

Meet the New Boss; Same as the Old Boss – The subsidisation of natural gas as a decarbonisation pathway in Ireland¹

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When the Covid-19 pandemic caused oil stocks to plummet, the US President was accused of facilitating “corporate socialism” by proposing to bailout the fossil fuel industry at a cost of \$20 billion.² However, this was not an isolated incident, brought about in exceptional times. The ailing fossil fuel industry has long relied on public finances to ensure its profitability. “Money is the oxygen on which the fire of global warming burns,”³ and nation states are using scarce public resources to fan the flames. In 2019, the International Monetary Fund (IMF) — not a noted environmental organisation — estimated that fossil fuels were subsidised to the value of \$5.2 trillion. That’s an increase of half a trillion dollars since the Paris Agreement was signed, which, incidentally, requires participatory states to make financial flows “consistent with a pathway towards low greenhouse gas emissions.”⁴ Instead, fossil fuels continue to account for a staggering 85% of *total global subsidies*.⁵ However, the pandemic has exposed the underlying weaknesses of the fossil fuel industry. We now have an unparalleled opportunity to retire fossil fuel production subsidies and invest in a clean, efficient energy system instead.

Although natural gas has not made as many headlines as oil recently, it is currently the second most subsidised fuel after coal.⁶ When burned, it emits roughly half the carbon dioxide emissions of a coal plant. The fossil fuel industry routinely manipulates this comparison to

¹ This essay is based on a report produced by the author for Friends of the Earth Ireland in 2019.

² Higgins, E. 2020. ‘Corporate Socialists Denounced as Trump Considers Fracking Industry Bailout Amid Corona Virus Break Out.’ Common Dreams, <https://www.commondreams.org/news/2020/03/10/corporate-socialists-denounced-trump-considers-fracking-industry-bailout-amid>

³ McKibben, B. 2019. ‘Money is the Oxygen on Which the Fire of Global Warming Burns.’ *The New Yorker*. <https://www.newyorker.com/news/daily-comment/money-is-the-oxygen-on-which-the-fire-of-global-warming-burns>

⁴ United Nations Framework Convention for Climate Change. 2015. Paris Agreement, 3. http://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf

⁵ Coady, D., Parry, I., Nghia-Piotr, L., Baoping, S. 2019. ‘Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates.’ *International Monetary Fund*. <https://www.imf.org/en/Publications/WP/Issues/2019/05/02/Global-Fossil-Fuel-Subsidies-Remain-Large-An-Update-Based-on-Country-Level-Estimates-46509>

⁶ *Ibid*, 5

portray gas as a low-carbon ‘bridge’ fuel to a zero-emissions society. However, emissions created at the point of combustion do not represent the *lifecycle* emissions of natural gas. Methane is the primary component of natural gas - a highly potent greenhouse gas, almost 90 times more efficient at trapping heat than carbon dioxide in a 20-year period.⁷ There is no pathway to remaining within 1.5°C — the politically agreed ‘safe’⁸ level of global warming in accordance with the Paris Agreement — that is compatible with natural gas expansion.⁹ The concept of requiring a ‘bridge fuel’ also obscures the fact that we are already capable of running our grid on renewable energy¹⁰ and instead prolongs our dependence on fossil fuels. Gas terminals and pipelines once built are designed to last decades, and money invested in bringing new reserves into operation could make it legally, politically, and economically very difficult to keep that carbon in the ground. Once investments are made, producers are likely to continue production until they have recovered their costs, even if the market price is *lower* than the long-term costs of production. Avoiding public investments in the first place is therefore fundamental to preventing carbon lock-in.

Earth has already warmed by approximately 1.1°C since the Industrial Revolution, and the impacts have been devastating, particularly in the Global South.¹¹ With less than 0.4°C additional warming to go before the 1.5°C ceiling is surpassed, the amount of carbon we can afford to pour into the atmosphere before we reach 1.5°C — our remaining ‘carbon budget’ — is rapidly diminishing (some estimate that it has already been exceeded).¹² According to the United Nations Intergovernmental Panel on Climate Change, to have a mere 50% chance of remaining within a 1.5°C threshold, only a further 480 gigatonnes of carbon dioxide (GtCO₂) can be emitted.¹³ In Ireland, based on our historical contribution to the climate crisis, we have until just 2024 of our current level of emissions before our minimally equitable share of the 1.5°C global carbon budget is entirely exhausted.¹⁴ To rely on natural gas as a bridge fuel and to invest public money in new carbon intensive infrastructure now, is to knowingly torch the planet.

