Submission By: Futureproof Clare
% Tim Hannon, Lavalla, Ballynacally, Ennis, Co. Clare.

An Bord Pleanála
64 Marlborough Street,
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D01 V902

October 22nd, 2021

Re:

Objection to Proposed Shannon LNG/Shannon Technology and Energy Park STEP (Fracked) Fossil Gas (FSRU) Import Terminal and Power Plant Planning Application

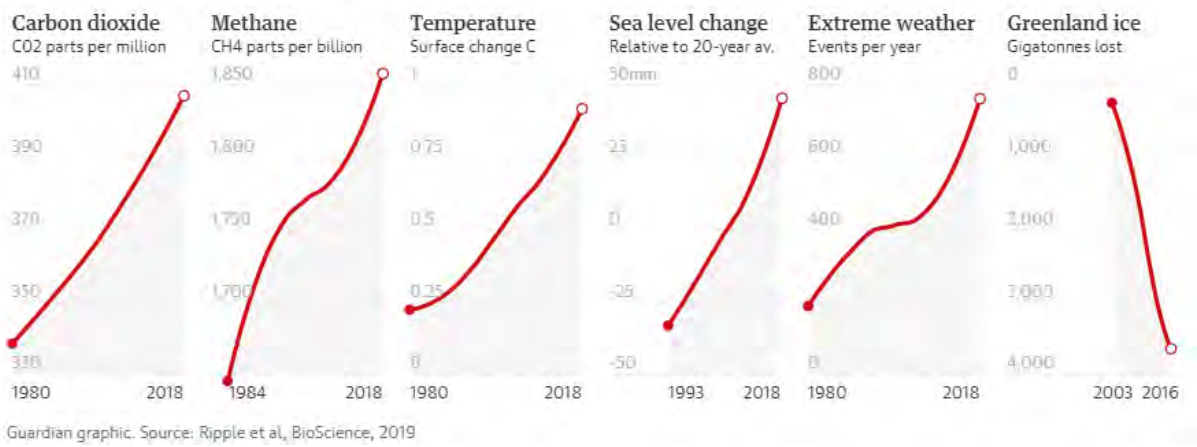
An Bord Pleanála Case Reference: PA08.311233

On behalf of Futureproof Clare, we wish to make the following observations on case reference PA08.311233 for a "10-year permission for proposed Shannon Technology and Energy Park STEP consisting of power plant, battery energy storage system, floating storage and regasification unit, jetty, onshore receiving facilities, above ground installation and all ancillary structures/ works."

We are objecting to the STEP (previously ShannonLNG project) on the grounds of climate implications, emissions, fracked gas import terminal, greenwashing, methane, Human Rights, Health and Ecocide, Biodiversity, Data Centres & Stranded Assets as listed below.

1 - Climate Implications

Shannon LNG - a further STEP to climate breakdown



Guardian graphic. Source: Ripple et al, BioScience, 2019

As can be seen in the graphs above carbon dioxide and methane levels are still rising at an alarming rate, as are temperatures, sea levels and extreme weather patterns. The United Nations' Intergovernmental Panel on Climate Change report released last 9th August shows that, cumulatively to date over the past century, methane has contributed about two-thirds as much to global warming as carbon dioxide has.

Warning to Humanity

Climate scientists have issued two Warnings to Humanity since 1992. In the first they declared that:

> *"humanity was pushing Earth's ecosystems beyond their capacities to support the web of life."*

More recently, in 2017, the *'World Scientists' Warning to Humanity: A Second Notice'* was published. It is signed by 15,364 concerned scientists from 184 countries around the world.

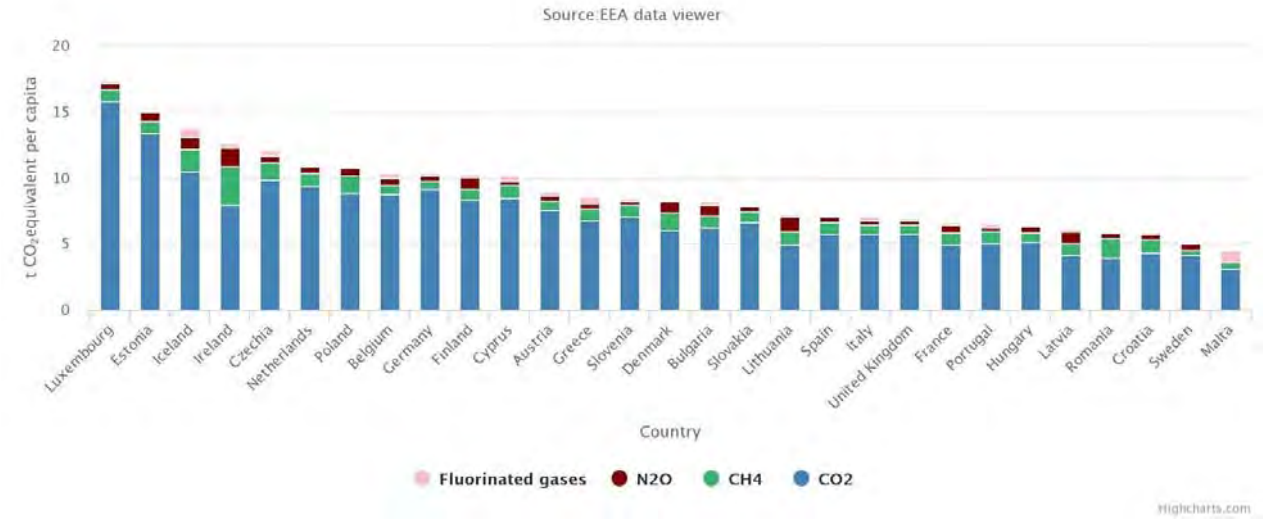
> *"a great change in our stewardship of the Earth and the life on it is required, if vast human misery is to be avoided."*

> *"Since 1992, with the exception of stabilizing the stratospheric ozone layer, humanity has failed to make sufficient progress in generally solving these foreseen environmental challenges, and alarmingly, most of them are getting far worse (figure 1, file S1). Especially troubling is the current trajectory of potentially catastrophic climate change due to rising GHGs from burning fossil fuels (Hansen et al. 2013)..."*

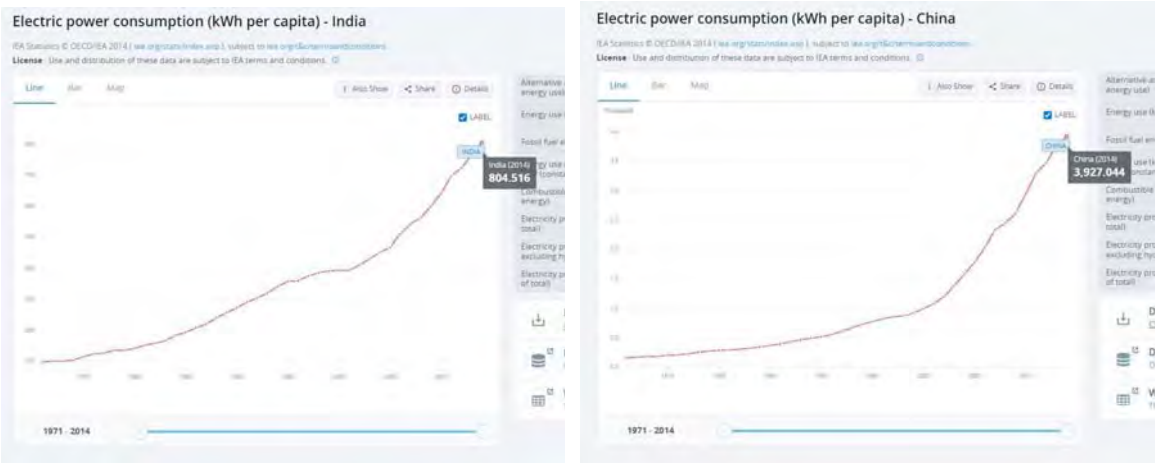
In August 2021 the Intergovernmental Panel on Climate Change (IPCC) published its Sixth Assessment Report (AR6). António Guterres, the UN secretary general, commented that:

> *"[This report] is a code red for humanity. The alarm bells are deafening, and the evidence is irrefutable: greenhouse gas emissions from fossil fuel burning and deforestation are choking our planet and putting billions of people at immediate risk. [ ] "This report must sound a death knell for coal and fossil fuels, before they destroy our planet."*[1]

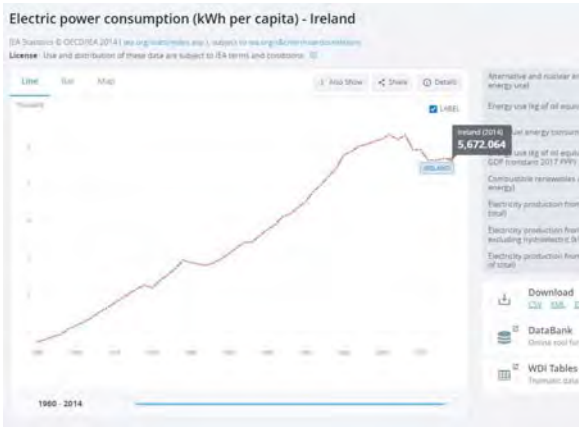
1



Ireland; third highest emissions in Europe. Source:IEA



Electric power consumption: 804 kW per capita in India and 3,927 kW per capita in China. Source:IEA



Electric power consumption: 5,672 kW per capita in Ireland. Source:IEA

As illustrated above, Ireland is the third highest producer of emissions in Europe and is already responsible for the highest level of methane emissions. Ireland's electricity consumption per capita also rates very high compared to China and India, despite its

population being a fraction of the latter two countries. We need to take responsibility for the disproportionate impact that we are having on the global climate, with respect to countries in the Global South, in line with climate justice principles and obligations .

