



THE ESG AGENDA IN THE OIL AND GAS INDUSTRY

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The Oil and Gas Industry (O&GI) has been a major contributor to global economies for almost two hundred years. Further, in light of the fact that known oil deposits are predicted to be depleted by 2052, the way in which this resource is used and transitioned is essential. In the meantime, countries continue to expand exploration with a view of discovering new reserves to extend the life-span of some economies which are based on non-renewable energy sources. The close nexus between the O&GI and the environment, society and economy is what prompted the ESG Agenda to be established. This Agenda speaks to the environmental, social and governmental (ESG) factors which are affected by an industry such as the O&GI. It also seeks to create strategies that can protect the ESG Agenda against the deleterious effects of the O&GI. The multi-focus perspective of the Agenda reaffirms the interconnected nature of the extractive industry and the broader context in which it operates. It is the focus of this paper to engage in an analysis of the O&GI at a macro level to determine whether the industry adequately addresses its impact on the ESG factors. Inherent in any discussion on the extractive industry in 2024, is the relationship between that industry and climate change. It is in this regard that attention will be paid to the factors of global boiling, resource depletion and sustainable renewable energy sources as the ESG Agenda is analyzed.

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1. INTRODUCTION

The environment, society and governance (ESG) Agenda was first mentioned in 2006 in the United Nation's Principles for Responsible Investment (PRI).¹ It is interesting that in the formative stages of the Agenda, its application was meant to be relegated to the financial evaluations of companies.² However, it is currently used as a tool for developing sustainable investments and analysing commercial activities.³ For the purposes of this Article, the ESG Agenda will be used as a framework within which the Oil and Gas Industry (O&GI) operates. The ESG Agenda is of great significance in the extractive industry and its relevance is only buttressed by the realised and potential environmental consequences of such activities. This is seen most poignantly when there are, *inter alia*, oil spills or gas leaks. The O&GI naturally reflects the fertile ground on which the environmental, social and governance threads operate. To this end, this paper will seek to use the ESG Agenda as a lens through which O&GI is examined to determine the sustainability of its practices.

First the O&GI will be discussed, with specific focus on the side-effects and consequences of the activities in this industry. In this part of the paper, there will be a discussion of the relationship between the ESG Agenda and the United Nations Sustainable Development Goals (UNSDGs). Second, will be a focus on each of the three elements of the ESG Agenda. In this vein, initially, there will be a careful analysis of how the O&GI impacts the environmental element of the ESG Agenda. There will then be a discussion of the effects of the O&GI on the social dimension of the ESG Agenda. Finally there will be an interrogation of the way in which the O&GI can impact the governance of states. Layered over the entire discussion will be an examination of whether the O&GI can ever be compatible with an ESG Agenda. The importance of examining each element of the ESG Agenda as it relates to the O&GI is that it will demonstrate how the ESG Agenda can be used by companies and industries to ensure compliance, sustainability and reduce overall harm. There will then be a separate section on recommendations to minimise or eradicate the risks associated with the O&GI.

¹ Eccles, Robert G., and Judith C. Stroeble. 'Exploring social origins in the construction of ESG measures.' *Available at SSRN 3212685* (2018); Betsy Atkins, 'Demystifying ESG: Its History & Current Status' (8 June 2020) *Forbes*, <https://www.forbes.com/sites/betsyatkins/2020/06/08/demystifying-esgits-history--current-status/?sh=5b0314732cdd>

² MacNeil, Iain, and Irene-Marié Esser, 'From a Financial to an Entity Model of ESG' (2022) 23(1) *European Business Organization Law Review* 9.

³ *Supra* n. 3.