⁷ Cowern, N., Russel Jones, R. 2016. ‘Global Warming Impact of a Switch from Coal to Gas-Fired Electricity Generation in the UK. UK Climate Change Committee. <https://www.theccc.org.uk/wp-content/uploads/2016/07/Onshore-petroleum-evidence-submitted-by-Cowern-and-Russell-Jones.pdf>

⁸ What constitutes an ‘acceptable’ degree of warming for politicians is not at all acceptable to frontline communities battling the climate crisis – this essay simply refers to 1.5°C as the bare minimum nation states have agreed to work towards.

⁹ United Nations Intergovernmental Panel for Climate Change. 2018. Special Report on the Impacts of 1.5°C warming. Chapter 2. https://www.ipcc.ch/site/assets/uploads/sites/2/2019/02/SR15_Chapter2_Low_Res.pdf

¹⁰ Connolly, D. 2014. ‘A technical and economic analysis of one potential pathway to a 100% renewable energy system.’ *Journal of Sustainable Energy Planning and Management*, 1. <https://doi.org/10.5278/ijsepm.2014.1.2>

¹¹ Mann, M. 2018. ‘People are already dying by the thousands because we ignored earlier climate change warnings.’ *Huffington Post*. https://www.huffpost.com/entry/opinion-climate-change-deaths_n_5c101e14e4b0ac5371799b1c

¹² Carbon Brief: UNEP 1.5°C climate target ‘slipping out of reach’ <https://twitter.com/CarbonBrief/status/1211631520760221696>

¹³ Rogelj, J., Forster, P., Kriegler, E., Smith, C., Séférien, R. 2019. ‘Estimating and tracking the remaining carbon budget for stringent climate targets.’ *Nature* 571, 335 – 342. <https://doi.org/10.1038/s41586-019-1368-z>

¹⁴ McMullin, B., Price, P., Jones, M., McGeever, A. 2019. ‘Assessing Negative Carbon Dioxide Emissions from the Perspective of a National ‘Fair Share’ of the Remaining Global Carbon Budget.’ *Mitigation and Adaptation Strategies for Global Change*. <https://doi.org/10.1007/s11027-019-09881-6>

What we have is a system that favours the development of carbon intensive infrastructure. What we lack is political will and investment flowing in the right direction. What we need is a leap in terms of policy and investment favouring renewables – not a ‘bridge’ fossil fuel.

Focusing our Energies - How Ireland Fuels the Gas Industry

Although natural gas subsidies can be directed towards both producers and consumers, producer subsidies work to cut the costs and risks associated with bringing new natural gas reserves into production. Producer subsidies therefore have a *far* more direct and tangible impact on our capacity to effectively decarbonise than consumer subsidies do. In the Irish context, producer subsidies provide us with a useful barometer to assess the government’s commitment to climate action, arguably more so than the raft of plans and stated emissions reduction targets, which to date have failed to be accompanied by actionable pathways.

Subsidising the production of fossil fuels essentially means that the investment risks associated with bringing new fossil fuel reserves into production are socialised, whilst profits are privatised. The financial risks shouldered by the public are considerable. 2,860 gigatonnes of carbon dioxide (GtCO₂) is contained in the *known* fossil fuel reserves owned by companies and states - enough carbon to burn through our remaining carbon budget of 480 GtCO₂ almost six times over. If we are to maintain a global temperature increase below 1.5°C, fossil fuel reserves and assets could become stranded (i.e. lose value prematurely). The value of stranded assets was recently described by the Financial Times as ‘breath-taking’ with estimates ranging between \$900 billion¹⁵ and \$27 trillion.¹⁶ The value of natural gas reserves and assets may be written down far sooner than proponents of the ‘bridge’ fuel expected. Before the Covid-19 pandemic, and the subsequent collapse in demand for fossil fuels, there was a pre-existing glut of global natural gas supply. A particularly mild European winter in 2019, combined with the US fracking boom, flooded global energy markets with surplus gas. At the beginning of March 2020, natural gas storage facilities in Europe were 60% full, and are projected to reach capacity by July of this year. Even when lockdown restrictions are lifted, the massive quantities already held in storage are likely to keep demand for new production low. The pandemic has simply accelerated an already ongoing decline.¹⁷

Ireland utilises a wide range of subsidisation mechanisms to fuel the natural gas industry in Ireland, all of which undermine our capacity to transition into a decarbonised society, as well as funnelling public funding away from social services into the hands of private fossil fuel companies.

