



gluaiseacht
FOR GLOBAL JUSTICE

Gluaiseacht Submission on the new 293MW Kilshane Gas power plant in Finglas

27/01/22

Planning Department
Fingal County Council,
County Hall,
Main Street,
Swords,
Fingal,
Co. Dublin

Planning Application Reference Number: FW21A/0250

Applicant: Kilshane Energy Ltd.

A chara,

I refer to the above planning application and wish to make the following objection in relation to the proposed development.

1. Introduction

According to the Eirgrid's 2021 "All-Ireland Generation Capacity Statement" there is currently 6183 MW of fossil fuel based electricity generating capacity in Ireland. The proposal to add 2000 MW of gas fired power plants to the system in the coming years, therefore signifies adding 32% more fossil fuel generating capacity to current levels.[1] That this is being added to the system mainly to feed brand new demand is as clear an indication as possible that the climate crisis, or Ireland's commitments to greenhouse gas reductions are not currently being taken seriously.

The obvious solution to prevent greenhouse gas and air pollutant emissions from the burning of fossil fuels is to stop burning them - we need to rapidly reduce our energy demand back to within the capacity of our renewable resources. An overall reduction

in energy use is the only viable basis for tackling climate change. This means we need strategies of so-called 'energy descent' and 'de-growth economics'. The strategies of using economic growth and interest rates as a means to provide for the necessities of life, need to be disposed of and replaced with strategies that don't mine non-renewable resources.

This proposed development does the direct opposite to this and so should be rejected out of hand.

2. Climate Implications

The application is missing any details on the climate implications of it's planned operations.

The application declares that *"it is not considered that any appropriate assessment issues will arise or the proposed development would be likely to have any significant effects individually or in combination with other plans or projects, on a European site."*

The application also states "It is the considered opinion of CWPA Planning and Architecture that the proposed development is considered to be sub-threshold" and so an EIAR isn't required.

Article 103 (1) of the Planning and Development Regulations, 2001 states:

"Where a planning application for sub-threshold development is not accompanied by an EIS, and the planning authority considers that the development would be likely to have significant effects on the environment, it shall, by notice in writing, require the applicant to submit an EIS." [2]

Schedule 7 of the Planning and Development Regulations, 2001 states:

"Criteria for determining whether a development would or would not be likely to have significant effects on the environment

1. Characteristics of proposed development

The characteristics of proposed development, in particular:

- *the size of the proposed development,*
- *the cumulation with other proposed development,*
- *the use of natural resources,*
- *the production of waste,*
- *pollution and nuisances,*
- *the risk of accidents, having regard to substances or technologies used."*

[3]

We submit that it is clear that this planning application will certainly *"have significant effects*

on the environment" and so, unless Fingal County Council are rejecting the application out of hand, it needs to require the applicant to submit an EIS.

While it is unclear from the application even what type of gas turbine is planned to be operating at this power plant, it would be useful to illustrate the level of greenhouse gas emissions that could be emitted from this development.

If we take for example the Whitegate Independent Power Plant owned by Bord Gáis Energy, which is a 445MW combined cycle gas turbine (CCGT) power plant. In 2020 they had verified ETS emissions of 765,553 tonnes CO₂(e) (923,191 tonnes CO₂(e) for 2019). [4][5]

If the proposed gas power plant was used in a similar manner to the Whitegate power plant and given to lack of details in the application, it seems that it wouldn't be unreasonable to assume that the proposed development could produce emissions in excess of 500,000 tonnes CO₂(e) per year.

Professor of Energy and Climate Change Kevin Anderson recently gave evidence before the Oireachtas committee on Environment and Climate Action on carbon budgets. He stated that Ireland's fair-share of global carbon budgets until the end of the century was between 120 million tonnes and 300 million tonnes depending on whether we were trying to limit future warming to 1.5 or 2 degrees Celsius. [6]

Given that in an estimated operational life-time of 25 years, this proposed development therefore has the ability to use a tenth of the overall carbon budget for the country for the century, then the very least that we can expect is an EIS.

