

Energy for who?

5 reasons we don't need data centres - and why we need to campaign against them.

A Friends of the Earth resource on data centres for climate justice campaigners

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Introduction

Data centres are already using up more than 20% of Ireland's electricity. This is forecast to grow to a staggering 30% by 2030 - data centres are predicted to consume almost one third of Ireland's grid power. Ireland currently hosts 82 operational data centres, with 14 more under construction and planning approval granted for an additional 40, predicting a 65% growth in the sector in the coming years. Irish governments have marketed Ireland abroad as a world leader for the Data Centre industry to the point where we now account for at least 25% of the European data centre market - and this is projected to surge. If we continue to allow this unchecked growth of such an energy and fossil fuel guzzling industry it will wreak havoc with Ireland's climate targets, as is outlined in the points below.

1. Bad news for local environments, worse news for the climate

Hearing that a data centre is setting up in your local area is not good news. Data centres' on-site gas and diesel generators emit not only greenhouse gas emissions but also potentially harmful pollutants into the local air. Data centres can also place huge demands on an area's water supply. A data centre requires tens of millions of litres of water every day to cool down its servers during the warmer summer months - essentially using the same amount of water as a large town. Meta's Data Centre in Clonee uses over 900,000 cubic metres of water, and despite the industry's argument that Ireland somehow has the

perfect climate for data centres - this is actually more than any other of its data centres worldwide. This does not even look at the issue of land use - the majority of data centres in Dublin are in areas with higher rates of poverty and material deprivation. In this context using so much land and water for heavily polluting data centres, that are run for corporate profits, is hard to understand.

Data centre's hunger for energy also poses a huge threat to Ireland's climate targets. Data centres are already using more than 20% of the nation's total electricity - that's more electricity than all the urban homes in the country combined. So any growth in this sector is likely to make Ireland's climate goals practically impossible to achieve. Friends of the Earth <u>research</u> has shown that huge growth in data centre electricity demand would substantially increase the challenges of meeting legally binding climate targets. If data centre growth uses a significant proportion of increasing renewable electricity generation, this will limit the potential for transport, buildings and industry sectors to meet their decarbonisation commitments.

While renewable energy provides for some of data centres' power demand, many use fossil fuels and if their growth continues it will create additional need for fossil fuel generation, particularly gas generation. (Point 2 below also highlights that data centres' use of renewable energy is also problematic). In some cases, a data centre is proposed as <u>justification</u> for building new fossil fuel infrastructure. The Shannon Liquefied Natural Gas (LNG) project promoter, New Fortress Energy, has declared plans for a huge data centre next to a proposed LNG terminal.

The Irish Academy of Engineering (IAE) predicts that data centre development will add at least <u>1.5</u> million tonnes to Ireland's carbon emissions by 2030, a 13% increase on current electricity sector emissions.

2. A waste of (renewable) energy

Data centres like to hype up their use of renewable energy but this energy is far from innocent.

Firstly, we already face a huge challenge to switch our energy system away from fossil fuels to 100% renewable energy at the speed necessary to prevent runaway climate breakdown. If energy demand increases this challenge will become more difficult, to the point of being impossible. This makes it essential to choose what we use renewables for wisely - and make sure that we prioritise renewable energy that is essential for human wellbeing, such as powering homes, schools and hospitals. We can't simply say yes to renewables for any kind of activity.

Secondly, all energy comes at a cost and even renewable energy can come with huge-environmental-and-social-impacts. The raw materials used to create solar panels and wind turbines and associated technologies such as batteries are not plucked from thin air instead it must be mined which can have hugely negative impacts on the local areas where the mining takes place and on the communities living in those areas. Mining-has become one of the biggest single drivers of deforestation, ecosystem collapse, and biodiversity loss around the world. Ecologists estimate that even at present rates of global material use, we are overshooting sustainable levels by 82 percent. Much of this mining (and its associated negative impacts such as pollution, human health impacts, water supply and land grabs from Indigenous Peoples) happens in the global South while the benefits of the renewable energy it is used to

create is enjoyed by the global North - hence continuing the North's exploitation of the South which has been happening since colonial times.

3. What are they doing in there anyway?

It's highly likely that much of the data stored by data centres does not contribute to human flourishing or planetary well being. In fact, you could argue that chunks of it are used to do just the opposite. Think about data that's used to facilitate the development of algorithms that build hate on social media, leading people towards greater polarisation and more extreme views. Or data that's used for advertising to create a false need in people to buy more and more stuff which in turn leads to overconsumption with huge environmental impacts. The sheer volume of <u>AI operations</u> that corporations like Meta execute mean that the emissions due to these operations, which are used to run things like recommendations and ranking algorithms, are likely to be immense.

4. Empty job promises

Those pushing for the construction of data centres sometimes play the "jobs card" - arguing that data centres will bring jobs to the area. But in reality most of the jobs that data centres create are short term construction jobs that will dry up once the centre is completed. By the <u>Department of Enterprise's own admission</u>, the amount of jobs that a functioning data centre maintains is small. And tiny in comparison to the amount of jobs that creating a more sustainable economy would create. In fact, there's a huge shortage of construction (and other types) of labour to carry out essential work like retrofitting Ireland's entire building stock to reduce our emissions and create warmer homes and buildings for all. Instead of being lured in by the false promises of data centres, the Government should be doing everything it can to realize the jobs potential of sectors that will facilitate our transition to a low carbon economy. There is an <u>urgent need</u> to attract, and train up, workers in these sectors, such as the retrofitting sector. The Government needs to be much more proactive in making this happen or labour shortages will seriously hamper efforts to meet Ireland's climate targets.

5. Energy use for who and for what?

The climate and energy crises we're facing now mean that we need to have a serious conversation about energy use - what it's used for and who gets to use it. To avoid complete climate breakdown we need to transition away from gas and other fossil fuels to 100% renewable energy but this won't be possible if we allow energy demand to keep growing. As it outlined in point 2 above, we'll only be able to transition to renewable energy at the scale and speed required if we reduce our overall energy demand - not grow it. This means that we need to look at sectors where energy use can be scaled down - and prioritise energy use that meets real human needs and is centred on delivering genuine human well being - for example making sure that everyone can live in warm comfortable homes - regardless of economic status. So you've got to ask - where do the likes of energy guzzling data centres that are owned by mega rich corporations with dubious ethics fit in here? Especially at the moment when ordinary people are struggling to pay their energy bills to meet their basic needs. We should ask similar questions when honing in on data storage itself - such as whose data is being stored and what is it being used for?