¹⁵ Livsey, A. 2020. ‘Lex in Depth: the \$900 bn cost of ‘stranded energy assets.’ The Financial Times. Available at: <https://www.ft.com/content/95efca74-4299-11ea-a43a-c4b328d9061c>

¹⁶ McKibben, B. 2012. ‘Global Warnings Terrifying New Math.’ *Rolling Stones*. Available at : <https://www.rollingstone.com/politics/politics-news/global-warnings-terrifying-new-math-188550/>

¹⁷ Feit, S., Muffett, C. 2020. ‘Pandemic Crisis, Systemic Decline: Why Exploiting the COVID19 Crisis Will Not Save the Oil, Gas and Plastic Industries.’ *Centre for International Environmental Law*. Available at : <https://www.ciel.org/wp-content/uploads/2020/04/Pandemic-Crisis-Systemic-Decline-April-2020.pdf>

Public Finance

In 2019, the European Investment Bank — the biggest public bank in the world, funded directly by EU taxpayers — adopted a new energy lending policy that will come into effect by the end of 2021.¹⁸ Until then, however, the bank can freely approve public financing for some 55 natural gas infrastructure projects included under the EU's 4th list of 'Projects of Common Interest,' (PCI list).¹⁹ Included on the 2019 PCI list is the proposed Shannon LNG terminal, which would facilitate the importation of liquefied natural gas (LNG), most likely extracted through fracking²⁰ from the US into Ireland.

Aside from adding 10 billion cubic meters of natural gas to Ireland's energy mix, twice Ireland's annual total gas consumption (5.14 billion cubic meters),²¹ the inclusion of the proposed plant on the PCI list makes very little sense. Ireland banned fracking in 2017 on health and environmental grounds. As grassroots groups have pointed out for years,²² importing fracked gas from elsewhere renders our domestic ban worthless. The legitimacy of the planning permission for the project is also being questioned; a case was brought against the developers by Friends of the Irish Environment after a number of environmental concerns were overlooked at the initial approval level. The case has been referred to the European Court of Justice and in the meantime, developers have been ordered to halt development plans.²³

Ireland already has a very poor track record of acquiring significant public financing from the EIB for natural gas infrastructure. Last year, Gas Networks Ireland (GNI) received a €100 million EIB loan (the equivalent of the entire EU-wide budget for renewable energy) to upgrade and expand Ireland's gas network. No independent assessment of demand for natural gas in Ireland was carried out prior to the EIB granting the loan.²⁴ GNI stated that they were not concerned about Ireland's gas network becoming stranded, given its potential for low-carbon alternatives, including Renewable Gas, Compressed Natural Gas, Carbon Capture and Storage and Hydrogen.²⁵ However, there are some concerns regarding these claims. Briefly:

¹⁸ European Investment Bank. 2019. 'EIB Energy lending policy: supporting the energy transformation.' https://www.eib.org/attachments/strategies/eib_energy_lending_policy_en.pdf

¹⁹ The PCI list contains key EU infrastructure projects that are eligible for funding from the EIB, supposedly designed to allow the EU to meet its climate objectives, including 'affordable, secure and sustainable energy for all citizens, and the long-term decarbonisation of the economy in accordance with the Paris Agreement.' For a project to meet the PCI criteria, it must be beneficial for at least two European countries, improve the EU's energy security and increase competition on the energy markets
<https://ec.europa.eu/energy/en/topics/infrastructure/projectscommon-interest>

²⁰ Fracking is a technique in which high-pressure water, sand and chemicals are pumped into shale rock to help extract natural gas. The fracking of a single well can require up to 23 million liters of water and the process contaminates fresh water supplies. Fracking has been responsible for a 'millennia's worth of earthquakes,' in Oklahoma, and leaks from fracked wells in the US have been responsible for the recent surge in global methane emissions.

²¹ Food and Water Europe. 'Ireland Factsheet.' Available at: https://www.foodandwatereurope.org/wp-content/uploads/2019/09/Ireland_FactSheet-final.pdf

²² See Not Here Not Anywhere (<https://noherenotanywhere.com/>), Futureproof Clare (<https://twitter.com/futureproofc?lang=en>) and Safety Before Shannon LNG (<http://www.safetybeforelng.ie/>)

²³ O'Sullivan, K. 2019. 'Developers of Shannon LNG Processing Terminal Ordered Not to Begin Construction.' The Irish Times. <https://www.irishtimes.com/news/environment/developers-of-shannon-gasprocessing-terminal-ordered-not-to-begin-construction-1.3795310>

²⁴ Email correspondence with Gas Networks Ireland.

²⁵ Email correspondence with Gas Networks Ireland.