It is also worth noting that in the recent application for a 299MW gas power plant in Tynagh, Galway, that the applicant EP Energy Developments Ltd didn't claim the sub-threshold clause and instead provided an EIAR.[7]

The applicant has provided no background on their experience or expertise in building, operating or decommissioning a development of this scale, which certainly cause significant damage to the environment if it is granted permission.

The application is pretty clear on where it's priorities lie in whether we should take effective climate action or just continue the practice of allowing fossil fuels to be used to keep the illusion of never-ending growth going on a finite planet.

"The concern of power outages has been highlighted recently in the media and is obviously a significant concern in terms of not stagnating growth in Ireland's growing economy"

It can be seen in Fig 1 & 2 from Eirgrids All-Island Generation Capacity Statement 2021-2030 that they are projecting a very significant rise in electricity demand in the coming years.[1] In the Median Demand Forecast a 5.6TWh increase is projected in the next 5 years.

Table A-1 - The Median Demand Forecast, given in Calendar year format (including a correction to 366 days in each Leap year), for Total Electricity Requirement (TER). TER is the total electricity required by the region, i.e. it includes all electricity produced by large-scale, dispatchable generators, all small-scale exporting generators, and an estimate of electricity produced by self-consuming generators. *Figure is provisional

Median Year	Calendar year TER (TWh)						TER Peak (GW)			Transmission Peak (GW)		
	Ireland		Northern Ireland		All-Island		Ireland	Northern Ireland	All-Island	Ireland	Northern Ireland	All-Island
2020	30.8	1.3%	8.3	-4.3%	39.1	0.1%	5.48	1.68	7.10	5.36	1.65	6.98
2021	32.1	4.2%	8.4	1.0%	40.5	3.5%	5.65	1.68	7.26	5.54	1.65	7.14
2022	33.3	3.8%	8.5	0.9%	41.8	3.2%	5.84	1.68	7.45	5.72	1.65	7.33
2023	34.7	4.3%	8.5	0.4%	43.2	3.5%	5.97	1.69	7.57	5.85	1.66	7.45
2024	35.8	3.1%	8.6	0.4%	44.3	2.5%	6.07	1.70	7.69	5.96	1.67	7.57
2025	36.4	1.9%	8.6	0.4%	45.0	1.6%	6.16	1.72	7.79	6.05	1.68	7.67
2026	37.5	2.8%	8.6	0.5%	46.1	2.4%	6.26	1.73	7.89	6.14	1.69	7.77
2027	38.4	2.4%	8.6	0.2%	47.0	2.0%	6.34	1.74	7.99	6.22	1.70	7.87
2028	39.3	2.5%	8.7	0.2%	48.0	2.1%	6.41	1.75	8.09	6.30	1.71	7.97
2029	40.1	1.9%	8.7	0.2%	48.8	1.6%	6.49	1.75	8.18	6.37	1.71	8.06
2030	40.9	2.1%	8.7	0.1%	49.6	1.7%	6.57	1.75	8.27	6.45	1.71	8.15