UN Framework Convention on Climate Change

The Irish government signed the UN Framework Convention on Climate Change to avoid dangerous climate change in 1992 and later agreed to the Kyoto Protocol to turn that resolution into action. Developed countries committed to reduce emissions by 5% by 2012.

In 2015 Ireland signed up to the Paris Climate Agreement, committing to limit temperature increase to well below 2 degrees Celsius, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. Ireland's target was to reduce greenhouse gas emissions by 20% by 2020. Ireland has failed to meet this target and Irish citizens now face fines or surplus annual emission allocation to the EU. Now Ireland has committed to reduce emission by 51% by 2030 and this new target is again severely in question - considering Eirgrid's projected energy demand increase of 50% by 2030 - if this increase is to be met by burning gas, a de facto fossil fuel with upstream emissions comparable to coal and oil. An Bord Pleanala granting permission for STEP would be hijacking new emission reduction targets and subjecting Irish citizens to even more fines in the future.

Climate Bill and Climate Actions

In 2019 Climate and Biodiversity Emergency was declared in Ireland.

Later, in a press release from 22 June 2021, the Environmental Protection Agency's states that:

> *'Ireland's emissions covered by the 2013-2020 EU Effort Sharing Decision target are estimated to be 7% below 2005 levels in 2020 under both projected scenarios (With Existing Measures and With Additional Measures) compared to the target of 20% below 2005 levels by 2020. Ireland is estimated to have cumulatively exceeded its compliance obligations by 12.2 Mt CO2 eq over the 2013-2020 period, and will need to use credits and/or purchase surplus annual emission allocation from other member states to achieve compliance.'*
>
> *'Projections indicate that under the best case scenario, with all the measures set out in the 2019 Climate Action Plan fully implemented, Irelands 2030 emissions will be 24 per cent lower than 2018 levels.'*

This is the Climate Action Plan referred to in the STEP application but it has superseded by the Climate Action and Low Carbon Development (Amendment) Bill (2021) and a new Climate Action Plan is currently being drawn up with comprehensive carbon budgets attached which is expected later this month. The plan commits to the reduction of emissions by 51% by 2030, with an average annual reduction of 7% per year. New five-year carbon budgets for each sector will be published soon. The target for energy generation by means of renewables has been increased from 70% to 80% in Oct 2021.

2 - Emissions

"*the total Irish emissions in 2019 have been estimated to be 59,777.6 kt CO2e (59.8 Mt CO2e).*" *EPA (2021)*

In the Non Technical Summary of the application Shannon LNG writes :

> "*Direct emissions from the operation of the Proposed Development will equate to approximately 963kt CO2e in 2030, around 2.1% of Ireland's carbon allowance if Ireland's carbon reduction targets are met.*"

However the applicant themselves point out that;

> "*This excludes indirect well-to-tank emissions as these are not included in Ireland's emissions inventory.*"

Some of the emissions that are not included are:

> - *'direct emissions from the final consumption of the gas by a third party, have been excluded from the scope of the Proposed Development.*" (STEP application.)
> - Emissions arising from transport including the additional emissions arising from maintaining liquefaction.
> - Emissions arising during the initial liquefaction process.
> - And if it is shale gas, which is most common in the US, up to 3.5% methane leakage during extraction and routine flaring during transportation and storage.

In evidence before the Oireachtas Joint Committee on Climate Action, Professor Robert W. Howarth of Cornell University in New York made clear the damaging step backwards from a climate perspective that it would be to switch from coal use to fracked gas.

> *"In the US, approximately 3.5% of the shale gas that is developed is emitted to the atmosphere as unburned methane due to leaks all along the chain from wells to the final consumer and purposeful emissions as the gas is processed, stored and transported. On account of these methane emissions, the use of shale gas in the United States has an even greater negative impact on the climate than coal, when we consider methane on the timescale of 20 years after it is emitted.*
>
> *"LNG imported to Ireland from the United States would have an even greater greenhouse gas footprint. To liquefy and transport the gas requires a substantial volume of energy. To import 1 cu. m of gas as LNG requires the production of 1.2 cu. m of gas with 0.2 cu. m of that gas burned to provide the energy for liquefaction, etc. With that we increase the CO2 emissions as well as methane emissions and, therefore, I estimate the use of shale gas imported as LNG to Ireland would create greenhouse gas emissions of 156g of CO2 equivalents per megajoule,* ***or a footprint that is 44% greater than that of coal.****"*
> https://www.oireachtas.ie/en/debates/debate/joint_committee_on_climate_action/2019-10-09/2/

As stated in the STEP application, EU and Irish law continues to ignore emissions of imports which occur upstream. In the case of fossil gas, especially fracked gas, much of the leakage occurs during extraction and transport. This 'Carbon Leakage' is defined in the Climate Bill as "*the transfer, due to climate policies, of production to other countries with less restrictive policies with regard to greenhouse gas emissions'* . The application does not deal with upstream and non-territorial emissions so the actual annual figure for full life cycle emissions will be considerably larger than the 963kt CO2e that the applicantant concedes but they *do* occur and therefore *must* be taken into account.

3 - Shannon LNG - a Fracked Gas Import Terminal

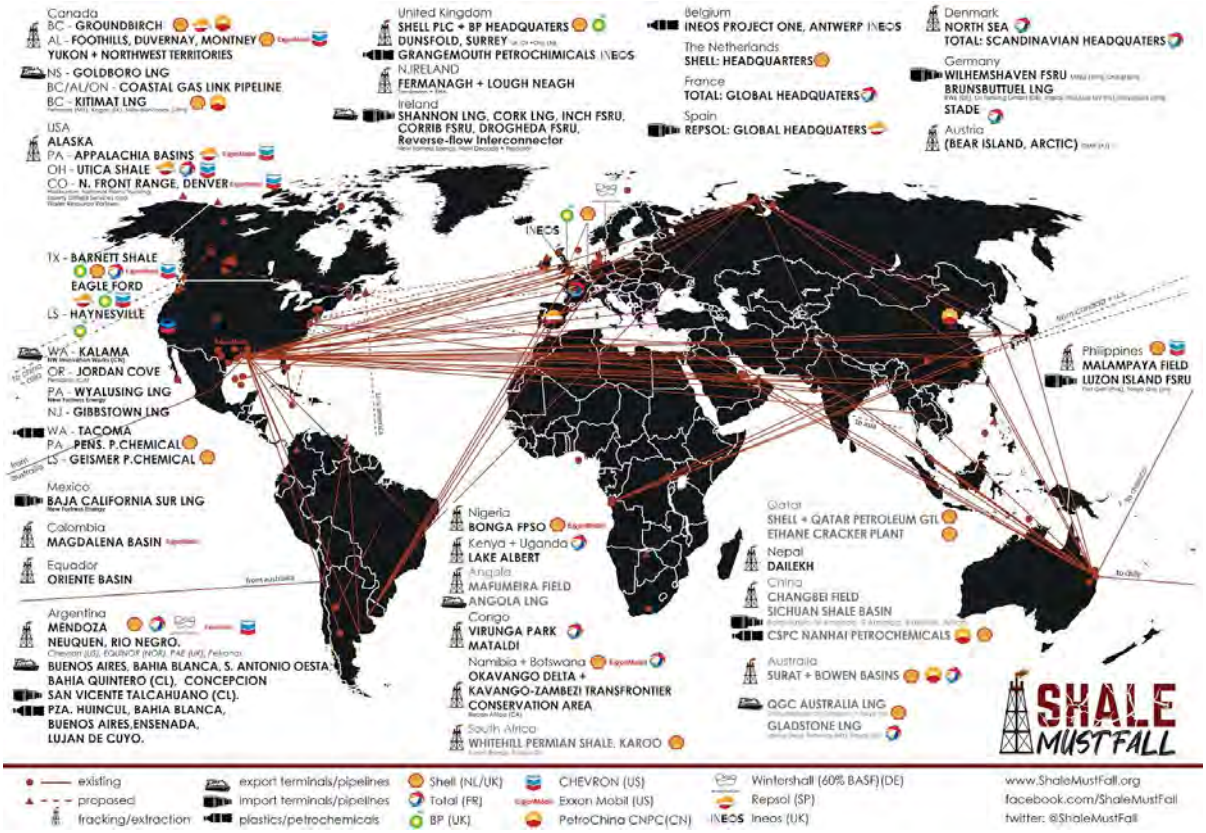
In the record of the meeting between Bord Pleanála and the Applicant on the 25/03/21, while the Applicant was seeking and duly granted Strategic Infrastructure Planning Application status the following quote is noted:

> "*The prospective applicant referred to the Programme for Government 2020 and in particular the matter of 'fracked gas', noting that most LNG in the world is not sourced from fracked gas. The prospective applicant stated that the proposed development is not dependent on fracked gas noting it is confident that it can source gas from non-fracked sources in order to meet the energy demand and security of supply in Ireland.*"

Shale Must Fall preliminary mapping of fracking activities in 2020 showed that fracking is widespread but especially in the US. Fracking is also known to be taking place in Australia, Canada, New Zealand, Poland, South Africa, Tunisia, Argentina, Nigeria, Kenya, Uganda, Democratic Rep. of Congo, Qatar, China, The Philippines, Russia, India, Slovenia and applications currently being made to frack in Northern Ireland, Namibia, Botswana, Colombia, Ukraine, Nepal. It is questionable where exactly New Fortress Energy/ ShannonLNG proposes to source conventional gas.

Professor Robert Howarth, Cornell University informed the Oireachtas Joint Committee on Climate Action on October 9th 2019 that,

> *"If Ireland were to import liquefied natural gas from the United States, it would largely be shale gas'*



Map: Shale Must Fall 2020 mapping of fracking/ LNG export/import/processing activities.