- Renewable gas in this context refers to biomethane, which contains over 90% methane. The risk of leakage in the production and transportation of biomethane would require “extremely robust and potentially costly independent regulation and monitoring of production sites.”²⁶
- Compressed Natural Gas (CNG) refers to GNI’s intentions to expand use of natural gas beyond energy and heat into transport. GNI plans to construct 70 CNG stations across Ireland, including one already opened in Topaz Dublin Port. However, CNG vehicles have similar carbon emissions performance to other fossil-fueled vehicles. When methane leakage is accounted for, CNG offers no climate benefits compared to petroleum-based fossil-fuels.²⁷
- Carbon capture and storage is a risky and expensive technology, presently non-viable at scale and does not forestall the need to rapidly reduce reliance on fossil fuels, including natural gas.
- Hydrogen can be produced in two ways. If it is produced through a chemical conversion process, whereby natural gas is split into hydrogen and carbon dioxide, and the carbon is (in theory) stored, this is not a zero-carbon gas. If it is produced through the conversion of renewable electricity, this would result in a zero-carbon gas, but the likelihood that renewable hydrogen will ever be produced in the same volume as natural gas currently occupies on our grid remains low, and its deployment may take decades, as GNI reported themselves.²⁸ Furthermore, both production systems would require a complete overhaul of GNI’s entire system of pipelines, storage and appliances, as hydrogen is a smaller molecule than methane.²⁹

Instead of directing limited public finances toward a much-needed Just Transition in Ireland, the EIB loan to GNI simply downplays the scale of transformation required from the energy sector in rapidly transitioning to a zero-emissions economy. This is not prudent fiscal policy. It is reckless. Subsidising the upgrade of gas infrastructure in Ireland should not be based on the unproven assumption that the network will distribute renewable energy or decarbonised gas at some undefined point in the future. EIB lending support for natural gas infrastructure in Ireland is not financing the transition — it is financing the entrenchment of resource extraction policies responsible for the climate crisis.

²⁶ Mullin, B., Price, P., Carton, J., Anderson, K. 2018. ‘Is Natural Gas Essential For Ireland’s Future Energy Security?’ *Stop Climate Chaos*
https://www.stopclimatechaos.ie/assets/files/pdf/is_natural_gas_essential_for_irelands_future_energy_security_scc_study_november_2018.pdf

²⁷ Transport & Environment. 2018. ‘CNG and LNG for Vehicles and Ships - the Facts.’ Available at :
https://www.transportenvironment.org/sites/te/files/publications/2018_10_TE_CNG_and_LNG_for_vehicles_and_ships_the_facts_EN.pdf

²⁸ Houses of the Oireachtas. Joint Committee on Communications, Climate Action and Environment debate - Tuesday, 15 Oct 2019. ‘Gas Networks Ireland’s Vision 2050: Discussion.’ Retrieved from:
https://www.oireachtas.ie/en/debates/debate/joint_committee_on_communications_climate_action_and_environment/2019-10-15/3/

²⁹ Fischer, L. 2018. ‘Renewable and Decarbonised Gas Options for a Zero Emissions Society.’ E3G.
https://www.e3g.org/docs/E3G_Renewable_and_decarbonised_gas_Options_for_a_zero-emissions_society.pdf;
also see: Stockman, L. 2019. ‘Burning the Gas Bridge Fuel Myth: Why Natural Gas is not Clean, Cheap, or Necessary.’ *Oil Change International*. http://priceofoil.org/content/uploads/2019/05/gasBridgeMyth_web-FINAL.pdf

Tax Exemptions

As the production of natural gas is extremely capital intensive, subsidies that can reduce the upfront costs associated with its production are highly attractive to investors. Subsidies that pose the greatest threat to remaining within 1.5°C are therefore those that assume the liability of investment risks associated with gas extraction, as they incentivize investment into natural gas extraction on a long-term basis, creating risk of lock-in.³⁰ Ireland's licensing regime for natural gas exploration and extraction is among the most liberal in the world.

Companies that receive licenses to drill for oil and gas in Ireland are required to pay 25% corporate tax on profits. Most countries tax profits on oil and gas extraction somewhere between 40 – 85%.³¹ As the entire operating costs of the business can be offset against the 25% tax rate, the Irish government can never receive even 25% of private profits earned from drilling for natural gas. Companies are required to pay 5% tax on profits from when production commences, however this can be written off against the 25% tax paid on overall profits. Furthermore, unused tax allowances on unsuccessful oil and gas exploration expenditure can be carried forward for up to 25 years. Although royalties to host governments are typically a mandatory compensation for the extraction of resources on State-owned land or waters, royalties on the profits of oil and gas extraction have been banned since 1987 in Ireland. Natural gas companies own 100% of the oil and gas found under Irish waters and are not required to sell any reserves found back to the State. Granting licenses for oil and gas exploration are therefore of no benefit to Ireland's energy security. If reserves are sold back to the State, it is at full market value.³² Finally, the revenue foregone from failing to appropriately tax fossil fuel extraction means that higher taxes on other economic activity is necessary to plug the budgetary gap.

