

Food & Water Europe Rue d'Edimbourg 26 Brussels 1050 Belgium

Contact person: Andy Gheorghiu, Fracking Policy Advisor +49 5631 50 69 507 (land), +49 160 20 30 974 (mobile), agheorghiu@fweurope.org



Food & Water Watch 1616 P Street NW Suite 300 Washington DC, 20036

Contact person: Scott Edwards, Co-Director FWW Justice +1 202.683.4969 (o) +1 914.299.1250 (c) sedwards@fwwatch.org

Sent by email to: EnergyAdaptationPlan@DCCAE.GOV.IE Electricity Policy Division DEPARTMENT OF COMMUNICATIONS, CLIMATE ACTION AND ENVIRONMENT 29-31 ADELAIDE ROAD DUBLIN 2 D02 X285

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Proposed Liquefied Natural Gas (LNG) terminals at Shannon and Cork and impacts of fracked gas on climate change

Statement submitted to: Public Consultation on Draft Climate Change Adaptation Plan for the Irish Electricity and Gas Networks Sector

Dear Sir or Madam,

Food & Water Europe (FWE) and Food & Water Watch (FWW) hereby submit these comments to the Draft Climate Change Adaptation Plan that your office prepared in the context of the National Climate Change Adaptation Framework (NCCAF 2012). The objective is to identify options for electricity and gas networks infrastructure and services that will help to build resilience against the impacts of climate change.

As you rightfully describe, climate change adaptation can be defined as the ability of a system to adjust to climate change, to minimise potential damage, to take advantage of opportunities, and to cope with the consequences. The approval and construction of the two proposed liquefied natural gas (LNG) terminals at Shannon and Cork for the importation of fracked hydrocarbons from the United States will be absolutely contrary to Ireland's climate targets – targets that are already hard to meet.ⁱ

In order to minimise potential damage related to climate change, the Irish authorities must reject the construction of the LNG terminals at Shannon and Cork.

1. Irish full divestment from fossil fuels and fracking ban

In January 2017 the Irish Dàil voted in favour of divesting coal, oil and gas holdings from the €8 billion Ireland Strategic Investment Fundⁱⁱ. The Fossil Fuel Divestment Bill 2016 has passed and has been referred to Commitee Stage.

Furthermore, the Republic of Ireland has recently banned hydraulic fracturing or 'fracking' because the government was convinced that fracking could not proceed in Ireland without having harmful effects on the environment and on human healthⁱⁱⁱ.





Fracking has also become an internationally recognized threat to human and planetary health and safety. In 2012, the UN Environment Programme (UNEP) issued a "Global Alert" on fracking. In 2014, the Permanent Peoples' Tribunal began seeking testimony for a session on the many adverse Human Rights Impacts of Fracking^{iv}.

2. Methane emissions and the greenhouse gas footprint of fossil gas

On a global scale, we have a very significant, but mainly ignored, problem with fugitive methane emissions from gas extraction in general and from shale gas in particular.

There is a leakage rate of roughly 4 to 12 percent from the lifetime production of gas wells being emitted into the atmosphere^v. Since methane is at least eighty-six times more powerful as a greenhouse gas than CO^2 over a twenty-year period, opting for business as usual or even more fracking simply means that it won't be possible to reach the climate objectives and/or the objectives of the Paris Agreement and holding "the increase in the global average temperature to well below 2°C [...] and to pursue efforts to limit the temperature increase to $1.5^{\circ}C''^{vi}$.

These crucial commitments do not leave any room for additional fossil fuel extraction and infrastructure buildout as there is little time before these thresholds are reached: We already reached the 1.1° C point in 2016^{vii} and the 1.5° C point will be reached in less than 10 years with current emissions^{viii}.

3. Proposed LNG Terminals at Shannon and Cork

The **Shannon LNG Terminal** is proposed to have a final maximum regasification capacity of at least 10 bcm/y^{ix}. This is more than twice Ireland's gas consumption of approximately 4.55 bcm of gas in 2015 while gas demand dropped by nearly 20% between 2010 and 2015^x. The **Cork LNG Terminal** is proposed to have an annual import capacity of up to roughly 3.9 bcm of gas.

Both terminals aim at importing fracked hydrocarbons from the United States and could be used for passthrough to the EU - instead of even fulfilling domestic energy demands ^{xi}. These projects would be in total contradiction of not only the EU climate objectives because of significant methane emissions and the disastrous environmental and public health impacts from the extraction and trasportation process, but is also outside the spirit of the above mentioned fracking ban in Ireland and the vote on a full divestement from fossil fuels. It is disingenuous for the Irish government to take such steps to stop fracking and fossil fuel investment on behalf of its own citizens, while approving LNG terminals that will force citizens of other countries, like the US, to live with significant, detrimental impacts of the fracking industry.

4. National Climate Change Adaptation Framework – Clean Energy for EU Islands

Respecting the National Climate Change Adaptation Framework (NCCAF 2012) and its objective to identify options for electricity and gas networks infrastructure and services that will help to build resilience against the impacts of climate change, FWE and FWW urge you and all of Ireland to reject the construction of the LNG terminals at Shannon and Cork.

The transition to a mostly renewable electricity system is not only achievable, it is underway worldwide. According to the <u>Global Trends in Renewable Energy Investment 2017</u>, published on April 6th by UN Environment, the Frankfurt School-UNEP Collaborating Centre, and Bloomberg New Energy Finance, *"investment in renewables capacity was roughly double that in fossil fuel generation;*





the corresponding new capacity from renewables was equivalent to 55 per cent of all new power, the highest to date".