The US Energy Information Administration (EIA) also states that at least 97.85% of gas produced in Pennsylvania in 2018 was fracked gas. New Fortress Energy has secured licences to transport LNG by truck (c.1,650 per day) or upto 100 carriages by railway (per day) from Wyalusing, Bradford County, PA to Gibbstown, NJ over a 200-mile stretch that connects some of the most densely populated areas of the East Coast.

> ‘Liquefying gas from Pennsylvania’s Marcellus Shale and transporting it to the Gibbstown port will allow project developer Delaware River Partners, a subsidiary of New Fortress Energy, to export the gas overseas.’ (https://stateimpact.npr.org/pennsylvania/2020/12/09/controversial-gibbstown-lng-terminal-gets-final-drbc-approval/)

Furthermore later in the meeting it is stated:

> "*With regard to the matter of fracked gas, the Board’s representatives suggested that the prospective applicant might wish to address this issue in the planning application and noted that information provided on this point would be of particular importance from a public perspective. The prospective applicant noted the Board’s comments and said that this matter would be addressed in the planning application.*"

https://www.pleanala.ie/anbordpleanala/media/abp/cases/records/304/p304007d.pdf?r=531120

We state that the matter has not been dealt with in this planning application as the Applicant told ABP specifically that they would do. An Bord Pleanala has a duty, from a public perspective, to ask for detailed information about the source of the fossil gas New Fortress Energy proposes to import.

We state that this shows that the Applicant has misled ABP in the process of getting Strategic Infrastructure Planning Application status.

They have also misled ABP and the public in their current application to the extent that their operations aren't based on fracked gas. Take for instance Figure 1 which is an image in their brochure taken from EIAR_Volume4, which purportedly lists New Fortress Energy's "Operations & Development"

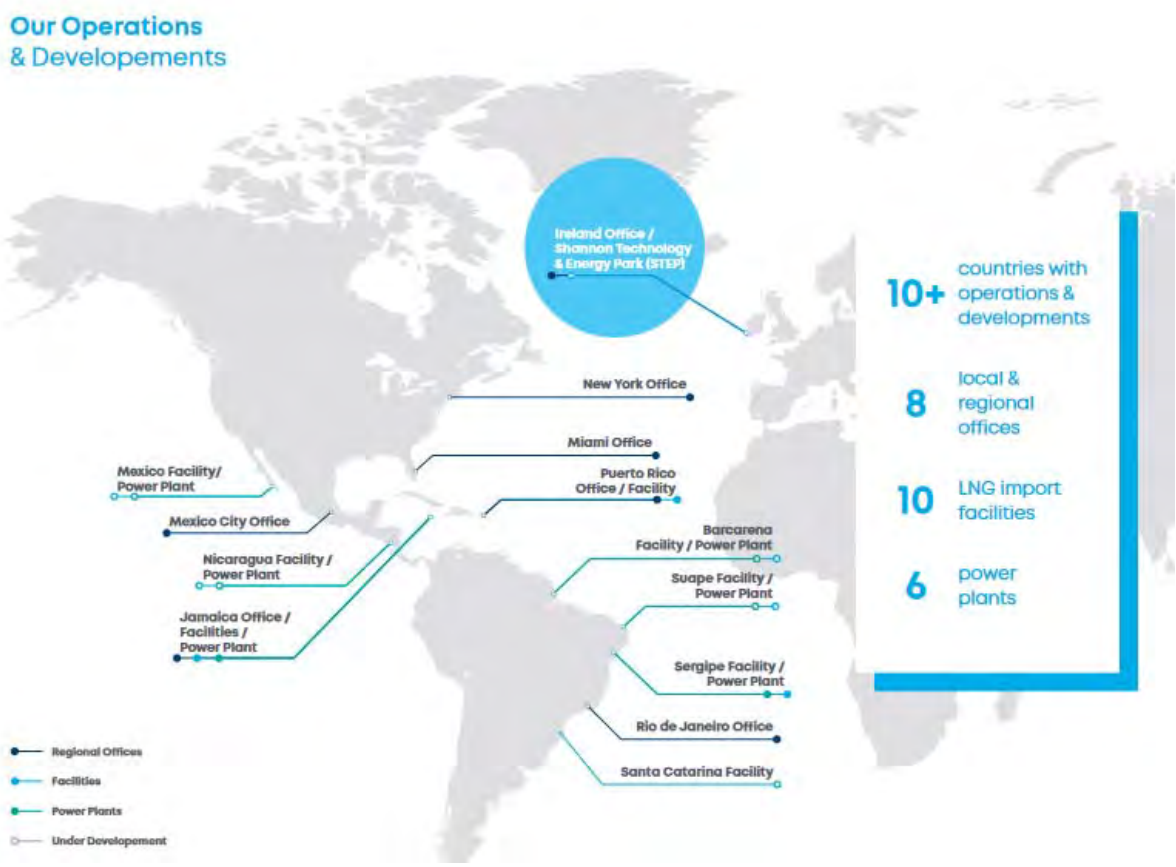


Figure 1: New Fortress Energy Operations & Development but with Liquefaction assets excluded

In the application New Fortress Energy has deliberately excluded their operations in the US, from which they source their gas. This is because if New Fortress Energy included their Liquefaction Assets in the image it would make clear how their whole operation is dependent on fracked US gas. They have also omitted the Gibbstown export terminal which would likely supply STEP with fracked gas from Pennsylvania.

Contrast the image to a recent NFE SEC filing:
https://ir.newfortressenergy.com/node/6301/html

In it New Fortress Energy state

> *"Liquefaction – Our approach is to enter into long-term, largely fixed-price contracts for feedgas, then liquefy that gas at or proximate to its site of extraction, minimizing transport and pipeline costs for the feed gas producers. We are currently developing a liquefier on land we have purchased in the Marcellus area of Pennsylvania, which is expected to have the capacity to produce approximately 3 to 4 million gallons of LNG (which is the equivalent of 250,000 to 350,000 MMBtu) per day, and intend to develop five or more additional liquefiers over the next five years.*
>
> *Logistics – We expect to own or control the logistics assets necessary to deliver LNG to our customers through our "logistics pipeline." Tanker trucks will transport LNG from our liquefier to a port on the Delaware River, at which point LNG will be transloaded directly to large marine vessels."*
>
> *"On March 2, 2018, the Company entered into a gas purchase agreement with a major Marcellus Shale producer to supply approximately 160 mcf/d or equivalent of approximately 2,000,000 LNG gallons per day to the Company effective upon fulfillment of certain conditions precedent."*

In the SEC filing, under the title "*Our Liquefaction Assets*", New Fortress Energy also state

> *"**We intend to supply all existing and future customers with LNG produced primarily at our own liquefaction facilities.**"*
>
> "*We constructed the Miami Facility, which commenced commercial operations in 2016, in under 12 months at a cost to build of approximately $70 million. The Miami Facility employs what we believe is one of the largest private ISO container fleets in the world. It has one liquefaction train, with liquefaction production capacity of approximately 100,000 gallons of LNG (8,200 MMBtu) per day*"

These are the only two liquefaction facilities identified under the "Our Liquefaction Assets"

Why have the applicants excluded these operations from the "Our Operations & Developments" Map and the application? The simple answer is that they are trading in fracked gas and that it is coming from the Marcellus area of Pennsylvania.

We therefore submit that New Fortress Energy has previously been clear in the past that fracked gas will be used to supply Shannon LNG. We submit that ABP would be perpetuating inequality of suffering and pollution, should they allow this fracked gas to be imported for Ireland to use as energy at the same time as we have banned the process of fracking for gas ourselves.

4 - STEP - Offensive Greenwashing

We find the greenwashing that the applicant has included throughout the application to be offensive. The example is taken from the application.

Extract from STEP application.

New Fortress Energy chairman and CEO Wes Edens when asked about their business ventures in Sri Lanka said: “This is a significant milestone for Sri Lanka’s transition to cleaner fuels and more reliable, affordable power.”

“We are pleased to partner with Sri Lanka by investing in modern energy infrastructure that will support sustainable economic development and environmental gains.” (https://www.offshore-technology.com/news/new-fortress-energy-sri-lanka-terminal/)

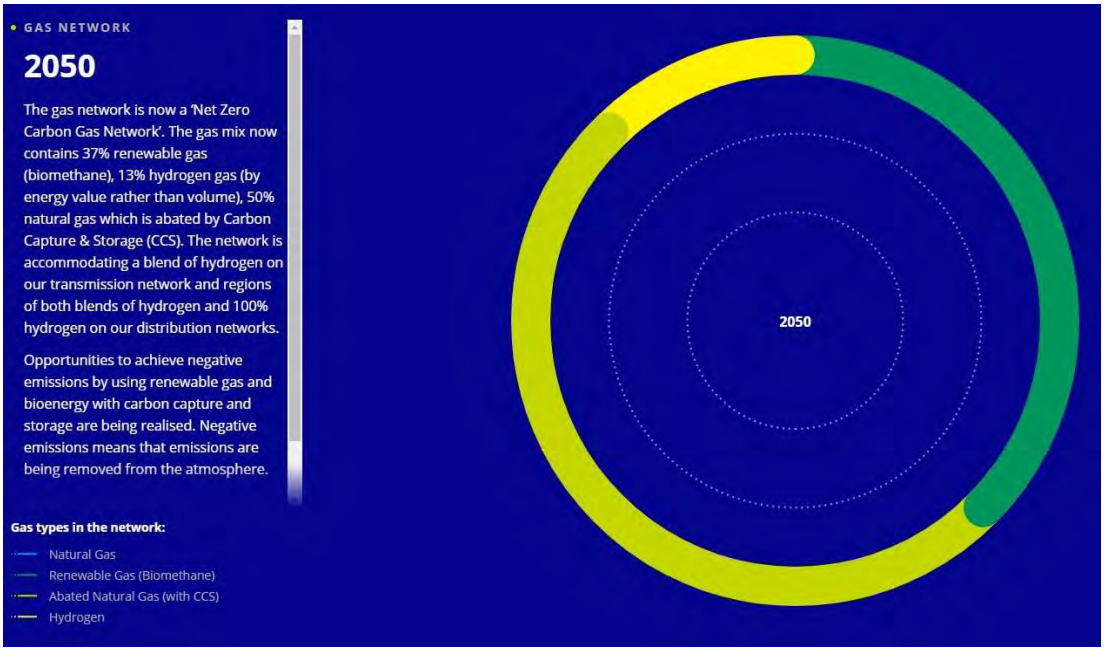
This is abysmal. Like the STEP proposals this will delay and considerably damage any prospect of a zero-carbon future. In fact it will guarantee a *higher* carbon future for the world. It was offensive to any notion of a zero-carbon future that An Bord Pleanála gave this application Strategic Infrastructure status, giving STEP permission would be in complete contradiction, by a State agency, to efforts to mitigate against climate collapse.