Figure 1

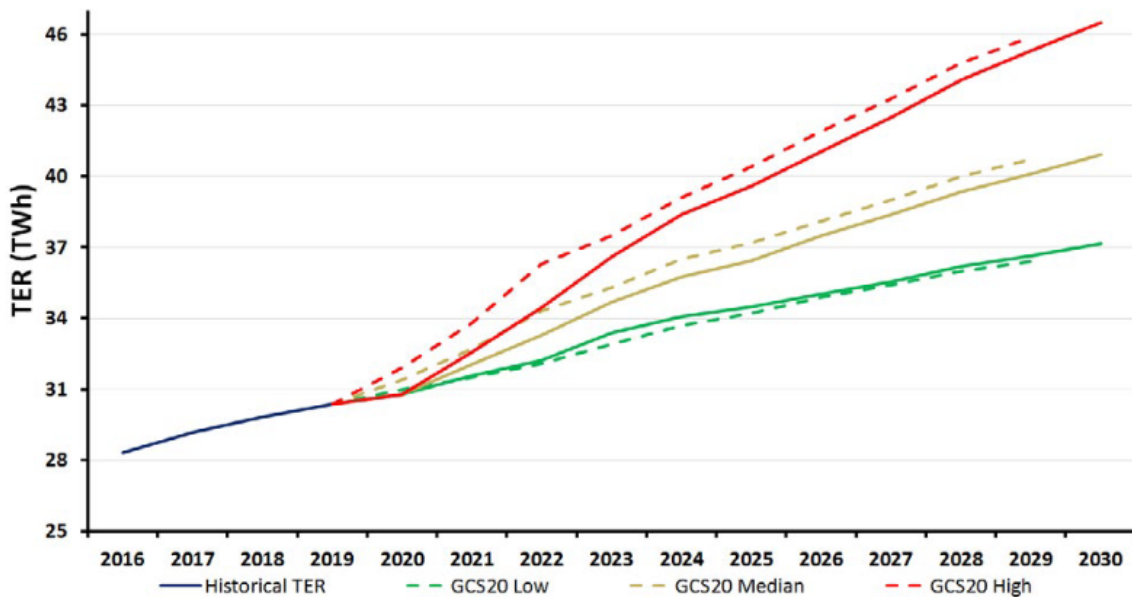


Figure 9 - Total Electricity Requirement forecast for Ireland 2021 – 2030

Figure 2

Furthermore as shown in Figure 3 (Table A-6), Eirgrid are projecting a modest additional 800MW (5325 - 4525) of wind energy sources being added to the system over the next 5 years. Therefore it is clear that this rise in electricity will not be met with renewables.

Table A-6 - All Renewable energy sources in Ireland (MW). We have assumed that the peat plant at Edenderry will be approximately 40-50% powered by biomass by 2020

At year end:	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
All Wind*	4,525	4,725	4,925	5,125	5,325	5,815	6,985	8,405	9,125	9,400
All Hydro	242	242	242	242	242	242	242	242	242	242
Biomass/LFG (including those units registered in the Capacity Market and Biomass CHP)	24	24	24	24	24	24	24	24	24	24
Waste (Assume 50% renewable)	41	41	41	41	41	41	41	41	41	41
Peat Stations on Biomass	59	59	59	0	0	0	0	0	0	0
Solar	261	384	507	630	692	753	815	877	938	1,000
Total	5,152	5,475	5,798	6,062	6,324	6,875	8,107	9,589	10,370	10,707

*The wind forecasts past 2021 are not based on exact projects. When more detailed information of exact wind developments occur, this will be included in the forecast.

Figure 3

SEAI's Energy in Ireland 2021 report stated that for 2020, gas provided 51% of electricity generation vs 36% wind. Given the projected rise in electricity demand this % of the share generated by fossil fuels in the short term is very likely to rise rather than fall.

Gas Networks Ireland are continuing to project an overall 29% increase in gas demand from the power generation sector by 2029 (or a 61% growth in gas demand in it's High Demand scenario).[8] Their projected growth for overall annual gas demand is 23% or a 45% forecast for the High demand scenario.

GNI are estimating an annual gas demand increase for the power generation sector from 32.5TWh in 2020 to 41.9TWh in 2029 (or 52.8TWh in the High demand scenario). To put these figures in context, wind generation provided about 10TWh of energy to the grid in 2019. So it's clear in the short term that this increase in demand will not be met with renewable power.

In the absence of a full-life cycle emissions estimate for the development, accompanied by appropriate and proportionate cost benefit analysis, the proposed development should be rejected out of hand as incoherent with mainstream opinion on climate mitigation.

3. Data Centre Demand

As Eirgrid also make clear this rise in demand is primarily due to data centres that are expected to be added to the system as detailed in Figure 4 & Figure 5.