2. THE OIL AND GAS INDUSTRY AND THE ESG AGENDA

The O&GI is one of the largest sectors in the world in terms of dollar value.⁴ The conventional process for extracting oil and gas involves vertically drilling a well into an underground reservoir.⁵ The combination of horizontal drilling and hydraulic fracturing (fracking) that started in 2000's has allowed oil producers to unlock previously inaccessible stores.⁶ When the oil and gas are extracted, they are used as energy sources for everyday life. The danger is that when products, such as gasoline, are burned for energy, they release toxic gases and high amounts of carbon dioxide, a greenhouse gas.⁷ There are also waste and spills from oil and gas extraction which contain hydrocarbons, heavy metals, radioactive material, salts, and toxic chemicals, all of which have the potential to damage soils, vegetation and eventually groundwater.⁸ The O&GI also impact wildlands, human communities, wildlife and can precipitate climate change through global warming.⁹ There are also immediate health-related effects in communities in which oil and gas activities take place such as respiratory problems like asthma, coughing, eye, nose and throat irritation, headaches, nausea, dizziness, insomnia and fatigue.¹⁰

The consequences of the O&GI must be balanced with the benefits which are gained by global economies. The harsh reality is that the non-renewable resources of oil and gas have been predicted to be 5-10 years away from the all-world conventional oil peak.¹¹ After this global cap in production, it is estimated that oil and production will

⁴ Morozov, Ivan V., et al. 'Prospects for the development of the oil and gas industry in the regional and global economy' *International Journal of Energy Economics and Policy* 8.4 (2018) 55-62.

⁵ Timothy G Kemper, 'Oil Extraction' in *Bailey's Industrial Oil and Fat Products* (2005) 1–38.; Lindsay Maizland and Anshu Siripurapu, 'How the US Oil and Gas Industry Works' (Council on Foreign Relations, 11 August 2022) <https://www.cfr.org/backgrounder/how-us-oil-and-gas-industry-works>

⁶ Ibid.

⁷ Lu, Jie. 'Environmental effects of vehicle exhausts, global and local effects: a comparison between gasoline and diesel' (2011); Andrew Turgeon, Elizabeth Morse, 'Petroleum' (National Geographic, Education, 19 October 2023) <https://education.nationalgeographic.org/resource/petroleum/>

⁸ S. Rana, 'Facts and Data on Environmental Risks – Oil and gas drilling operations' (SPE Asia Pacific oil and gas conference and exhibition, 2008); Andrew Scott and Sam Pickard, *PA! 3: Oil and Gas, Poverty, the Environment and Human Right* (ODI) <https://odi.org/en/about/our-work/climate-and-sustainability/faq-3-oil-and-gas-poverty-the-environment-and-human-rights/#:~:text=Waste%20and%20spills%20from%20oil,can%20also%20damage%20agricultural%20resources.>

⁹ Nathan F. Jones, Liba Pejchar, and Joseph M. Kiesecker, 'The energy footprint: how oil, natural gas, and wind energy affect land for biodiversity and the flow of ecosystem services' (2015) 65(3) *BioScience* 290-301.

¹⁰ Anne C Epstein, 'The human health implications of oil and natural gas development' in *Advances in Chemical Pollution, Environmental Management and Protection*, vol. 1 (Elsevier 2017) 113-145.

¹¹ R. W. Bentley, 'Global Oil & Gas Depletion: An Overview' (2002) 30 (2) *Energy Policy* 189-205.

fall at the rate of 3% per year¹² and will be completely depleted by 2052.¹³ This fact reveals two major takeaways. The first is that the O&GI is finite in nature. The second is that the terminable end to the industry is less than thirty years away. This necessitates the urgent development of more sustainable sources of energy. It is at this juncture that the ESG Agenda's utility can be applied to the O&GI.

To begin explaining the ESG Agenda, it is first necessary to explain each limb of the concept and identify the core areas which they each seek to address within the O&GI. It should be noted that the three limbs of environment, society and government are naturally connected in relation to the O&GI and there will be organic linkages among all three.