In May 2017, Ireland joined the 'Clean Energy for EU Islands' initiative. According to its goals, the initiative aims "at accelerating the clean energy transition on Europe's more than 2700 islands" and it "will help islands reduce their dependency on energy imports by making better use of their own renewable energy sources and embracing more modern and innovative energy systems." The initiative's goal is also to "help reduce energy costs and at the same time improve air quality and lower greenhouse gas emissions".

The <u>European Clean Energy Islands Forum</u> took place on 22 September 2017, in Chania, Crete. In his <u>speech, European Commissioner for Climate Action & Energy Miguel Arias Cañete</u> listed the main objectives:

"Promoting energy self-reliance through an increased penetration of renewable energies such as solar, wind, marine energies, as well as new storage solutions, in the buildings, transport and industry sectors, and promoting a wide uptake of energy efficiency measures; At the same time, we will reduce the dependency on costly fossil fuel imports, easing the strain on public budgets."

Energy efficiency measures and renewables have a big potential to attract investment and the transition will be good for Ireland by improving people's health and environment and boosting the economy. The real community benefits lie, therefore, with local energy produced by renewables and increased energy efficiency, not approval and construction of new fossil fuel infrastructure projects like the proposed LNG facilities. New gas development will only lead to a further fossil lock-in which needs to be avoided at all costs.

It is worth mentioning that the BNP Paribas Groups, a leading financial services provider in Europe and worldwide, has <u>announced on 11 October 2017</u> that the group *"will no longer do business with companies whose principal business activity is the exploration, production, distribution, marketing or trading of oil and gas from shale and/or oil from tar sands."* Furthermore, it *"will no longer finance ... LNG terminals that predominantly liquefy and export gas from shale."*

We at Food & Water Europe and Food & Water Watch truly believe that Ireland could become Europe's most ambitious 100% renewable energy project. With the US pulling out of the Paris Agreement, Ireland's continuing clean energy leadership would also show to the world that the EU is sincere in its commitment to fight climate change.

I look forward to receiving your reply.

Sincerely

Andy Gheorghiu - Policy Advisor -Food & Water Europe





ⁱ Kevin O'Sullivan "Ireland can't meet simple climate targets. How will it meet ambitious ones? *The Irish Times*. 19 July 2017. Available at: https://www.irishtimes.com/opinion/ireland-can-t-meet-simple-climate-change-targets-how-will-it-meet-ambitious-ones-1.3160522 ⁱⁱ Samuel Osborne "Ireland votes in favour of law to become world's first country to fully divest from fossil fuels". *The Independent*. 27 January 2017. Available at: http://www.independent.co.uk/news/world/europe/ireland-votes-divest-fossil-fuels-climate-change-worldfirst-country-parliament-renewable-energy-a7549121.html

^{III} https://www.irishtimes.com/news/politics/oireachtas/ireland-joins-france-germany-and-bulgaria-in-banning-fracking-1.3137095 http://www.oireachtas.ie/documents/bills28/bills/2016/3716/b3716d-memo.pdf

^{iv} UNEP Global Environment Alert: Gas Fracking – Can We Safely Squeeze the Rocks'. November 2012. Available at:

http://sdg.iisd.org/news/unep-global-environment-alert-raises-concerns-about-gas-fracking/

Permanent Peoples' Tribunal Session on the Human Rights Impacts of Fracking. Available at: https://www.tribunalonfracking.org/ http://www.tribunalonfracking.org/preliminary-human-rights-work

^v Howarth, Robert W. et. Al. Cornell University, Methane emissions and the greenhouse gas footprint of natural gas: 2016 update. Available at: http://www.eeb.cornell.edu/howarth/summaries_CH4_2016.php

vi Paris Agreement. Link: http://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_english_.pdf

vii World Meteorological Organization, Climate breaks multiple records in 2016, with global impacts. Available at:

https://public.wmo.int/en/media/press-release/climate-breaks-multiple-records-2016-global-impacts and the set of the se

viii Carbon Brief, Analysis: Only five years left before 1.5C carbon budget is blown (May 2016). Available at:

https://www.carbonbrief.org/analysis-only-five-years-left-before-one-point-five-c-budget-is-blown

^{ix} European Commission. Projects of Common Interest. PCI 5.3 – Shannon LNG Terminal and connecting pipeline. Availabe at: http://www.lngworldshipping.com/news/view,northwest-europe-ponders-new-deepsea-Ingimport-capacity 47036.htm

https://ec.europa.eu/energy/sites/ener/files/documents/pci 5 3 en 2015.pdf

^x Eurostat data. Available at: http://ec.europa.eu/eurostat/statistics-explained/index.php/Natural gas consumption statistics

^{xi} Karen Thomas "Northwest Europe ponders new deepsea LNG-import capacita". *LNG World Shipping*. 19 April 2017. Available at: European Commission. Presentation of the NSI West Candidates. The third Union list of PCIs. Available at:

https://cloud.foeeurope.org/index.php/s/1v1lsApWXwpHTEZ

NextDecade. Press Release "NextDecade Signs MOU with Port of Cork to Develop FSRU and LNG Import Terminal Infrastructure". 19 July 2017. Availabe at: http://next-decade.com/2017/07/nd-cork-mou/