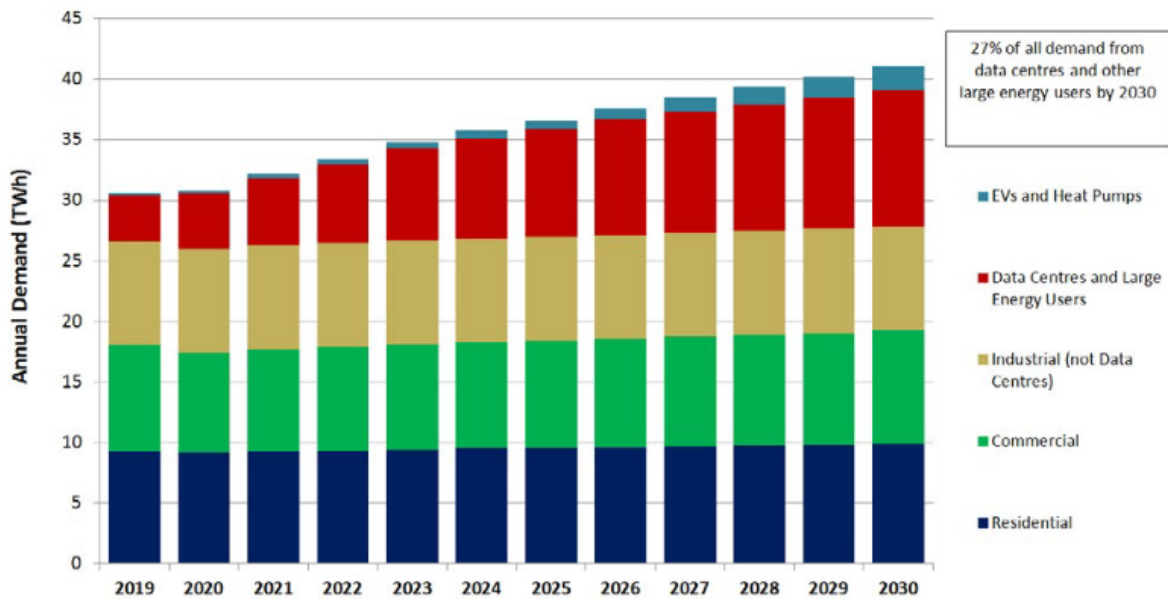


Figure 10 - For the Ireland Median Demand scenario, this illustrates the approximate split into different sectors. EirGrid estimate that 27% of total demand will come from data centres and large energy users by 2030

Figure 4

Figure 5 taken from the CRU consultation on Data Centres [9] shows an approximate 10TWh growth in annual electricity requirements due to data centre demand.

