and a society-wide reduction in energy demand both here and around the world.

To avoid the most severe impacts of climate change, average global temperatures must be kept below 1.5°C above pre-industrialised levels, and we will need rapid and widespread action to

decarbonise our energy systems. Burning fossil fuels is the single biggest cause of climate change and taking climate action means newly built infrastructure in Ireland must be fossil fuel free. Planning is a key area of influence, and Local Councils have a major role to play in facilitating the transition from fossil fuels to renewable energy. This encompasses processes for carbon-proofing major decisions, programmes, and projects.

Regarding the application to Mayo County Council for the construction of a data centre spanning a gross floor area of 29,076 sq.m, we make the following recommendations:

1. **New data centres must be powered entirely by onsite or new off-site renewable energy to avoid increasing Ireland's carbon dioxide (CO_2) emissions, consistent with Ireland's Climate Action Plan and commitments under the 2015 Paris Agreement. They must also provide sufficient energy storage (e.g., battery or fully renewable fuel), rather than fossil or HVO fuel-based emergency storage, to account for variation in renewable energy supply.**

Instead, this application indicates that the power supply for this data centre will be provided from the national grid, which currently uses less than 40% renewables in the energy mix. Further, the EIAR Non-Technical summary, states that "The Proposed Development has the potential, in the absence of mitigation, to indirectly (from the use of electricity) and directly (through onsite backup generators) release **significant quantities of GHG emissions** during the operational phase of the project."

It states that, as the capacity of the Proposed Development is greater than 20 MW rated thermal input, "a greenhouse gas emission permit will be required for the facility which will be regulated under the EU-wide Emission Trading System (ETS) which necessitates offsetting GHG emissions through the purchase of 'carbon credits'." It concludes that the Proposed Development will therefore operate "under a system where GHG emissions will become increasingly costly and will encourage GHG emission reductions." It is utterly unacceptable for the developers to simply hope that cost incentives will result in a reduction in the acknowledged significant quantities of GHG emissions from this data centre.

We observe no plans to provide for the generation of renewable energy to compensate for the increased energy demand that the data centre will place on the grid. (The data centre will have an IT load in the order of 40 MW which will require c. 50 MW average electrical power to operate as per the EIAR). The applicant should be required to provide its own new renewable energy generation (on or off site).

The government has acknowledged that "data centres pose considerable challenges to the future planning and operation of Ireland's power system" (Department of Business, Enterprise and Innovation, 2018). As of 2023, data centres accounted for 21% of Ireland's electricity demand, the same amount as all urban homes (CSO, 2024). In a recent policy statement, the Irish government admitted that "In the short term, there is only limited capacity for further data centre development" (Department of Enterprise, Trade and Employment, 2022). These challenges include higher electricity costs for consumers (Taylor, 2018). In 2019, the Danish Council on Climate Change recommended that the Danish government legally requires data centre owners and developers to contribute to the infrastructure required to supply the centres with renewable energy, such as wind and solar farms (Irish Examiner, 2019). Polling has shown that the majority of Irish people (59%) believe that data centres should be restricted to achieve climate targets and to reduce strain on the grid (Business Post & REDC, 2021).

Emergency Generation

According to the EIAR, this data centre facility, once fully operational would have "emergency and peaking ability available from HVO fuelled generators."

Research suggests that hydrotreated vegetable oil (HVO), is far from a carbon-neutral solution as it could inadvertently be fuelling tropical deforestation. According to research by Prof Hannah Daly, Irish Times, (2023),

> "*Concerns have arisen as to whether part of the supply of its main feedstock marketed as used cooking oil (UCO) is in fact pure palm oil, one of the main drivers of deforestation.*
>
> *Because of decarbonisation policies incentivising biofuels, UCO can fetch a higher price than palm oil in Europe, and inadequate traceability controls offer palm oil traders an attractive arbitrage opportunity.*
>
> *Case in point: in 2020, Malaysia, the world's second-largest producer of palm oil, exported five litres of UCO per capita (about 150 million litres in total) to the UK and Ireland. This far exceeds the volume that was actually collected in the country.*
>
> *These concerns have led to the EU capping the use of UCO for meeting renewable transport targets to 1.7 per cent (though this is being revised upwards). Ireland, one of the heaviest users of UCO for biofuels in the EU, exceeded this cap threefold in 2021. Moreover, these caps don't apply to heating, and HVO is considered a zero-carbon fuel in greenhouse gas accounting, ignoring the potentially substantial emissions arising from deforestation and other factors in the supply chain.*"

Instead of reliance on HVO for backup generation, the applicant should be required to install renewable and clean energy back-up and storage, for example with battery storage sufficient for any back-up and emergency power generation requirements.