Other examples of the Greenwash includes:

- "NFE’s Path to Zero - We are already working towards a net-zero future"
- "Supporting a Green Ireland - STEP is consistent with CRU, Eirgrid and GNI scenarios for creating a carbon-free Ireland"

<u>STEP - supporting Gas Network Ireland's 2050 vision greenwashing</u>

Gas Network Ireland's 2050 vision is in no way low carbon for the scientific reasons that follow therefore STEP, given its heavily carbon based business model will never support the creation of a carbon-free Ireland.



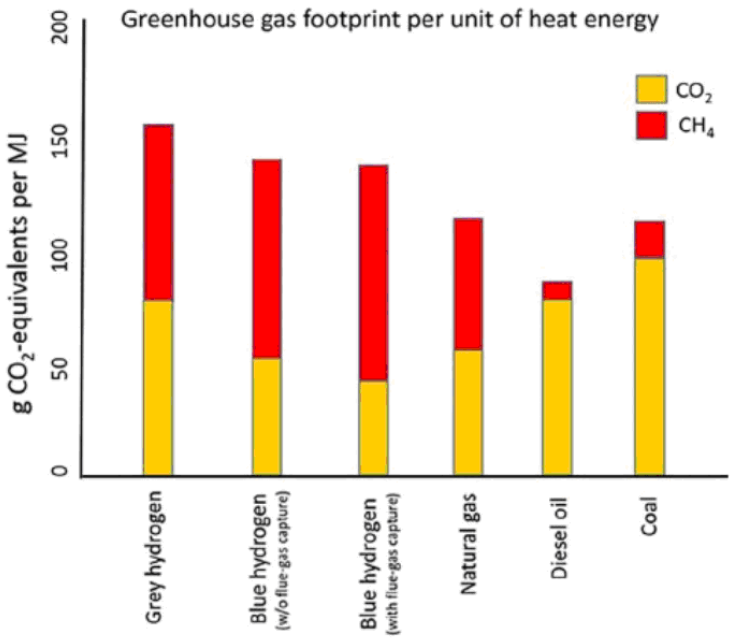
Source: GNI 2050 Vision: 13% Hydrogen, 37% Biomethane, 50% Abated Natural Gas

GNI proposes to use 50% abated gas, even in 2050 and beyond. This is using fossil gas (likely fracked gas, given the dominance of fracked globally) ignoring all the associated emissions and leakages which occur during extraction, liquefaction, transport and storage, before the burning process even begins, and then attempting to safely capture and store the carbon dioxide from the burning process. Carbon Capture and Storage/ Carbon Sequestration/ Carbon Dioxide Removal technology to 'abate' the fossil gas emissions has not yet been used at scale, *anywhere*. The IPCC amongst others are warning that mitigation of effects of current/ future 'Natural' Gas/ LNG use is NOT an option. In *"Mitigation Pathways Compatible with 1.5°C in the Context of Sustainable Development"*, they warn that,

> *"[*Carbon Dioxide removal or Carbon Sequestration*] deployed at scale is unproven, and reliance on such technology is a major risk in the ability to limit warming to 1.5°C."*

The future of hydrogen as a method of decarbonising the energy mix as proposed by GNI and STEP is also very worrying. According to experts, *Robert W. Howarth and Mark Z.Jacobson;*

> *"Currently, most hydrogen is produced by steam reforming of methane in natural gas ("gray hydrogen"), with high carbon dioxide emissions. Increasingly, many propose using carbon capture and storage to reduce these emissions, producing so-called "blue hydrogen". [...] The total carbon dioxide equivalent emissions for blue hydrogen are only 9%-12% less than for gray hydrogen. [...] The greenhouse gas footprint of blue hydrogen is more than 20% greater than burning natural gas or coal for heat and some 60% greater than burning diesel oil for heat.'*



Graph: *How green is blue hydrogen?* Prof. Robert W. Howarth and Prof. Mark Z.Jacobson

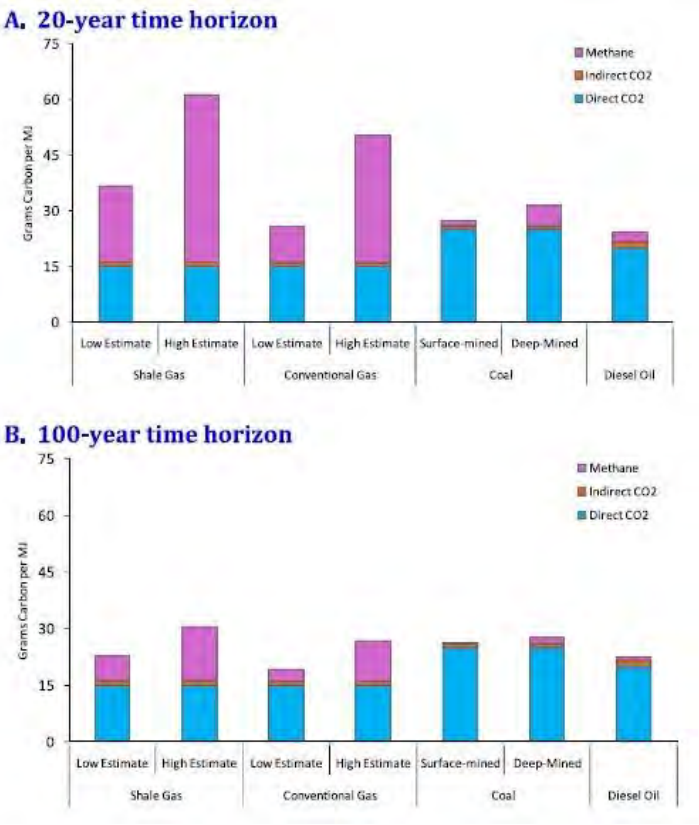
5 - Methane Emissions make Shale Gas and STEP a Bridge to Nowhere

Professor Robert W. Howarth, from Cornell University, has written several papers on fracked and conventional gas and how their methane emissions badly affect global warming. He clearly states that so called 'natural' gas is most definitely *not* a 'cleaner' fossil fuel. 'Natural' gas is most definitely not a 'bridge' fuel nor a 'transition' fuel.

Firstly, his studies show that methane (CH4) has a global warming potential of 87 times more than carbon dioxide over a 20-year period. The IPCC itself in 2013 said,

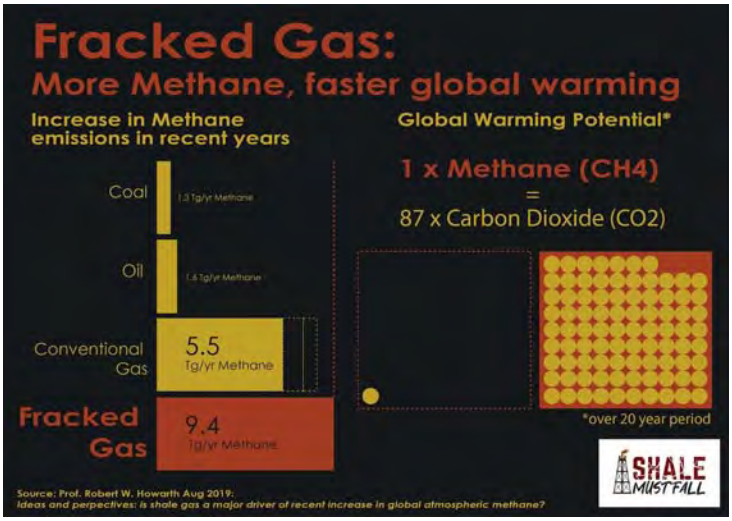
> "there is no scientific argument for selecting the 100 years compared with other choices. The choice of time horizon… depends on the relative weight assigned to the effects of different times…"

Given all the scientific warnings and that the climate tipping points and the looping effects of global warming are actually happening faster than expected it is reasonable and logical to use the most relevant equivalents and in the case of methane this is the 20 year period. EU and Irish regulations currently do not use the 20-year Carbon Dioxide equivalent (C02e) of methane but the 100-year equivalent when reporting and projecting Greenhouse Gas Emissions. Given the scientific warnings of the urgence to reduce emissions this is an inaccurate and dangerous weighting in favour of methane-rich (fracked) fossil gas.



Graph: Methane and the greenhouse-gas footprint of natural gas from shale formations

Secondly, his findings also conclude that previous estimations of methane leakages from gas extraction and transportation were much higher than had been previously thought. He states that fracked gas is responsible for more methane than conventional gas, oil and coal put together but that conventional gas also produces a staggering *higher* amount of methane than oil or coal.