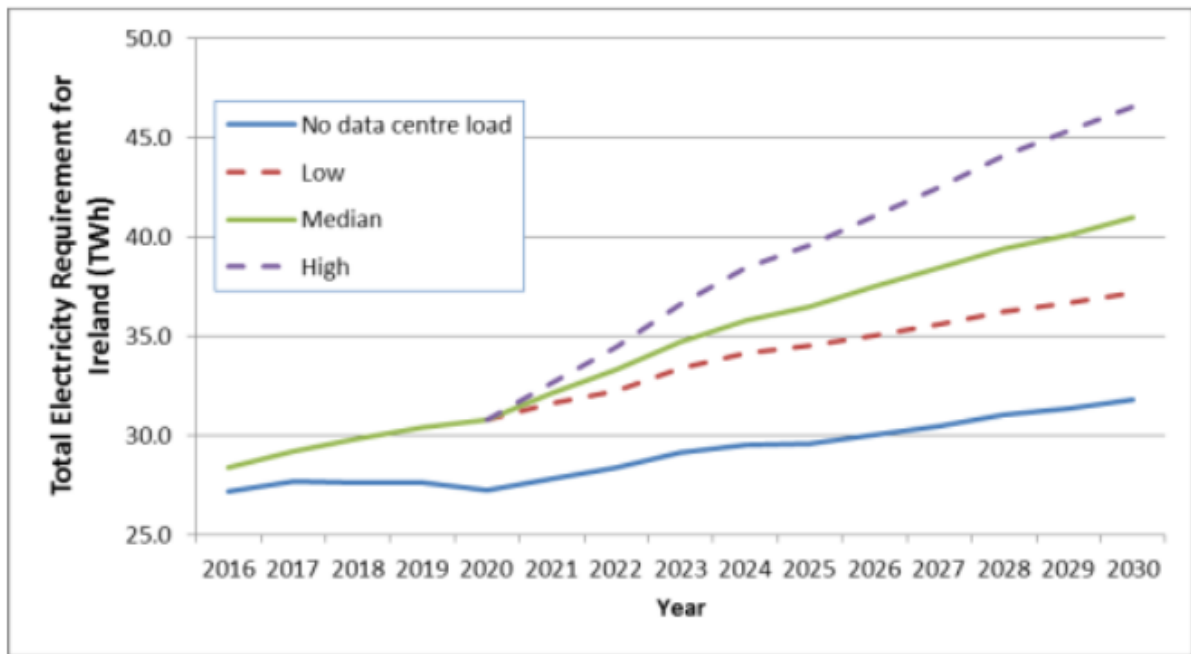


Figure 5: Data centre demand forecasts against average growth forecasts. Source: EirGrid

Therefore we can say with some confidence that this gas power plant is being added to service the needs of the data centre industry. Indeed recent quotes from Eirgrid CEO Mark Foley and Chairwoman of the Climate Change Advisory Council (CCAC) Marie Donnelly emphasise this point

Mark Foley CEO of Eirgrid

"We can't get your customers [data centres] connected in the near term, it's as simple as that. We wouldn't have this proposition [data centres to build their own generation] if the 2000MW was literally coming and the wires were there. So it's actually designed fundamentally to try to give your clients and critical FDI companies in this country, a way to continue to grow their business and not be shut down because Ireland Inc won't be ready for another 5 to 7 years. So it's an enabling tool." [10]

Chairwoman of the Climate Change Advisory Council (CCAC) Marie Donnelly

"So this [building of gas fired power plants] is a short term fix for that technology gap [grid stability] that we have that needs to be plugged right at this point in time" [11]

In Bill Thompson's (Group Head of Regulation for Eirgrid) Letter to the CRU 27 May 2021 [9] he states

"The rate at which data centres are seeking to grow their load is unprecedented. Over the last 4 years we have seen annual increases in demand usage of around 600 GWh from data centres alone – equivalent to the addition of 140,000 households to the power system each year."

"The unprecedented growth brought about by the data centre phenomenon, or paradigm shift, has to raise questions about the very design and purpose of the transmission network and centralised power system itself. Ireland's electricity system was surely not planned to

be, nor designed to be planned to be, a system which seeks to serve the needs of the global citizen for increased data supported by an ever proportionately smaller non-data centre commercial, industrial and domestic load. Whilst not questions first and foremost for EirGrid it surely must as part of this, give rise to consideration and potentially wider national debate as to that which is in the public interest in this regard. Such considerations of the public interest are specifically called out in the relevant sections of the statute concerning the granting by EirGrid of connections to the system."

We have still not had the "wider national debate" on the future of the country's electricity system that Mr Thompson called for. But we need to be clear what this application stands for. It stands for putting multinationals' new electricity demand before our climate obligations and targets.

This application continues the practice of relying on fossil fuel growth to continue the practice of economic growth. So while the entities involved in pushing this application forward will talk about climate targets, the energy transition & renewables, in reality it is clear that this is found lacking in substantive action towards these necessary goals.

4. Ireland's Emissions - The bigger picture

The climate crisis means we need to urgently reduce greenhouse gas emissions. We need to transition our energy system away from fossil fuels to one based on renewable energy, but more importantly we need to reduce our overall energy consumption.

A rapid reduction in the burning of fossil fuels and its attendant greenhouse gas emissions is essential if we are to meaningfully address the climate crisis. The following SEAI produced graphic shows how much renewables actually contribute to the total final energy supply in Ireland:

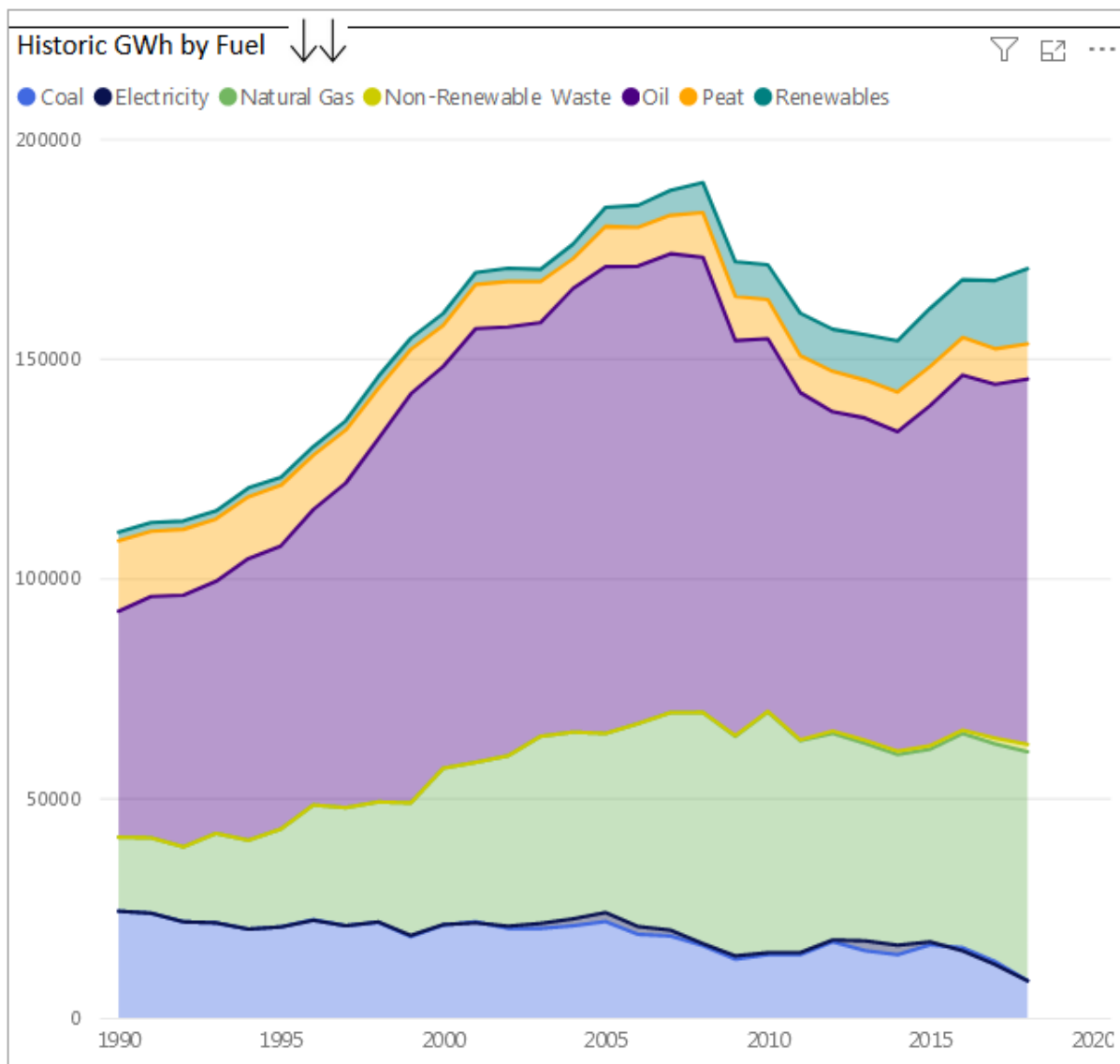
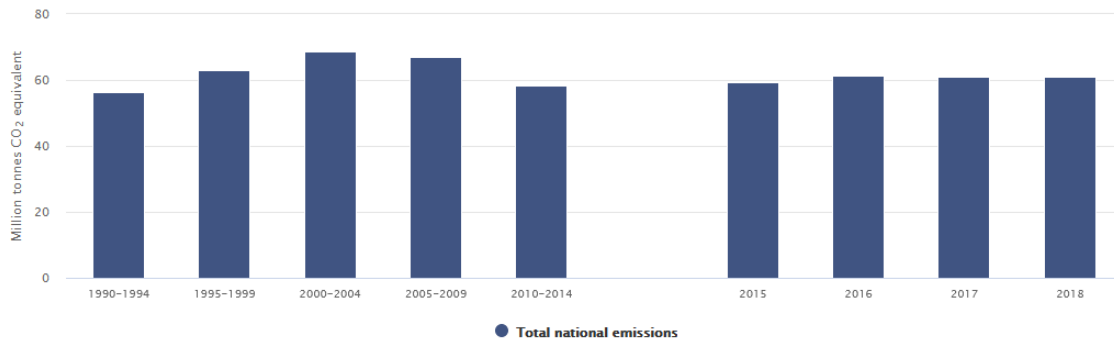