The environmental aspect of ESG, the "E" pillar, employs quasi-private governance investing principles and tools to address the impact of commercial and industrial activities on shared air, land, and water resources.¹⁴ This means that the environmental pillar of the ESG Agenda looks at how the environment is affected by activities of companies. To apply the environmental pillar to a given activity, one must first identify the ways in which the commercial activity interacts with the natural environment. "G" (governance), in the ESG Agenda, refers to both internal corporate governance frameworks as well as the national governmental laws, policies and regulations which operate in a specific industry or sphere of commercial activity. While environmental reporting affects the "S" pillar (social relationships), there may be new territory for compliance teams in respect of human rights and United Nations Sustainable Development Goals (UNSDGs) which can be closely intertwined with existing compliance functions such as legal affairs, internal audits, and human resources.¹⁵

It is perhaps the social pillar of the ESG Agenda that best demonstrates the interconnectedness of the limbs of the Agenda. The relationship between law, human rights, and the environment is naturally synergistic and it helps to highlight the linkages which undergird the three pillars of the ESG Agenda.

While it has been stated that the role of each limb of the ESG Agenda has historical roots and collectively may suffer from a challenge of definitional clarity, it is much easier to see the ESG Agenda in the O&GI when it is actively applied. For example, a company with poor environmental practices may be subject to increasingly strict regulation, which could hurt profits and a company with poor social practices may also face reputational damage, leading to a reduction in its customers and loss of

¹² Ibid.

¹³ Sorrell, Steve, et al. 'Shaping the global oil peak: A review of the evidence on field sizes, reserve growth, decline rates and depletion rates' (2012) 37 (1) Energy 709-724.

¹⁴ Pedros Matos, ESG and responsible institutional investing around the world: A Critical Review, CFA Institute Research Foundation (2020).

¹⁵ Niall McCarthy, "Making Sense of ESG's Governance Pillar", EQS Group, 2 June 2022.

revenue.¹⁶ Similarly, a company with weak governance practices may be more likely to experience fraud or other financial problems.¹⁷ These foregoing examples demonstrate the close relationship the actors in the O&GI have with both their economic strength and ESG compliance.

Ultimately, ESG impacts company success and has the potential to preserve the environment, society and governance systems. It is to this end that ESG initiatives can significantly impact how consumers perceive a brand, so it is essential to ensure that ESG efforts are consistent with the image the company wants to project.¹⁸ As such, when there are oil spills or other devastating environmental consequences within the O&GI, it becomes necessary to manage public perception and commentary. When one considers the growing role of corporate social responsibility and corporate reputation, one may appreciate that the way in which a company is seen has a direct impact on a company's market share. If a company is able to meaningfully operate within an ESG Agenda it may benefit from customer loyalty, increased revenue, reduced penalties for regulatory infractions and even goodwill. This means that the investment in ESG compliance has real and direct benefits to a company. In this vein, after the Deepwater Horizon Oil Spill in the Gulf Coast in 2010, BP admitted that it spent a total of \$93 million USD on advertising from April to the end of July to ensure "residents were informed on issues and provide transparency about the company's actions."¹⁹ Therefore, coupling corporate social responsibility with an ESG Agenda can result in a tool to financial success within the O&GI. While ESG is perceived by some to be difficult to implement, and it may seem like a profit-killer, the irony is that for most companies that implement ESG programs, including those within the O&GI, it has the opposite effect.²⁰ However, it is not enough to convince public and private actors to adopt an ESG Agenda on the proposed benefits they will gain by such implementation. This is partly because of the initial cost associated with an ESG Agenda. What may be useful in swaying hesitant parties to adopt the ESG Agenda is the impact it will have on the wider global environment and the longevity of the industry through more sustainable practices. This relationship between the ESG Agenda and sustainability and climate change will now be addressed.

¹⁶ Jo Ellis, "What are the three pillars of ESG?", Lexicon, Corporate Governance Institute, website: <https://www.thecorporategovernanceinstitute.com/insights/lexicon/three-pillars-of-esg-ultimate-guide-to-esg/> Date accessed: 2 September 2023.

¹⁷ Ibid.

¹⁸ Supra n. 18.