Methane-rich fossil gas and the high global warming potential of methane as described by Prof. Robert W. Howarth in Aug 2019. (Shale Must Fall graphic)

In Prof. Howarth's 2014 presentation '*Methane Emissions Make Shale Gas a Bridge to Nowhere'* he clearly points to the link between not only shale or fracked gas but also conventionally sourced gas and global warming,

> *“Even before the shale gas boom, the natural gas industry was the largest source of methane pollution in the US and one of the two largest sources globally (together with animal agriculture). Without large reductions in emissions of both methane and carbon dioxide, the average temperature of the Earth will reach 1.5°C to 2°C above the 20th Century baseline within the next few decades, creating a risk of runaway feedbacks in the climate system leading to even more rapid warming and climate disruption.”*

In his 2019 paper he reiterates,

> *“‘Given our finding that natural gas (both shale gas and conventional gas) is responsible for much of the recent increases in methane emissions, we suggest that the best strategy is to move as quickly as possible away from natural gas, reducing both carbon dioxide and methane emissions. Natural gas is not a bridge fuel.’* - Howarth, 2014.”

He highlights,

> ‘*that shale-gas production in North America over the past decade may have contributed more than half of all of the increased emissions from fossil fuels globally and approximately one-third of the total increased emissions from all sources globally over the past decade.’*

Methane leakage in EU and global gas infrastructure is very frequent and remains unregulated.

Euractiv reported on independent investigation of European gas infrastructure last year,

> *“The non-profit Clean Air Task Force visited over 200 sites in seven EU countries in 2020 and filmed emissions with an infrared camera in public vantage points to detect hydrocarbons invisible to the naked eye, such as methane. CATF counted 271 incidents, with some sites leaching methane from several places. Over 90% of the sites visited in the Czech Republic, Hungary, Italy, Poland and Romania were emitting methane while the hit rate in Germany and Austria was lower.*
>
> *The New York Times also used an infrared camera to identify large methane leaks at US oil and gas sites in 2019 while satellite footage made available to Reuters revealed massive methane leaks from Russian gas pipelines.*
>
> *Currently, the EU does not regulate methane emissions in the energy sector, meaning companies running the sites surveyed by CATF are not breaking laws because of leaks or venting however the EU has proposed laws this year that will force oil and gas companies to monitor and report methane emissions, as well as improve the detection and repair of leaks.*

Source:
https://www.euractiv.com/section/climate-environment/news/gas-infrastructure-across-europe-leaking-planet-warming-methane-report/

Methane leakage is said to cost the gas industry billions in profit, if they were able to solve this problem they would make it a priority. As appears not to be possible, the only way to mitigate these huge emissions is to halt extraction and reliance on fossil gas.

STEP would increase emissions when global Methane and Carbon Dioxide must fall.

The IPCC Assessment Report 6 (2021) has recommended that as well as reducing carbon dioxide emissions, rapid reductions in methane would limit global warming.

> *'Strong, rapid and sustained reductions in CH4 [Methane] emissions would also limit the warming effect...'*

https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Headline_Statements.pdf

Drew Shindell, the lead author of the Global Methane Assessment for the UN Environment Programme (Unep), agrees CO2 is the number one target in the fight against climate change, but says cutting methane will have a more rapid impact.

> *"So many aspects of climate change are happening faster than expected. "We see more fires, more of the strongest hurricanes, more heatwaves, and methane is the best lever we have to reduce the growth in those over the next 30 years."*

Global Methane Pledge

In a joint statement from the EU and US,

> "Scientific recommendations have led to the introduction of a Global Methane Pledge which will be formally launched at COP26 in Glasgow. The co-convenors Frans Timmermans (EU), John Kerry (US) and Inger Andersen (UNEP) affirmed the critical importance of rapidly reducing methane emissions as the single most effective strategy to reduce near-term global warming and keep the goal of limiting warming to 1.5 degrees Celsius within reach. 9 of the world's top 20 methane emitters are now participating in the Pledge, representing about 30% of global methane emissions and 60% of the global economy.

https://ec.europa.eu/commission/presscorner/detail/en/IP_21_4785

Ireland and the US have signed this pledge. The actual full life cycle greenhouse gas emissions of STEP are not reflected in this application. It would be contradictory to the principles of this pedge to develop STEP which would increase methane emissions of both nations resulting in an increase of overall global methane emissions.

6 - Human Rights, Health and Ecocide.

As stated in the 'International Human Rights Impacts of Fracking Report' published by LLM candidates in International Human Rights Law at the Irish Centre for Human Rights (ICHR), NUI Galway, Rowan Hickie and Bridget Geoghegan, lists some of the 'risks of harms' caused by fracking to include,

> *'detrimental impacts on water, air, climate stability, public health, farming, property values, and economic vitality*.'

In addition the report states that

> '*certain communities and persons are disproportionately impacted by fracking, including pregnant women, children, communities of color, Indigenous peoples, and communities living in poverty.*'

Fracking, as all fossil fuel extraction and burning, is a threat to human rights due to its known contribution to climate change at an international level. A whole suite of international agreements and treaties contain rights which are impacted including the Paris Agreement (2015) and the following treaties.

- *The International Covenant on Civil and Political Rights (ICCPR);*
- *The International Covenant on Economic, Social and Cultural Rights (ICESCR); The United Nations Convention on the Rights of the Child (CRC);*
- *The United Nations Convention on the Elimination of All Forms of Discrimination against Women (CEDAW);*
- *The United Nations Convention on the Rights of Persons with Disabilities (CRPD);*
- *The International Convention on the Elimination of All Forms of Racial Discrimination (ICERD).*

European States also have obligations under the European Convention on Human Rights (ECHR) to address the rights and freedoms contained within the convention.

Many of the causes of impacts on human rights of fracking would overlap with issues related to the fossil fuel industry in general. Notwithstanding STEP, given its strong links with fracking, should not be given planning permission as it would, through the trade of (fracked) fossil gas be impacting:

> *'the right to life,*
> *the right to health,*
> *the right to water,*
> *the right to food,*
> *the right to housing,*
> *the right to access to information,*
> *the right to public participation,*
> *the right to a clean and healthy and sustainable environment,*

with violations of these rights having disproportionate impacts on marginalized and vulnerable communities and groups.'

Ecocide

The Independent Expert Panel for the Legal Definition of Ecocide convened by the Stop Ecocide Foundation, in June 2021 declared the following legal definition for ecocide,

> *'"ecocide" means unlawful or wanton acts committed with knowledge that there is a substantial likelihood of severe and either widespread or long-term damage to the environment being caused by those acts.'*

Efforts are being made that ecocide will be finally included in the Statute of Rome along side the existing four Crimes against Peace; Crimes against Humanity, Genocide, War Crimes and Crimes of Agression. The Stop Ecocide Foundation includes fracking as a form of ecocide because of the extensive contamination of water, land and air caused during the process.

Since 2017 Ireland has banned on-shore hydraulic fracturing and it would be hypocritical of Irish authorities and elected representatives to facilitate New Fortress Energy in subjecting other communities and ecosystems to the Human Rights and Rights of Nature violations involved in the extraction and burning of fossil fuels. Expanding the existing fossil gas infrastructure and developing new pathways to import vast quantities of (fracked) fossil gas into Ireland and the EU sets a very dangerous precedent for even larger scale (fracked) fossil gas consumption and a possible excuse to grant current fracking licence applications in Northern Ireland. These in themselves will destroy communities and ecosystems on both sides of the border. And because of the single market energy mix, even challenge the Irish ban on fracking and be detrimental to achieving the climate targets of 2030 and 2050. With all the information that we have up to 2021, a project like STEP going ahead is completely unthinkable.

Gas extraction brings radiation to the surface and increase cancer cases

As reported on by Justin Nobel, in his article *The Syrian Job: Uncovering the Oil Industry's Radioactive Secret* for DeSmog*,* there has been, and still is a lack, of knowledge about the health risks associated with oil and gas. This is equalled by the extent to which the industry tries to keep this information from the general public and authorities. He writes;

> *'Nearly everyone on earth uses oil and gas products. But most people are completely unaware that oil and gas production brings large amounts of radioactivity to the surface.*
>
> *The first scientific record comes from a 1904 paper by a University of Toronto researcher who examined crude oil from a well in a farmer's field in southern Ontario. He discovered a radioactive gas we now know to be radon, which is currently pegged by the US Environmental Protection Agency (EPA) as the second leading cause of lung cancer in the United States. Radon is just one*

of many radioactive elements oil and gas brings to the surface. “The presence of these naturally occurring radionuclides in petroleum reservoirs,” states a 1991 EPA report, has actually been used, “as one of the methods for finding hydrocarbons.”

While today the oil and gas industry does not talk openly about the risks radioactivity poses to their workers, they once did. “The presence of natural radioactivity in oil and gas fields has been recognised worldwide,” states a 1987 document from the UK Offshore Operators Association, a leading trade association for the UK’s oil and gas industry.

Shell is aware of the issue too. The company’s own documents reveal that the oil and gas giant has known for 70 years that various exposures from oil and gas work, including exposure to radioactive materials, can lead to cancer.

“Human contacts with soot, carbon black, pitch, asphalt, crude petroleum, shale oil, paraffin oil, lubricating and fuel oil, anthracene oil and other distillations and fractionation products of coal and petroleum apparently cause the majority of environmental cancers in man,” states a 1950 report produced by a toxicologist working at Emeryville Research Center, a bygone Shell lab in California. Substances like “arsenic” and “radio-active elements” are unique, the report notes, as they have “established carcinogenic qualities” for which the “origin of environmental cancer” can actually “be traced”.

A court case settled in 2016 in the state of Louisiana, in the heart of America’s conventional oil and gas patch, reveals that dozens of workers working a variety of common industry jobs such as roughneck, roustabout, pipe cleaner and truck driver developed cancer.

A report written by radiation experts uses an analysis program created by the US Centers for Disease Control and Prevention to link these worker’s cancers to radioactivity exposures received on the job. Cancers the workers developed include non-Hodgkin’s lymphoma, various leukemias, colon cancer and liver cancer, among others.

More recent documents from Shell indicate that through the fracking boom of the 2000s, knowledge of the risks of radioactivity has not been lost. In fact, Gert Jonkers, the retired Shell radiation expert, has authored or co-authored half a dozen papers on the topic.