The Petroleum Affairs Division of the Department of Communication, Climate Action and the Environment (DCCAE) has never required an Environmental Impact Assessment to be carried out for the exploration of oil and gas in Irish waters.³³ The location of drilling for oil and gas is effectively led by industry, as the DCCAE prioritises “determining where they can obtain the best level of interest.”³⁴ In May 2019, ExxonMobil received a license to drill in Ireland's environmentally-sensitive Porcupine Basin — a critical ecosystem for whales and dolphins. Unsurprisingly, this venture was unsuccessful,³⁵ but the environmental impacts of exploration alone are enormous. The impacts of seismic testing on marine wildlife in Ireland has been well

³⁰ Koplou, D. 2018. 'Defining and Measuring Fossil Fuel Subsidies.' Cambridge University Press.

³¹ Kavanagh, A.S., Nykänen, M., Hunt, W., Richardson, N., Jessopp, M.J. 2019. 'Seismic surveys reduce cetacean sightings across a large marine ecosystem.' *Nature*. <https://www.nature.com/articles/s41598-019-55500-4.pdf>

³² Slevin, A. 2016. 'Gas, Oil and the Irish State: Understanding the Dynamics and Conflicts of Hydrocarbon Management.' Manchester University Press.

³³ Seismic Surveys: Written Answers. 2018. Kildare Street. Retrieved from: <https://www.kildarestreet.com/wrans/?id=2018-06-12a.2809>

³⁴ Joint Committee on Communications, Natural Resources and Agriculture. 2012. Report: Offshore Oil and Gas Exploration. Available at: <http://www.andrewdoyle.ie/wp-content/uploads/2012/05/OffshoreOilandGasExplorationReport-OireachtasCommittee-AndrewDoyleTD-May2012.pdf>

³⁵ Murray, D. 2019. 'Fresh blow to exploration industry as drilling off Kerry coast draws a blank.' *The Sunday Business Post*. <https://www.businesspost.ie/news-focus/fresh-blow-to-exploration-industry-as-drilling-off-kerry-coast-draws-a-blank-923819a6>

documented by Irish researchers,³⁶ and in 2019, new research found that seismic testing has significantly reduced sightings of cetaceans.³⁷ Despite this, Ireland issued 15 new exploration licenses from 2018 through to June 2019.³⁸

Investments by State-Owned Enterprises

Investments in natural gas infrastructure by State-owned enterprises create risk of carbon lock-in as well as stranded assets and gives investors the impression of policy certainty around the future of gas. The Electricity Supply Board (ESB), a 95% State-owned company, announced plans in 2019 to build four new gas plants in North Dublin, at the anticipated cost of €700 million.³⁹ The company aims to feed the gas into the grid by 2023 and has so far applied for planning permission to begin the construction of a Flexible Generation Thermal Station (Flexgen) for the generation of electricity in Poolbeg.⁴⁰ When asked what the new gas plant was required for, the ESB simply responded that “all of the power will be fed into the electrical grid.”

However, this does not explain why a semi-State company is investing in new natural gas infrastructure when we know we need to rapidly decarbonise. Incidentally, Eirgrid projects that by 2027, 31% of electricity demand will come from data centres and that by 2030, data centres will account for 75% of new electricity demand growth in Ireland.⁴¹ Data centres are large buildings used to centralise, store, and disseminate digital data collected largely by tech giants and their subsidiaries, such as Microsoft, Apple, Amazon, Alphabet Inc. (Google’s parent company) and Facebook. Dublin has already become Europe’s “largest data hosting cluster,” and in May 2019, there were 53 data centres active in Ireland, with a further 29 under

³⁶ Mercier, S. 2018. ‘Do we want our beaches strewn with stranded dolphins?’ *The Journal*.

<https://www.thejournal.ie/readme/do-we-want-our-beaches-strewn-with-stranded-dolphins-4107401-Jul2018/>

³⁷ Kavanagh, A.S., Nykänen, M., Hunt, W., Richardson, N., Jessopp, M.J. 2019. ‘Seismic surveys reduce cetacean sightings across a large marine ecosystem.’ *Nature*. <https://www.nature.com/articles/s41598-019-55500-4.pdf>

³⁸ Department of Communications, Climate Action and the Environment. 2019. Petroleum Exploration & Development Offshore Ireland.

<https://www.dccae.gov.ie/documents/Acreage%20Report%20at%2030%20September%202019.pdf>

³⁹ O’Halloran, B. 2019. ‘ESB could spend €700m on plan to meet surging electricity demand.’ *The Irish times*.