Image from <https://www.seai.ie/data-and-insights/seai-statistics/energy-data/>

The portion of renewable energy has increased dramatically since 1990, but it hasn't "eaten into" our energy demand - that has grown by more than renewables have added. There have been reductions in Greenhouse Gas emissions from electrical power generation overall but this has largely been achieved by replacing coal and peat power stations with gas. The benefit from that switch has been reaped and won't continue the downward trend.

A look at our overall greenhouse gas emissions by year is important for context to see how we are doing. The following graph of overall estimated greenhouse gas emissions per year is from the CSO Environmental Indicators Report 2020:

Figure 4.1 Ireland: Greenhouse gas emissions 1990–2018



Source: Environmental Protection Agency

In 2018, Ireland's greenhouse gas emissions were 60.9 million tonnes of carbon dioxide equivalent. This was 9.9% higher than the 1990 figure of 55.5 million tonnes.

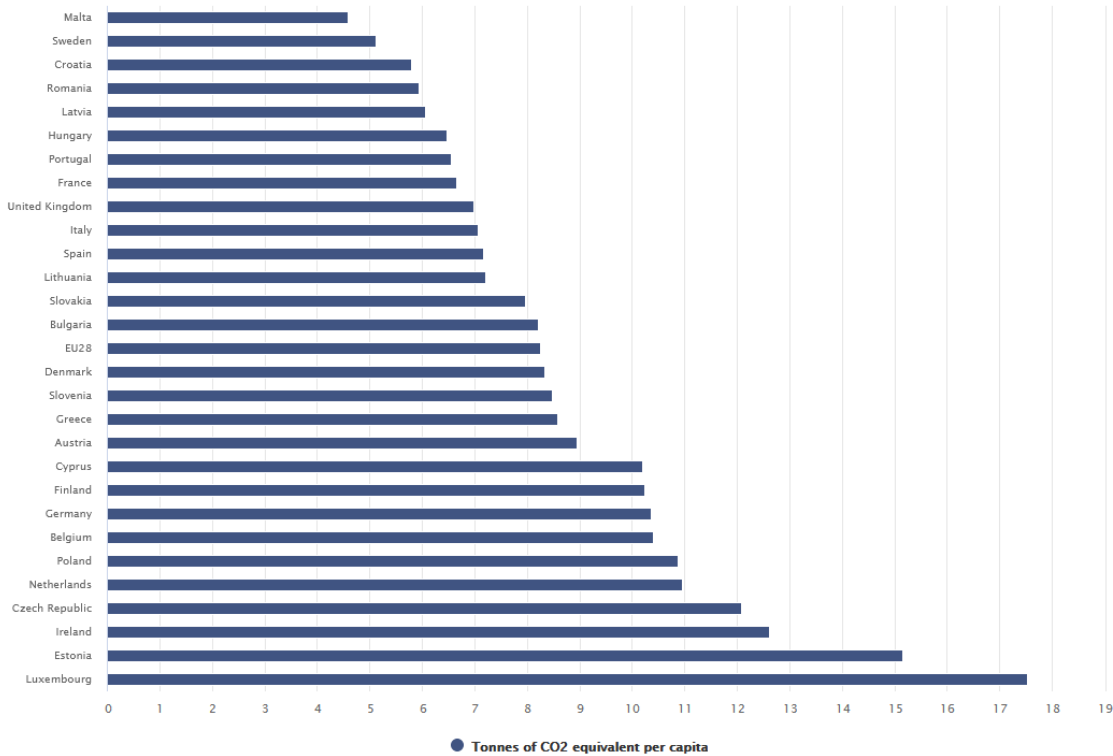
<https://www.cso.ie/en/releasesandpublications/ep/p-eii/environmentalindicatorsireland2020/greenhousegasesandclimatechange/>

The main trend visible over time is the increase in energy consumption and emissions during the Celtic Tiger boom years in Ireland. Our energy use however has risen back up to near the peak of the boom time while our emissions have flat-lined. Despite break-neck deployment of massive wind power capacity and retirement of our most polluting power stations, we cannot reduce our emissions.