¹⁹ Associated Press, 'BP Spent \$93M on Advertising after Gulf Spill' *CBS News* (1 September 2010) <https://www.cbsnews.com/news/bp-spent-93m-on-advertising-after-gulf-spill/>

²⁰ Lisa Rushton, 'ESG: How it Applies to the Oil & Gas Industry and Why it Matters' (*Womble Bond Dickinson*, 22 September 2021) website: <https://www.womblebond Dickinson.com/us/insights/articles-and-briefings/esg-how-it-applies-oil-gas-industry-and-why-it-matters> Date accessed 2 September 2023.

3. SUSTAINABILITY AND CLIMATE CHANGE

The reality is that there is a tangible impact of environmental practices on climate change. In fact, most discussions surrounding the O&GI and sustainability involve a transition from fossil fuels to renewable sources of energy. However, owing to the complexity of economic systems and human behaviour, it is often the case that changes aimed at reducing one type of resource consumption, either through improvements in efficiency of use or by developing substitutes, do not lead to the intended outcome when net effects are considered.²¹ In fact, based on research conducted by York, suppressing the use of fossil fuel will require changes other than simply technical ones such as expanding non-fossil fuel energy production but more infrastructural solutions to benefit from the use of non-fossil fuel energy.²²

A more nuanced approach to climate change, sustainability and the O&GI is the impact of climate change on the industry itself and how the industry can aid in the amelioration of the climate change phenomenon. The cyclical impact of industrial practices within the O&GI on the environment and global boiling cannot be understated.²³ Climate change poses a serious threat to the destabilisation of global economies for decades to come; large tracts of farm land could become unproductive due to shifts in temperatures and major coastal cities could become uninhabitable due to rising ocean tides.²⁴ Additionally, within the oil and gas sector, there is a vulnerability which exists due to climate change and extreme weather events.²⁵ These extreme weather events include increased temperatures, changes in precipitation patterns and sea level rise all of which affect the interconnected and complex systems on which the O&GI is based.²⁶ Within these sensitive linkages, weather can cause disruption of supply chains which can in turn result in delays, expenses and losses. Also, evidence has shown that the O&GI is particularly vulnerable to hurricanes, high winds, lightning, storm surge and flooding.²⁷ This can be seen when many offshore drilling rigs are susceptible to damage caused by these weather patterns in the open seas.

²¹ R York, 'Do Alternative Energy Sources Displace Fossil Fuels?' (2012) 2 *Nature Climate Change* 441 <https://doi.org/10.1038/nclimate1451>.

²² *Ibid*

²³ Nadeem, Khadeeja, Zahid Yaseen, and Muhammad Muzaffar, 'Climate Change and Global Boiling: An Understanding' (2023) 4(3) *Annals of Human and Social Sciences* 857-873.

²⁴ *Supra* n. 22.

²⁵ Cruz, Ana Maria, and Elisabeth Krausmann, 'Vulnerability of the oil and gas sector to climate change and extreme weather events' (2013) 121(1) *Climatic change* 41-53.

²⁶ *Ibid*.

²⁷ H Sengul, N Santella, LJ Steinberg and AM Cruz, 'Analysis of Hazardous Material Releases Due to Natural Hazards in the United States' (2012) 36(4) *Disasters* 723 <https://doi.org/10.1111/j.1467-7717.2012.01272.x>.

Ironically, the O&GI has been a major contributor to the cause of climate change: the release of greenhouse gases into the atmosphere.²⁸ Therefore, while the unpredictable and unprecedented weather patterns affect the O&GI, it is this industry that has contributed directly and indirectly to the ramped up warming of the earth. Consequently, in addressing the impact of the O&GI on the environment, one would naturally reduce the rate of warming of the earth. It should be noted that there is an increasing importance of ESG investment in combating climate change, as a properly operating ESG Agenda can result in a reduction of greenhouse gas emissions.²⁹ This reinforces the basic argument that there is a need to urgently address climatological deterioration in an attempt to prosper: both in economic and social terms at national and international levels. This is particularly so in the context of the negative impact of climate change on the global environment as is seen from the changed terminology from “global warming” to “global boiling”.³⁰