Available at : <https://www.irishtimes.com/business/energy-and-resources/esb-could-spend-700m-on-plan-to-meet-surging-electricity-demand-1.3849983>

⁴⁰ Dublin City Council. 2019. *Planning Application Details*. Dublincity.ie. (Reference number 3714/19). <http://www.dublincity.ie/swifitlg/apas/run/WPHAPPDETAIL.DisplayUrl?theApnID=3714/19&backURL=%3Ca%20href=wphappcriteria.display?paSearchKey=4563759%3ESearch%20Criteria%3C/a%3E%20%3E%20%3Ca%20href=%27wphappsearchres.displayResultsURL?ResultID=5313580%26StartIndex=1%26SortOrder=APNID:DESC%26DispResultsAs=WPHAPPSEARCHRES%26BackURL=%3Ca%20href=wphappcriteria.display?paSearchKey=4563759%3ESearch%20Criteria%3C/a%3E%27%3ESearch%20Results%3C/a%3E>

⁴¹ EirGrid. 2018. ‘All-Island Generation Capacity Statement 2018-2027.’ http://www.eirgridgroup.com/site-files/library/EirGrid/Generation_Capacity_Statement_2018.pdf

development.⁴² Investment in data centres in Ireland is predicted to reach €10 billion by 2022.⁴³ A single data centre demands the same energy as “a large town,” in Ireland and if run on combined gas-fired units, data centres will add 1.5 million tonnes to Ireland’s carbon emissions by 2030 — a 13% increase in electricity sector emissions.⁴⁴

Companies that own and seek to develop data centres have offices located in Ireland to expressly avoid paying tax and are listed among the most profitable enterprises in the world, outpacing even carbon majors ExxonMobil and Shell in terms of their market share.⁴⁵ In fact, the distinction between the fossil fuel industry and big tech is itself becoming increasingly blurred. Google, Amazon, and Microsoft have quietly become “the new innovative arm of the fossil fuel industry,” investing heavily in researching and developing artificial intelligence to enhance the efficiency of oil and gas extraction.⁴⁶ Amazon recently threatened to fire its employees for speaking out against the company’s contracts with the fossil fuel industry and for donating to climate-denying politicians.⁴⁷ Shannon LNG developers plan to build data centres to “manufacture,” their own demand for natural gas in Ireland.⁴⁸

New natural gas infrastructure is being subsidised by the ESB to support the energy demands of an extremely lucrative industry that will contribute very little to the Irish economy in terms of tax take or secure employment, but will instead increase Ireland’s energy costs and emissions.⁴⁹

Fiscal Support for Industry Research

Fiscal support of industry-led research effectively doubles subsidies to the natural gas industry. Firstly, the research is partially State-funded and is directed towards the interests of the natural gas industry. Secondly, academic partnerships offer an objective position from which industry can influence policy. The public relations value of partnering with research institutions cannot be

⁴² RTE. ‘Data centre investment to top €10 billion by 2022.’ *Rte.ie*

<https://www.rte.ie/news/business/2019/0514/1049443-data-centres-report/>

⁴³ Host in Ireland & Bitpower. 2019. ‘Ireland’s Data Hosting Industry: 2018 Q2 Update.

http://www.bitpower.ie/images/RDDSTUDY/Bitpower_2018_Q2_Update_V4.pdf

⁴⁴ Irish Academy of Engineering. 2019. ‘Electricity Sector Investment for Data Centres in Ireland.’

<http://iae.ie/wp-content/uploads/2019/08/Data-Centres-July-2019.pdf>

⁴⁵ Paul, M. 2018. ‘Ireland is the World’s Biggest Corporate Tax Haven Say Academics.’ *The Irish Times*.

<https://www.irishtimes.com/business/economy/ireland-is-the-world-s-biggest-corporate-tax-haven-say-academics-1.3528401>

⁴⁶ Merchant, B. 2019. ‘How Google, Microsoft and Big Tech are Automating the Climate Crisis.’ *Gizmodo*.

<https://gizmodo.com/how-google-microsoft-and-big-tech-are-automating-the-1832790799>

⁴⁷ Milman, O. 2020. ‘Amazon threatened to fire employees for speaking out on climate, workers say.’ *The Guardian*. <https://www.theguardian.com/technology/2020/jan/02/amazon-threatened-fire-employees-speaking-out-climate-change-workers-say>

⁴⁸ Murray, D. 2019. Fracked Gas Exporter Will Create Own Demand by Developing Power Hungry Data Centres.

The Sunday Business Post. <https://www.businesspost.ie/more-business/fracked-gas-exporter-will-create-own-demand-by-developing-power-hungry-data-centres-06fc909c>

⁴⁹ Taylor, C. 2018. ‘Data centre demand to lead to higher energy prices.’ *The Irish Times*.