Eirgrid estimates that data centres could account for up to 28% of Ireland's electricity demand by 2028, and up to 50% of new electricity demand growth (Eirgrid, 2022).
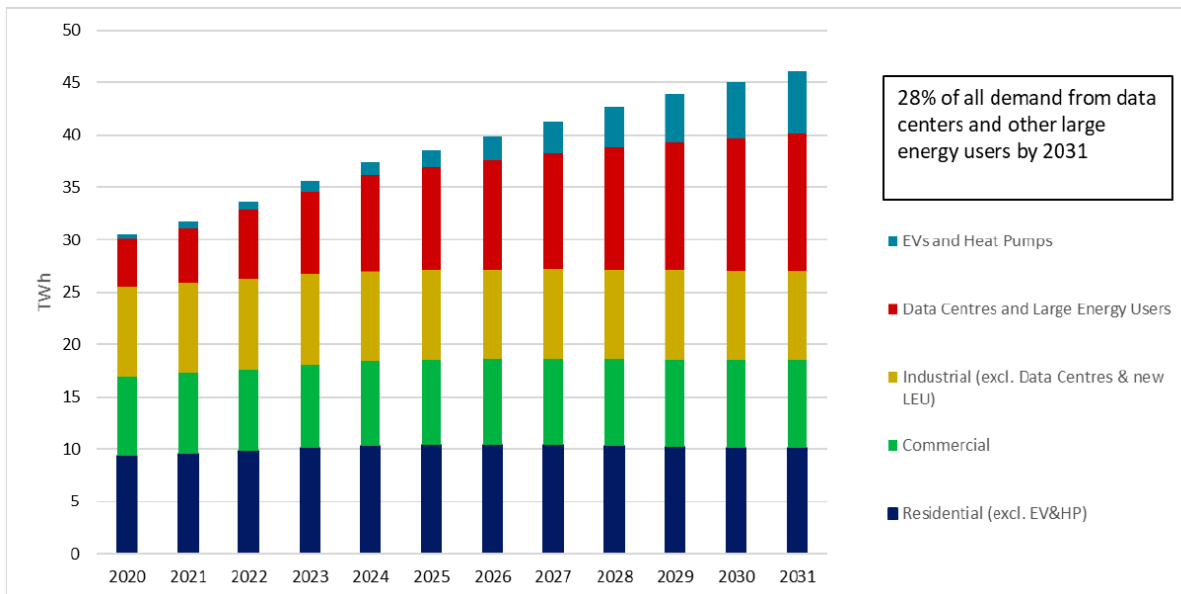
Source: Eirgrid Ireland Capacity Outlook 2022-2031

The Irish Academy of Engineering (2019) 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.

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 (Lillington, 2018). 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" (Climate Home News, 2017).

To meet the GHG emissions targets set out in the 2015 Paris Agreement, and in the recently published Climate Bill, it is paramount that Mayo County Council examines the impact that the energy supply of data centres will have on net emissions. Furthermore, it is crucial that Mayo County Council 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.

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 purpose. Denmark's Ramboll Group (2019) recommends that the large quantities of waste heat generated by data centres should be utilised in district heating systems. Existing technology (such as heat pumps) to capture excess heat should be required and used to increase data centres' energy efficiency.

3. **Risk of blackouts**

In the middle of an energy crisis, with Ireland's electricity grid at risk of failure in winter, large, wasteful energy users like data centres simply cannot be allowed to use any more of the nation's gas and electricity supplies. Blackouts as a result of pressure from data centres on energy demand

is a real risk (The Irish Independent, 2022). With Eirgrid already banning electricity connections for data centres in Dublin and Minister Eamon Ryan calling for a ban on gas connections for data centres, it is evident that this development is not future-proof and goes against the best interests of the country (Business Post, 2022; RTÉ, 2022b)

4. Data centre costs versus benefits

Data centres provide a wide range of services, but are not transparent about the amount of energy used for these different purposes. While some capacity provides essential services to society (enabling public services like health, public transport, remote working, and communications between people), at the other end of the spectrum are services that can be seen as highly wasteful, such as cryptocurrency mining. An independent report into organisational data management also demonstrated that a majority of data stored globally is dark or redundant data, while only 14% was business-critical (Veritas, 2015), meaning that energy used for its storage is essentially wasted.

To make a case for the construction of the data centre, which will create further electricity demand and therefore challenge the realisation of Ireland's decarbonisation targets, the applicant should provide information about the purpose or their services, and how they will ensure electricity is not wasted on storing dark or redundant data that have huge costs to our energy infrastructure without providing societal or commercial benefits.

Thank you in advance for your consideration.

Kind regards,

Angela Deegan
On behalf of *Not Here Not Anywhere*
www.notherenotanywhere.com
Instagram:@notherenotanywherenhna
Facebook:@notherenotanywhereNHNA
BlueSky: nhna.bsky.social

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