In a practical sense, the sustainability of the practices within the O&GI can extend to the way in which certain processes are carried out in extraction and processing. For example, there have been efforts to electrify offshore platforms through the use of wind and ocean-wave energy.³¹ Furthermore, there are efforts to integrate electrification with a power grid architecture in which case the sustainable engagement of alternative energy sources on the platform can add to the national energy grid or at the very least not take from it.³² Additionally, some oil and gas companies have begun to use on-site solar powered generators which reduce emissions and result in cleaner energy.³³ However, these efforts by major players in the O&GI are insufficient to counter the extent of harm caused by the industrial practices on the environment. In this context, while there are efforts to reduce the carbon footprint within the O&GI, there are other practices that can hinder this progress. For example, the investment in Carbon Capture, Utilization and Storage (CCUS) can at first blush appear to be environmentally sound because it seeks to remove carbon dioxide from the flue gas followed by recycling the carbon dioxide and determining safe and permanent storage options.³⁴ For the most

²⁸ Experience I Nduagu and Ian D Gates, ‘Unconventional Heavy Oil Growth and Global Greenhouse Gas Emissions’ (2015) 49(14) *Environmental Science & Technology* 8824

²⁹ Percy Jinga, ‘The Increasing Importance of Environmental, Social and Governance (ESG) Investing in Combating Climate Change’ (2021) *Environmental Management—Pollution, Habitat, Ecology, and Sustainability*.

³⁰ Amnuaylojaroen, Teerachai. ‘Perspective on the Era of Global Boiling: A Future beyond Global Warming’ (2023) 1 *Advances in Meteorology* 2023 5580606.

³¹ Oliveira-Pinto, Sara, Paulo Rosa-Santos, and Francisco Taveira-Pinto, ‘Electricity supply to offshore oil and gas platforms from renewable ocean wave energy: Overview and case study analysis’ (2019) 186 *Energy conversion and management* 556-569.

³² Elgenedy, Mohamed, et al. ‘Unlocking the UK continental shelf electrification potential for offshore oil and gas installations: A power grid architecture perspective’ (2021) 14(21) *Energies* 7096.

³³ Okedu, Kenneth, Husam Nadabi, and Ahmed Aziz, ‘Prospects of Solar Energy in Oman: case of oil and gas industries’ (2019) 3(3) *International Journal of Smart Grid-ijSmartGrid* 138-151.

³⁴ Hasan, MM Faruque, et al, ‘A multi-scale framework for CO₂ capture, utilization, and sequestration: CCUS and CCU’ (2015) 81 *Computers & Chemical Engineering* 2-21.

part, carbon capture is useful in facilitating the continuation of the status quo in the O&GI. However, the CCUS regime is predicated on the perpetuation of the existing practices within the O&GI as the CCUS seeks to capture and store carbon rather than reduce activities that produce high amounts of carbon.³⁵ Additionally, the infrastructure necessary to operationalise CCUS is expensive and as national regulations and policies change, any potential financial benefit to be gained from CCUS can quickly become futile.³⁶

At an overarching level, the O&GI is a major component of the solution to carbon emissions.³⁷ The reality is that converting the entire industry into a more sustainable organism will take time and resources. The major challenges which the O&GI faces in turning the die on reliance on fossil fuels include immature technology readiness, insufficient resource availability and unstable energy supply.³⁸ These factors affect the ability of the industry as a whole to achieve net-zero.

Apt to the present discussion is the interrelated nature of climate change, sustainable energy and the energy trilemma. It bears merit to state that the O&GI has a pivotal role to play in providing energy but doing so in a responsible and sustainable manner. The concept of the “energy trilemma”, as defined by the World Energy Council, seeks to provide that states ensure (i) the availability of sufficient and affordable energy; (ii) the reliability and safety of energy supply; and (iii) environmental friendliness (minimize impact of energy systems on the environment).³⁹ As such, the energy trilemma tool can allow states to identify the strengths and weaknesses of the energy landscape which operates nationally and can guide a state to mapping out the way forward in a more sustainable world. While it may move the present research off its mooring to delve deeper into a discussion on the trilemma, it is sufficient at this juncture to highlight that the trilemma can be used to further support the ESG Agenda in achieving energy sustainability and facilitate a just transition.