<https://www.irishtimes.com/business/energy-and-resources/data-centre-demand-to-lead-to-higher-energy-prices-1.3581998>

overstated. It is considerably more valuable than advertising alone, which is recognised as self-interested; independent research instead is marked by its disinterestedness.

One of the leading research objectives of the Irish Centre for Research in Applied Geosciences (iCrag) is “to significantly de-risk Ireland’s offshore and onshore hydrocarbon (i.e. oil and gas) and mineral resource exploration, thereby increasing exploration activities.”⁵⁰ The Centre receives funding from semi-state and public bodies including Science Foundation Ireland, Ireland’s European Structural and Investment Funds Programme, and the European Regional Development Fund. Among iCrag’s 60 industry partners are fossil fuel giants Shell, ExxonMobil, BP, and Chevron, as well as local actors such as Providence Resources,⁵¹ companies which have been instrumental in establishing the discourse of natural gas as a “transition fuel.”⁵²

The natural gas industry is fully embedded in the governance of the research centre. Representatives from Shell and Woodlands occupy positions on iCrag’s Industry Advisory Committee which “advises iCrag on the prevailing industry trends and needs, and influences research agenda accordingly.” Aside from setting the research agenda, a seat on iCrag’s Industry Advisory Committee affords Shell and Woodlands direct access to policymakers from the Department of Communications, Climate Action and the Environment, who also occupy positions on the Committee.⁵³ Tullow Oil and ENI (an Italian oil and gas company) occupy positions on iCrag’s Governance Committee, the group responsible for providing “advice and guidance on the strategic development of the Centre.”⁵⁴ Finally, in a particularly striking conflict of interest, the Chair of the Irish Offshore Operators Association (IOOA) sits on the Executive Management Committee of iCrag. The IOOA is the private representative and lobbying organisation for all oil and gas companies in Ireland. In 2019, the IOOA lobbied heavily against the Climate Emergency Measures (CEM) Bill (proposed legislation to ban the issuance of new exploration licences for oil and gas in Ireland).⁵⁵

Public funding directed to iCrag is not even counted as a subsidy. The Central Statistics Office analyzes subsidies directed towards fossil fuels in Ireland, including data on research and development directed to the ‘promotion of fossil fuels.’ The CSO found that research and development of fossil fuels had not received any public financing since 2015. However, a report in the Sunday Business post found that the Science Foundation Ireland granted €14.5 million in

⁵⁰ Irish Centre for Research in Applied Geosciences. 2019. Retrieved from:

<https://www.ucd.ie/earthsciences/research/iCrag/>

⁵¹ Irish Center for Research in Applied Geosciences. 2019. ‘Current Industry Partners.’ Retrieved from:

<https://www.iCrag-centre.org/industry/current-iCrag-partners/>

⁵² See, eg: <https://www.shell.com/energy-and-innovation/natural-gas/providing-more-and-cleaner-energy.html>

<https://corporate.exxonmobil.com/Energy-and-environment/Energy-resources/Natural-gas>

<https://www.bp.com/en/global/corporate/sustainability/climate-change/natural-gas.html>

⁵³ Irish Center for Research in Applied Geosciences. 2019. Industry Advisory Committee Members. Retrieved from:

<https://www.iCrag-centre.org/people/advisory-committees/industryadvisorycommittee/>

⁵⁴ Irish Center for Research in Applied Geosciences. 2019. Governance Advisory Committee Members. Retrieved

from: <https://www.iCrag-centre.org/people/advisory-committees/governancecommittee/>

⁵⁵ Murray, D. 2019. ‘Sevenfold Increase in lobbying by oil and gas firms last year.’ *The Sunday Business Post*.

<https://www.businesspost.ie/news/sevenfold-increase-lobbying-oil-gas-firms-last-year-441547?auth=login>

public funds to iCRAG's research since 2015. €4.7 million of this was directly channelled to 'commercially focused oil and gas exploration.'⁵⁶

As Franta and Supran note, when involving the fossil fuel industry in academic research "neither the public nor the future is well served."⁵⁷ The subsidisation of public research carried out in partnership with the gas industry may be compromising not only research integrity, but our response to the climate crisis. Companies can shape independent and publicly funded research to promote the use of natural gas as a part of Ireland's transition to a low-carbon economy and society, as has demonstrably been the case in this instance.⁵⁸

Transitioning Toward a Truly Zero-Carbon Economy and Society

The recent oil price shock, precipitated by Covid-19, should serve as a lesson to the Irish Government, which is continuing to invest in natural gas infrastructure. This is what an unmanaged decline of the fossil fuel industry looks like. We can avoid future chaos for gas-dependent employees in Ireland if action is taken to redirect public investment right now. There are other very good reasons to retire public investment from natural gas infrastructure. The current unpredictability about when, and to what extent, energy demand might resume is likely to deter ongoing natural gas production. However, as Oil Price International notes, without targeted policies aimed at developing a clean and efficient energy system as we emerge from the current crisis, fossil fuel companies may profit from an increase in price when demand eventually does resume. We need to institute safeguards against this, by redirecting public investment toward supporting clean and efficient energy systems.⁵⁹ If there's one lesson that has already been brought into sharp relief by the Covid-19 pandemic, it is the need to respond to crises in a timely manner.