“The encounter of Naturally Occurring Radioactive Material (NORM) is of increasing concern for the oil and gas industry, not only because of radiological safety aspects, but also from an environmental point of view,” states one 1997 article, published with the American Petroleum Institute. Another paper discusses how NORM “is often encountered during gas and oil production” and “gives rise to increased health hazards to personnel.”

The Concerned Health Professionals of New York in their 7th Edition of the Compendium of Scientific, Medical and Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Gas and Oil Extraction) have stressed that

> *‘the evidence clearly demonstrates that the processes of fracking contribute substantially to anthropogenic harm, including climate change and global warming, and involve massive violations of a range of substantive and procedural human rights and the rights of nature.’*
>
> *'Fracking has been linked to cancers in at least two states. In Colorado, children and young adults with leukemia were 4.3 times more likely to live in an area dense with oil and gas wells. A 2017 study in Pennsylvania found elevated rates of bladder and thyroid cancers among residents living in areas of fracking activity. In southwestern Pennsylvania, dozens of children and young adults were diagnosed with a rare cancer, Ewing sarcoma, as well as other rare cancers, in a six-county area where more than 3,500 fracking wells have been drilled. As shown by multiple studies in Pennsylvania, as the number of gas wells increase in a community, so do rates of hospitalization, and community members experience sleep disturbance, headache, throat irritation, stress/anxiety, cough, shortness of breath, sinus problems, fatigue, wheezing, and nausea. Also in Pennsylvania, hospitalizations for pneumonia among the elderly are elevated in areas of fracking activity.'*

This is not the future, or the types of jobs, that the families of Pennsylvania nor the families of Kerry deserve.

<u>Health impacts of fossil fuel power plants and cumulative effects of nearby polluting industries.</u>

The cumulative public health risks and impacts on the environment and climate of the STEP proposal should be taken into account alongside those of all other polluting industries in Ireland, especially those in the vicinity such as Aughinish Alumina, Moneypoint Power Plant, Tarbert Power Plant, Irish Cement in Limerick and other potential projects already in the planning process such as the incinerator project in Limerick, Ennis Data Centre/ fossil gas power plant, Tynagh power plant extension, etc. A study, ‘Associations Between Residential Proximity to Power Plants and Adverse Birth Outcomes’ concluded that there is increased risk to the unborn in cases where pregnant women live near power plants,

> *“living closer to any power plant increased the odds of all adverse birth outcomes compared with living farther away. We further identified that solid waste plants had the strongest association with term LBW [low birth weight], while oil, gas, and solid waste plants all had strong associations with PTD [preterm delivery] and VPTD [very preterm delivery]. The study also found that women living near 1 or more power plants located within a 20 km radius from their residence had higher odds of adverse birth outcomes.”*

The STEP proposal itself also includes diesel generators and a future phase of development which could include up to eight data centre halls (likely to include dedicated diesel backup generators). Irish data centre development is currently dependent on fossil gas generation both through the grid and vast on-site generation capacity, but also for the majority are dependent on diesel backup generators. Serious health risks have been linked to air pollution caused by diesel engines in the 2001 paper '*Health effects of diesel exhaust emissions'* which stated that:

> *'Epidemiological studies have demonstrated an association between different levels of air pollution and various health outcomes including mortality, exacerbation of asthma, chronic bronchitis, respiratory tract infections, ischaemic heart disease and stroke.'*
>
> *"...diesel engines [...] give rise to a greater amount of nitrogen oxides and aldehydes, which are particularly prone to cause irritation of the upper respiratory tract. Diesel engines also produce submicron soot particles that are believed to mediate several of the observed adverse effects."*
> *"Diesel exhaust (DE), in addition to DEPs, contains a complex mixture of gases such as carbon monoxide (CO), nitric oxides (NO, NO2), sulphur dioxide (SO2), hydrocarbons, formaldehyde, transition metals and carbon particles"*

Therefore the dangers of all greenhouse gases including NOx, particulate matter radiation and other health hazards potentially emitted from the STEP proposal must be closely investigated by An Bord Pleanala.

7 - STEP's negative impacts on Nature and Biodiversity

Impacts on Birds

We feel that the duration of the summer survey should be extended to include data from a second summer season. This would be in line with NPWS comments presented in (section 7A.3.6, Table 7A-2) i.e *"a two-year survey of bird use of the estuary within 2 km of the proposed jetty and FSRU infrastructure is recommended, with a year being the minimum requirement"*.

We feel that the impacts associated with the shipping route were ignored and that the survey was inadequate as it was only carried out in the vicinity of the proposed development site and no data was available for birds along the shipping route. These exclusion zones mean that other vessels may not approach within 0.5 miles (approximately 800m) of these tankers. Thus for safety reasons any passing vessels must be pushed out of the main navigation channels into adjacent areas. This will have the effect of changing the whole navigation regime of the estuary. We believe for this reason it is essential to map the navigation route to include the exclusion zone and to assess the indirect effect of boating traffic (diverted by the LNG vessel) which may cause disturbance to any adjacent habitats or species (specifically QIs of the Natura 2000 sites) along the shipping route.

Impacts on Dolphins

The only known population of resident Bottlenose Dolphins in Ireland occur in the Shannon Estuary and are a qualifying interest of the Lower River Shannon cSAC. Although this population is small, studies have shown that it may be genetically distinct from other populations and thus be of very high conservation import (Mirimin *et al*. 2011). We feel that any such behavioural impacts have not been assessed and that the low numbers within this important population of dolphins make them highly vulnerable to impacts such as this one that could be a factor which undermines their reproductive success.

Impacts on Biodiversity

Vos et al (2010) lists some of the impacts of climate change on species and habitats; some of these impacts are included below.

- *temperature increase, changing precipitation patterns, increase in weather extremes,sea level rise.*
- *Impact on species caused by changes in: physiology : photosynthesis, respiration, evapotranspiration.*
- *Impact on species caused by changes in: phenology : timing processes life cycle, geographical distribution, increased population fluctuations, genetics: micro-evolutionary adaptations, interaction with existing anthropogenic pressures: habitat fragmentation, eutrophication, drought, industrial warming of surface water, fixed coasts and riverbeds.*
- *Effects on functioning ecosystems, changes in species composition, changes in species interactions.*
- *Impacts on habitats caused by changes in: drought , drowning, increased water table fluctuations, changing water and soil conditions: eutrophication, acidification, reduced period of snow cover, melting glacier ice, increased flooding, storm risks, fires, increased salinity, (coastal) erosion.*

The Climate Action and Low Carbon Development (Amendment) Bill (2021) states that

> "*the minister and the government shall have regard to the need to promote sustainable development and restore, and protect, biodiversity*".

An Bord Pleanala should refuse permission for this fossil fuel development which could never be described as sustainable. The cumulative impact of fossil fuel developments should be assessed together, which would show that they have catastrophic impacts on the climate with drastic knock-on effects on the Natura 2000 sites and on biodiversity in general on a local and global level.

According to EC (2017a) Guidance document on the preparation of the Environmental Impact Assessment Report:

"*The environmental impact assessment shall identify, describe, and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the following factors*: *(Directive 2011/92/EU as amended by Directive 2014/52/EU)*

(a) population and human health,
(b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;
(c) land, soil, water, air and climate;
(d) material assets, cultural heritage and the landscape;
(e) the interaction between the factors referred to in points (a) to (d)."

We feel that the EIAR did not properly assess the impacts on Climate as they interact with human health, population, biodiversity, water, land and soil, air quality, material assets, cultural heritage and landscape, as in subsection (e) above.

8 - Unethical and deliberate creation of energy demand: data centres

Data centres are increasing energy demand at unprecedented speed and during a Climate and Biodiversity Emergency. According to Eirgrid cumulative energy demand by data centres was projected at 29% of Irish energy demand by 2028/ 2030. However Eirgrid has also stated that the national peak demand for all sectors is 5,500MW and they have reported that current connection agreements and current requested connections for data centres (in total about 115 data centres nationwide), would add an increase 3,800MW which is the equivalent of a 69% increase in peak demand.

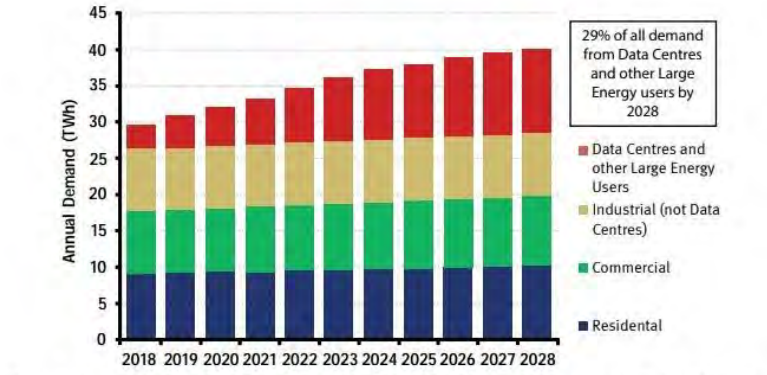
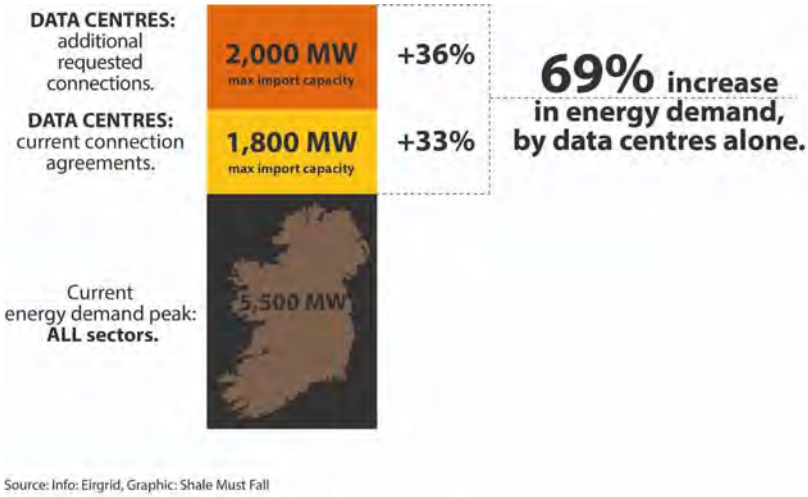


Figure 9 - For the Ireland Median Demand scenario, this illustrates the approximate split into different sectors. Eirgrid estimate that 29% of total demand will come from data centres by 2028

The Irish Academy of Engineers published a report estimating that an "investment of €9 billion" will be needed in the Republic's electricity sector over the next eight years to meet increased demand for power from data centres. It was unclear to them how this would be funded. Any public investment should be going towards renewable generation and reducing energy demand and certainly not towards increasing demand by private companies and not until the global climate has been stabilized.