There is also a relationship between the ESG Agenda and the United Nations Sustainable Development Goals (UNSDGs). In fact, sustainable development goal (SDG) 7 calls for “affordable, reliable, sustainable and modern energy for all” by 2030.⁴⁰

³⁵ Abreu, Catherine, Comment: Carbon Capture and Storage is a dangerous distraction. It's Time to imagine a world beyond fossil fuels”, Reuters (December, 2023).

³⁶ Wang, Nan, Keigo Akimoto, and Gregory F. Nemet. ‘What went wrong? Learning from three decades of carbon capture, utilization and sequestration (CCUS) pilot and demonstration projects’ (2021) 158 Energy Policy 112546.

³⁷ Hastings, Astley, and Pete Smith, ‘Achieving Net Zero emissions: The oil and gas industry is a major component of the solution’ (2020).

³⁸ Wang, Zhoujie, et al, ‘Oil and gas pathway to net-zero: Review and outlook’ (2023) 45 Energy Strategy Reviews 101048.

³⁹ World Energy Council, *World Energy Trilemma Index* (2019), cited in Leonid Grigoryev and Dzhanheta Medzhidova, ‘Global Energy Trilemma’ (2020) 6 Russian Journal of Economics 437.

⁴⁰ He, Jianjian, et al, ‘Linking SDG 7 to assess the renewable energy footprint of nations by 2030’ (2022) 317 Applied Energy 119167.

There is unfortunately, a fatalistic reality for this SDG based on current research and trends. While it is notable that there has been a 1.9% increase in renewable energy consumption between 2019 and 2020, there is also a consistent decline in available funding for clean energy in low and middle income countries.⁴¹ This could result in a global delinking of sustainability progress, with large portions of the worlds' global economies and populations being left behind.

Furthermore, as sustainable energy continues to be an important driving force for economies, states can try to implement their ESG Agenda within the guidance provided by SDG 1,⁴² 3,⁴³ 4,⁴⁴ 8,⁴⁵ 9,⁴⁶ 11,⁴⁷ 12,⁴⁸ 13,⁴⁹ 15.⁵⁰ It must be noted at this juncture that the UNSDGs will be an example of a consideration that affects all three elements of the ESG Agenda. With a global effort to guide states to achieve developmental goals, practices which are inimical to the advancement of those goals should be stopped. In a similar fashion to the UNSDGs, where commercial activities cause harm to the environment, it would similarly require immediate action to halt the activity. This is the point that is applicable to the CCUS investment which was discussed previously.

Recognising that the joint application of the UNSDGs and the ESG Agenda in the context of the O&GI is somewhat incompatible, there will be a need to either carefully manage the O&GI and/or guide the stoppage of the practices which negatively impact the environment. However, the continuation of the damaging practices within the O&GI despite the harmful effects on the environment reveals a realistic side of the discussion that will best be addressed in the next section of this Article. Attention will now be turned to the social dimension of the ESG Agenda.

Bearing in mind the realities of the O&GI in present times, mechanisms which can be implemented to balance energy production and environmental protection are essential to the global economic survival. It is in this place that the ESG Agenda exists. After establishing the importance of the ESG Agenda to the overarching theme of climate change and sustainability in the O&GI, it is now necessary to interrogate each of the three limbs of the ESG Agenda and critically examine how the ESG Agenda can be used to curb the deleterious effects of the O&GI.

⁴¹ Sinan Küfeoğlu, 'SDG-7 Affordable and Clean Energy' in *Emerging Technologies: Value Creation for Sustainable Development* (Springer International Publishing 2022) 305–330.

⁴² No poverty.

⁴³ Good Health and Well-being.

⁴⁴ Quality Education.

⁴⁵ Decent work and economic growth.

⁴⁶ Industry, Innovation and infrastructure.

⁴⁷ Sustainable cities and communities.