Subsidising the production of fossil fuels will only delay the inevitable transition to a zero-emissions economy and society – it cannot reverse it. However, if we are to emphatically not return to 'business as usual', our climate and fiscal policies must not only be scientifically sound, but also socially equitable. For example, many of the Carbon Majors are strong advocates of the need for a carbon tax, but their silence on the need to remove subsidies is telling. Fossil fuel producer subsidies act as a negative tax on carbon whose benefits are enjoyed by a minority whilst the costs are borne across society. Furthermore, research has demonstrated that if

⁵⁶ Murray, D. 2019. 'State pumps €4.7m into studies for oil, gas sectors.' The Sunday Business Post. <https://www.businesspost.ie/business/state-pumps-e4-7m-studies-oil-gas-sectors-448238?auth=login>

⁵⁷ Franta, B. and Supran, G. 2017. 'The fossil fuel industry's invisible colonization of academia.' The Guardian. <https://www.theguardian.com/environment/climate-consensus-97-per-cent/2017/mar/13/the-fossil-fuel-industrys-invisible-colonization-of-academia>

⁵⁸ See, for instance: Commercialization of Natural Gas Hydrates: <https://www.icrag-centre.org/research/projectlist/commercializationofnaturalgashydratesgeologicalattributesenvironmental.html>
Natural Gas Will Underpin Ireland's Electricity Generation to 2030 and Beyond: <https://www.icrag-centre.org/t4media/Natural%20gas%20underpinning%20electricity%20generation.pdf>
Unconventional Hydrocarbons: <https://www.icrag-centre.org/research/research-challenges/energy-security/unconventionalhydrocarbons/>

⁵⁹ Ibid

people perceive that the costs of a climate policy will be borne by polluting industries, they are far more likely to support it.⁶⁰ Campaigns to keep fossil fuels in the ground have “yielded significant mobilization,”⁶¹ and perhaps more strikingly, the most conservative players in our global economy - including the IMF, the OECD and the Irish Central Bank - have long warned governments that fossil fuel subsidies are inefficient, socially inequitable, fiscally draining, offer no benefit to the taxpayer, and block the much-needed rapid transition to clean and efficient energy systems.

Despite claims of natural gas serving as a ‘bridge’ or ‘transition fuel,’ there are no plans to phase out natural gas, even in the medium to long-term. The Irish Government is instead bankrolling its expansion throughout the production chain. By placing the interests of the natural gas industry at the heart of Ireland’s transition, the Irish Government is effectively guaranteeing a more disruptive and burdensome transition to a low-carbon future. If the ultimate goal is to align energy policy with climate science (in other words, reality), and therefore create an energy system supported solely by renewables, why waste public capital on a temporary ‘bridge’ fuel now? In a carbon and budget-constrained world, the Irish Government must instead adopt an unburnable carbon approach to Ireland’s fiscal and energy policies. This means an end to subsidies for natural gas production.

More importantly, the time for action is now. It is not every day, or even every election cycle, that politicians have an opportunity to reset the economy. Our recovery from the Covid-19 recession should not prop up the ailing system responsible for our ecological crisis. We can, instead, seek to transform it. We need to learn from mistakes made in the aftermath of the 2008 financial crisis, which saw public lending overwhelmingly favour polluting industries, leading to soaring emissions. Furthermore, we must do more than simply reallocate public resources from natural gas to renewables. Massive public investment is needed to decarbonise our entire economy and society, but we must ensure that those resources are directed toward supporting energy as a public good, rather than a privatised commodity. If we are to realistically address the climate and biodiversity crises, Ireland’s fiscal policies and institutions must work to support a genuine zero-carbon transition, ecological boundaries, and human rights.

⁶⁰ Erickson, P., Lazarus, M., Piggot, G. 2018. ‘Limiting fossil fuel production as the next big step in climate policy.’ *Nature Climate Change* 8, 1037–1043. https://www.nature.com/articles/s41558-018-0337-0?WT.feed_name=subjects_climate-change

⁶¹ Erickson, P., Lazarus, M., Piggot, G. 2018. ‘Limiting fossil fuel production as the next big step in climate policy.’ *Nature Climate Change* 8, 1037–1043.