Source: Info: Eirgrid, Graphic: Shale Must Fall

It is clear from closer inspection that the existing and proposed data centres have increased fossil gas demand by 27% in 2020 alone and are putting increasing pressure on the grid. This 'problem' can simply be avoided, stop allowing data centres from connecting to the grid and gas network. STEP will not solve short term mismanagement of the public grid and energy injustice, it will only bring long term problems, real problems like flooding and extreme weather conditions. Big tech companies are also buying up many wind farms which should be publicly owned in order to reach the goal of 70-80% renewable generation target by 2030. One data centre application even claims to fulfill their climate neutral aim by buying more than 100% of GNI's total biomethane capacity. Given that the data centres cannot run solely on the grid, they are required to have on-site power plants and diesel back-up generators. One data centre proposed in Ennis has a 200MW demand, equivalent to the energy demand of 210,000 houses, or all the houses in counties Clare, Limerick and Kerry combined. Given the estimated emission due to the fossil fuel generators it would be the twelfth largest polluter in Ireland, emitting 657,000 tonnes CO2e.

At a time when we need to cut our energy demand drastically and make an urgent switch to renewable energy generation, it is paramount that Government prioritise and safeguard heating and lighting homes, schools, hospitals, essential travel and other essential services like powering street lighting, instead of dishing out copious amounts of energy to multinational big tech corporations for data storage and processing for large amounts of data, the necessity of which is very questionable. The latest government policies to support unjustifiable numbers of fossil powered data centres to be built is reckless. Singapore placed a moratorium on data centre development when they reached 7% of the country's energy demand, in Ireland they have surpassed 11% already.

Due to increased demands by these large energy consumers, gas and electricity prices are rising steadily. This cannot be used as an excuse to build an LNG terminal to import (fracked) fossil gas. STEP together with uninhibited data centre growth mean even more extreme reductions for all other sectors including agriculture, or greenhouse gas emissions per capita will rise and there will be outright abandonment of climate commitments and failure by government and state bodies to protect citizens from the worst effects of climate collapse, simply to accommodate big tech investors and the fossil fuel industry.

9 - Stranded assets and unjustifiable subsidizing of fossil gas corporations.

The European Energy Agency issued a report in 2016 that illustrates that:

> *'past trends of extending the life of large fossil fuel power plants (at or above 200 MWe capacity) or building new ones would clash with the EU's best-case decarbonisation scenarios as set out in the EU's Energy Roadmap 2050, resulting in fossil fuel overcapacity.'*

Currently, according to the Council of European Energy Regulators (CEER) Report 2019, existing EU LNG terminals are operating at only 27% capacity. The final report by Artelys released in January 2020, states that a further €29 billion of public funding is proposed to be spent on new gas infrastructure, 'most' of which are 'unnecessary'. Under normal market conditions, the existing gas infrastructure in Europe in 2030 suffices even under 'high demand' scenarios. This existing gas infrastructure is also 'resilient enough to a wide range of extreme disruptions' and therefore any new gas infrastructure would be 'at risk of becoming stranded assets'. In any case they will definitely be harmful to global climate breakdown mitigation if the EU continues to create a market for (fracked) fossil gas.

Global Energy Monitor's CEO has also stated that fossil fuels have no place in the future and that EU gas consumption must decrease rapidly, never mind increase which is what STEP would be responsible for,

> *'EU risks locking itself into a more polluting future or wasting billions on infrastructure'*

> *'EU's ambitious climate targets require gas consumption to drop sharply by 2030 and continue dropping to 2050.'*

> *'The fossil fuel era has passed.'*

.

<u>Investor-State Dispute Settlement and Investor Court Systems:
an additional challenge to climate mitigation law.</u>

Gas infrastructure usually has a lifespan of several decades and therefore new investments now would lock us into the fossil fuel market for the coming decades and because of the ISDS clauses in treaties like the Energy Treaty Charter and the equally dangerous ICS clause of CETA potentially leave Irish citizens open to extreme financial claims for future perceived losses by the industry when Ireland tries to pull out of the fossil fuel market for climate mitigation reasons. RWE, a German fossil fuel corporation, is suing the Netherlands for €2b for shutting down a coal plant on climate change mitigation grounds. Many countries are now removing themselves from the Energy Charter Treaty and are wary of signing up to any ISDS/ICS clauses because they are mostly used by the oil and gas industry, mining or energy corporations and two-thirds of cases are used to challenge a country's environmental protection laws. The EU is currently considering stepping out of the Energy Charter Treaty, as a whole, to at least avoid the 20 year sunset clause between EU states. An Bord Pleanala allowing STEP

to proceed will be putting Irish Citizens at risk of paying out millions or billions of Euros to New Fortress Energy for perceived loss to their future profit.

The IMF found the production and burning of coal, oil and gas was subsidised by $5.9 trillion in 2020. That is taxpayers' money being poured into the fossil fuel industries which are known drivers of climate collapse and human suffering. Instead this money must be invested in a sustainable future and reducing energy demand. Subsidies, like PCI funding, towards fossil fuels must stop immediately as each new fossil gas infrastructure project is delaying the switch to renewables, wasting finite natural resources and contributing to faster climate breakdown.

In addition, Futureproof Clare has concerns about:

- the safety risk of STEP from the point of view of being an explosion risk which would put local communities in immediate danger..
- The legality surrounding a grant of permission for STEP.
- The legality of STEP's PCI status on the 4th PCI List.
- The impacts STEP will have on:
    - air pollution (emissions other than previously mentioned, including in the case of a major accident),
    - water pollution (risk of major LNG spill, contamination of water both chemically and thermally during routine regasification)
    - noise pollution,
    - the visual impact.

Futureproof Clare strongly opposes the proposed development of Shannon Technology and Energy Park as proposed by Shannon LNG and New Fortress Energy. We urge An Bord Pleanala to refuse planning permission for this development for the reasons mentioned above and because this is an opportunity to give the people of Ireland a chance to avoid further climate and biodiversity collapse and to make a real difference both for the future of Irish families and Irish nature and globally, for those communities and ecosystems that are already suffering and on the brink of extinction.

Members of Futureproof Clare.
futureproofclare@gmail.com

Please see attached additional signatories of a petition officially objecting to Shannon LNG Planning Application on grounds of planning, public-health, climate-mitigation, environmental-protection and human rights grounds.

Sources:

IPCC Sixth Assessment Report - https://www.ipcc.ch/report/ar6/wg1/

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How green is blue hydrogen? - Prof. Robert W. Howarth and Prof. Mark Z.Jacobson *https://onlinelibrary.wiley.com/doi/full/10.1002/ese3.956*

Methane and the greenhouse-gas footprint of natural gas from shale formations
A letter by Robert W. Howarth, Renee Santoro and Anthony Ingraffea, 2011.
https://www.researchgate.net/publication/225756201_Methane_and_the_Greenhouse-Gas_Footprint_of_Natural_Gas_from_Shale_Formations

'Ideas and perspectives: is shale gas a major driver of recent increase in global atmospheric methane?' (2019) - https://bg.copernicus.org/articles/16/3033/2019/

International Human Rights Impacts of Fracking Report - Rowan Hickie and Bridget Geoghegan
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https://secureservercdn.net/166.62.108.229/ejr.4eb.myftpupload.com/wp-content/uploads/2021/02/CHPNY-PSR-Fracking-Science-Compendium-7_20210219.pdf
Human tool 2https://newsinteractive.post-gazette.com/fracking-and-health-2/

Associations Between Residential Proximity to Power Plants and Adverse Birth Outcomes - Sandie Ha, Hui Hu, Jeffrey Roth, Haidong Kan, Xiaohui Xu:
https://academic.oup.com/aje/article/182/3/215/167933

Health effects of diesel exhaust emissions - A. Sydbom, A. Blomberg, S. Parnia, N. Stenfors, T. Sandström, S-E. Dahlén: https://erj.ersjournals.com/content/17/4/733

Petition Objecting to Shannon LNG Planning Application (deadline October 22nd, 2021)

We, the undersigned, strongly object to the Irish Planning Authority - An Bord Pleanála - granting planning permission for the Shannon LNG/New Fortress Energy LNG Import Terminal (reference https://www.pleanala.ie/en-ie/case/311233) in Tarbert, County Kerry, Ireland, on planning, climate-mitigation, public-health, environmental-protection and human-rights grounds.

Note: By signing this petition you are consenting to the publication of your name, address and comment and the forwarding of this information to An Bord Pleanála. Your email address will not be published. This list will be hand-delivered to An Bord Pleanála by "Safety Before LNG" on or before October 22nd 2021 because individual submissions cannot be made online and would otherwise cost €50 per submission - see https://www.pleanala.ie/en-ie/observations-sid .