For further context, we should understand our emissions position per capita within Europe:

4.3 EU: Greenhouse gas emissions per capita 2018

Figure 4.2 EU: Greenhouse gas emissions 2018



<https://www.cso.ie/en/releasesandpublications/ep/p-eii/environmentalindicatorsireland2020/greenhousegasesandclimatechange/>

We are the third worst greenhouse gas emitters per capita in Europe despite having the second highest wind power grid penetration in the world.

The obvious solution to prevent emissions from the burning of fossil fuels is to stop burning them - we need to rapidly reduce our energy demand back to within the capacity of our renewable resources. An overall reduction in energy use is the only viable basis of tackling climate change. This means we need a strategy of energy descent and de-growth economics. The strategies of using economic growth and interest as a means to provide for the necessities of life need to be deposed and replaced with strategies that don't mine our non-renewable resources.

In this context, after recording the seven hottest global mean temperatures on record and during a year which has already brought incredible climate extremes such as the flooding of Germany and near 50 degree centigrade heat in Canada, we have a proposal to add, for private profit, to our national energy demand and emissions the equivalent of all the power used by 140,000 homes.

5. Energy Security and Environmental Concerns

A further issue is where the Natural Gas for the proposed plants will come from. At the time of writing it is not clear that the Nord Stream 2 gas pipeline will come online due to political tensions between Russia and the EU. Even if the Natural Gas is to be sourced from Norway or Algeria or the Middle East, Ireland is at the end of the pipeline should any supply constraints occur. It seems astounding to choose to construct 2GW of Natural Gas electricity generating plant which will have a lifetime of at least 25 years, simply so that the construction of Data Centres can continue, when the focus should be on installing 2+GW of Wind Turbine capacity. In the worst case, the natural gas will be sourced from US fracking operations which have untold environmental impacts over there.

6. Conclusion

We oppose the development and this should be rejected by anyone that takes the climate crisis seriously. We are not going to reduce our emissions by adding loads of new fossil fuel based generation capacity, and it is wishful thinking that this is going to happen. This project proposal is a continuation of the policy of using fossil fuels to preserve the illusion that economic growth can just keep growing and growing .

Please reject this planning application.

Yours sincerely,

Fergal Scully
On behalf of Gluaiseacht

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Links:

- [1] Eirgrid's 2021 "All-Ireland Generation Capacity Statement"
<https://www.eirgridgroup.com/site-files/library/EirGrid/208281-All-Island-Generation-Capacity-Statement-LR13A.pdf>
- [2] <https://www.irishstatutebook.ie/eli/2001/si/600/made/en/print#article103>
- [3] <https://www.irishstatutebook.ie/eli/2001/si/600/made/en/print#sched7>
- [4] https://ec.europa.eu/clima/eu-action/eu-emissions-trading-system-eu-ets/union-registry_en
- [5] Whitegate 2015 GHG permit
<https://www.epa.ie/publications/licensing--permitting/climate-change/IE-GHG163-10428-3.pdf>
- [6] https://twitter.com/sli_eile_/status/1481414159757676549
- [7] <https://www.eplanning.ie/GalwayCC/AppFileRefDetails/212192/0>
- [8] <https://www.gasnetworks.ie/corporate/gas-regulation/regulatory-publications/GNI-2020-Network-Development-Plan.pdf>
- [9] <https://www.cru.ie/wp-content/uploads/2021/06/CRU21060-CRU-consultation-on-Data-Centre-measures.pdf>
- [10] Mark Foley CEO of Eirgrid speaking at Data Centre Webinar
https://twitter.com/sli_eile_/status/1466697798351572992
- [11] Marie Donnelly speaking at Oireachtas Climate Committee:
<https://www.oireachtas.ie/en/oireachtas-tv/video-archive/committees/5046>