(midday Friday 15th oct: 660 signatories) - View List of Signatories here: https://docs.google.com/spreadsheets/d/1CJltVCKRNpPQZq_bTqhHXvb7oplCBYsdprTqg0lSlcl/preview

For inquiries, contact us directly by Twitter https://twitter.com/SafetyBeforeLng) or by email (SafetyBeforeLNG@hotmail.com) or visit our website www.SafetyBeforeLNG.ie.
Thank you.

Name: LISA C. REILLY Email: oreilly133@gmail.com Address: CREGG, CAHIRCH, CO CLARE.	Comment:
Name: Lynn MERRINS Email: LynnMerrins@gmail.com Address: Cahendorry Lahinch. Co. Clare	Comment:
Name: Ann MERRINS Email: Annmerrins@hotmail.com. Address: Killaspuglonane Lahinch.	Comment:

We, the undersigned, strongly object to the Irish Planning Authority - An Bord Pleanála - granting planning permission for the Shannon LNG/New Fortress Energy LNG Import Terminal (reference https://www.pleanala.ie/en-ie/case/311233) in Tarbert, County Kerry, Ireland, on planning, climate-mitigation, public-health, environmental-protection and human-rights grounds.

Name: PATRICK MORRISSEY
Address: KILKEE CO. CLARE

Name: John Hannafin
Address: Castle Road
Ennis.

Name: Joseph Bevillard
Address: 16 Lakes Village, Hill Rd
Killaloe

Name: Rita O'Dwyer
Address: Quilty
Co Clare.

Name: Sinead Burke
Address: Quilty west.
Co Clare

Name: Conor Power
Address: Quilty
Co. Clare

Name: Robert Power
Address: Quilty
Co. Clare

Name: Michael Keenan
Address: Clohanirchy

We, the undersigned, strongly object to the Irish Planning Authority - An Bord Pleanála - granting planning permission for the Shannon LNG/New Fortress Energy LNG Import Terminal (reference https://www.pleanala.ie/en-ie/case/311233) in Tarbert, County Kerry, Ireland, on planning, climate-mitigation, public-health, environmental-protection and human-rights grounds.

Name: G.A. MAC COX Email: GUSCOX@gmail.com Address: COOLA CLARE KILRUSH CO CLARE	Comment:
Name: Cynthia COX Email: cynthiacox555@gmail.com Address: Cooraclare Kilrush Co Clare	Comment:
Name: Deborah Buckley Email: buckleydeborah@hotmail.com Address: Cahercrush Quilty, Clare	Comment:
Name: Aimee Mahoney Email: aimeemahoney@gmail.com Address:	Comment:
Name: Noreen Lynch Email: noreenlynch147@gmail.com Address: Druendigus, Kilmurry McMahon, Kilrush, Co Clare.	Comment:
Name: Angela Donovan Email: missang75@yahoo.com. Address: Cassernagh, Knock, Kilrush Co. Clare. V15 NN22	Comment:
Name: Ann Hawke Email: annhawke@hotmail.com Address: Moyasta, Kilrush.	Comment: People before money.
Name: Email: Address: Geraldine McGrath Kilrush Co Clare.	Comment: 089-4890457

7

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Name: Siobhán Quin Email: Address: Killimer.	Comment:
Name: Noel M. Parsons Email: NMParsons@AOL.com Address: Quay Mills, APT 303 Kilrush, Co. Clare V15 VW23	Comment:
Name: M. O'Connell Email: moc333@gmail.com Address: Quoin KILKEE Co CLARE	Comment:
Name: ~~Catherine~~ Rees Email: ~~[redacted]~~ Address: Nagles Terrace Kilrush	Comment:
Name: Cara Burke Email: Address: Carrawmere, Quin, Ennis	Comment:
Name: Joyce Wynne Email: Address: Kilrush, Co. Clare.	Comment:
Name: Christopher Price Email: ChristopherPrice1953@gmail.com Address: 15 Ros Mór Donegal Town. Co. Donegal	Comment:
Name: ~~TRACEY~~ REEVE Email: Address: STRAGHT DOONBEG	Comment:

We, the undersigned, strongly object to the Irish Planning Authority - An Bord Pleanála - granting planning permission for the Shannon LNG/New Fortress Energy LNG Import Terminal (reference https://www.pleanala.ie/en-ie/case/311233) in Tarbert, County Kerry, Ireland, on planning, climate-mitigation, public-health, environmental-protection and human-rights grounds.

Name: MARY Mc CORMACK Address: Tullaha Leifenora Co. Clare..	Comment:
Name: TANIA LITTLE Address: MOLLYS COTTAGE CARNACALLA CO. CLARE	Comment:
Name: JOVANNE RADO Email: Address: ENNIS, KILRUSH CO. CLARE	Comment:
Name: EAMONN PETERS Email: Eamonn.Peters11@gmail.com Address: Kilrush	Comment:
Name: M. Murphy Email: Address: Derry glass Co Tipperary	Comment: very much against this project - Keep Ireland green.
Name: John Murphy. Email: Address:	Comment: Concur with my wife
Name: C Sheridan Email: Address: Kilrush	Comment: Keep Ireland green
Name: Rose Cooper Email: Address: Killimer	Comment: Never! for Ireland Fracking kills people

4

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Name: Richard Sharp Email: Address: Seafield Road Quilty	Comment: Fracked gas 44% worse emissions than peat+coal Extraction causes cancerous groundwater.
Name: Maciej Stolowski Email: Address: 69 Groody Student Park Castletroy Co Limerick	Comment:
Name: Michael Hewitt Email: ~~tbc~~ Address: 58 GROODY VILLAGE LIMERICK	Comment:
Name: Gerard Duggan Email: Address: 47 NORWOOD PARK Limerick.	Comment:
Name: Tsjamke-Roelofs Email: Address: 69 Sea view park Quilty Co. Clare.	Comment:
Name: Hilary Price Email: Address: 24 Buston St. Kilrush Co. Clare.	Comment:
Name: AISLING HAMILTON Email: - Address: KILRUSH	Comment:
Name: Kevin Mc Cann Email: Address: Killimer	Comment:

10

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Name: Enda Meeela Email: Address: CLOUBONNY Miltown MALBAY	Comment:
Name: Helen Flynn Email: Address: miltown Malbay Co Clare.	Comment:
Name: PAT MURPHY Email: Address: MILTOWN MALBAY	Comment:
Name: ROSE WOLFF Email: Address: Miltown Malbay	Comment:
Name: LIAM O 'DAT Email: Address: KANTURK Co CORK	Comment:
Name: Patrick ~~Fitzpatrick~~ Email: Address: Quilty	Comment:
Name: Ronan Pender Email: Address: Quilty.	Comment:
Name: MOLLY Email: Address: Broomhill Kilrush	Comment: Spend Money on Research INSTEAD.

We, the undersigned, strongly object to the Irish Planning Authority - An Bord Pleanála - granting planning permission for the Shannon LNG/New Fortress Energy LNG Import Terminal (reference https://www.pleanala.ie/en-ie/case/311233) in Tarbert, County Kerry, Ireland, on planning, climate-mitigation, public-health, environmental-protection and human-rights grounds.

Name: ROSA O REILLY Email: Address: 14 ST KILLIANS AVE GREENHILLS DUBLIN 12	Comment: TOTALLY OPPOSED TO THIS OPERATION
Name: Michael o Reilly Email: Address: 14 ST KILLIANS AVE GREENHILLS DUBLIN	Comment: ABSOLUTELY NO WAY
Name: PAUL O REILLY Email: Address: 44 BROADFIELD DR RATHCOOLE DUBLIN	Comment: Totally against this
Name: Jennifer O Reilly Email: Address: 14 ST KILLIANS AVE WALKINSTOWN DUBLIN 12	Comment: CANNOT HAPPEN
Name: STEPHEN O REILLY Email: Address: 204 CROMWELLSFORT RD WALKINSTOWN D12	Comment: OUT WITH FRACKING, of EVERY KIND
Name: LORRAINE BRENNAN Email: Address: BRIGHTON RD RATHGAR DUBLIN 6	Comment: NO NO NO CANT HAPPEN
Name: NIEN GROOT Email: Address: CONNOLLY	Comment: NO
Name: Email: Address:	Comment:

We, the undersigned, strongly object to the Irish Planning Authority - An Bord Pleanála - granting planning permission for the Shannon LNG/New Fortress Energy LNG Import Terminal (reference https://www.pleanala.ie/en-ie/case/311233) in Tarbert, County Kerry, Ireland, on planning, climate-mitigation, public-health, environmental-protection and human-rights grounds.

Name: Ciara O Connell Email: ciara13oconnell@yahoo.co.uk Address: Ballycuddy Ennistymon Co Clare	Comment:
Name: Ann N Wall Email: nwallann@yahoo.ie Address: Ballycuddy Ennistymon Co Clare	Comment: Fracking ~~was~~ has been banned in Ireland - Please This should be upheld
Name: Email: Address:	Comment:
Name: Email: Address:	Comment:
Name: Email: Address:	Comment:
Name: Email: Address:	Comment:
Name: Email: Address:	Comment:
Name: Email: Address:	Comment:

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Name: ANNE BOWE Email: Address: COORACLARE	Comment:
Name: Email: Address:	Comment:
Name: Email: Address:	Comment:
Name: Email: Address:	Comment:
Name: Email: Address:	Comment:
Name: Email: Address:	Comment:
Name: Email: Address:	Comment:
Name: Email: Address:	Comment:

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Name: Gary Daly Address: Griffin Rd Kilrush Co. Clare.
Name: BRIAN COONEY Address: QUILTY TAVEAU Quilty Co. Clare.
Name: Beatrice Reardon Address: Quilty, Ennis, Co. Clare.
Name: Mary Stacey Address: Quilty Co. Clare.
Name: Caelan Cullen Address: 2 An Cladach, Quilty West
Name: Mosullen Address: Quilty Co CLARE
Name: Seán Riordan Address: Quilty Co Clare
Name: Martha Clancy Address: Quilty