⁴⁸ Responsible consumption and production.

⁴⁹ Climate Action.

⁵⁰ Life on land.

4(A) ENVIRONMENTAL DIMENSION

As has already been mentioned, there is a correlation between the extractive industry and global warming due to the increase in carbon dioxide emissions. However, beyond these emissions there are dangerous working conditions, other released gases, environmental pollution, groundwater contamination, destruction of wildlife and habitat. These consequences on the environment impact national populations and will, of necessity, require a discussion under the social pillar as well of the ESG Agenda. This is stated because a clean environment, biological diversity and potable water are obligations which fall squarely in the framework of international environmental law and human rights.

The nature of the environmental impact caused by the O&GI is linked to the chemical composition of the gases which are released not only during the extraction and processing but also in the consumption of the final product by the market. This latter point speaks to the use of petroleum as an energy source for transportation with the resultant exhaust from vehicles releasing greenhouse gases. The effects on the environment by these emissions include, but are not limited to, global warming as a result of the release of greenhouse gases, acidification of rain or acid rain, close heating of surrounding vegetation, surrounding air.⁵¹ It is pellucid that the O&GI, as it is traditionally understood, has a negative impact on the environment and would be incompatible with an ESG Agenda. That is not, however, the end of the complexity of the current discussion. The fact is that the ESG Agenda, if used effectively, can convert an incompatible industry to one that is environmentally and socially sound and policy-driven through government regulation.

4(B) SOCIAL DIMENSION

There is a cross-cutting effect of the operations of the O&GI on the environment and society. This is because “social” in the ESG Agenda speaks to human rights and equity; an organisation’s relationship with people as well as its policies and actions that impact individuals, groups and society.⁵² One such example is the causal link between the O&GI and human health.⁵³ The effects of the O&GI on the society in which it operates

⁵¹ A K Sekyi, ‘The Impact of Gas Flaring on Man and His Environment and the Way Out’ (2017) 2(3) *International Journal of Engineering and Management Sciences (IEMS)*.

⁵² Jamie Molnar, ‘ESG 101: What Does Social in ESG Mean?’ (OneTrust, 2023) <https://www.onetrust.com/blog/esg-101-what-does-social-in-esg-mean/>

⁵³ W Blundell and A Kokoza, ‘Natural Gas Flaring, Respiratory Health and Distributional Effects’ (2022) 208 *Journal of Public Economics*.

are devastating. In fact, released pollutants into the air and water from near oil and gas facilities can cause respiratory issues; increased risks of cancer and water pollution.⁵⁴

Beyond the physical human impacts of the industry, there is also the broader social impact of displacement which must be discussed. Displacement occurs when petroleum becomes an important factor in civil wars, ethnic conflict and violence.⁵⁵ Indigenous people are increasingly defending their land and property rights. Land loss and limited compensation cause a number of consequences, with homelessness, unemployment, and health risks at the forefront.⁵⁶ Indigenous people displaced from the forest do not know how to adapt to new conditions, which often leads to alcoholism.⁵⁷ Resettlement of a population leads to a huge cultural loss, such as the extinction of languages, and the disappearance of local identity and cultural heritage of ethnic groups.⁵⁸ There has also been research on the linkage between the oil industry and social exclusion, well-being and health.⁵⁹ For example, due to the O&GI in Nigeria, there was land clearing, gas flaring and infrastructural development and spills which left land and waterways inaccessible and unproductive resulting in further deforestation and exploitation of land as people are pushed to find alternative sources of income and land on which to live.⁶⁰

With the foregoing dangerous impacts of the O&GI on societies, it can be said with little opposition, that an ESG Agenda will be inconsistent with any activity that causes this kind of human harm. Moreover, taking a human rights lens to this discussion, it is clear that states that knowingly engage in practices that cause harm will be in breach of several international environmental obligations not to cause harm. However, that discussion requires a more in-depth analysis of treaty ratification. Furthermore, for a state-owned oil company establishing state liability may not be overly troublesome. It is a very different situation when it relates to privately owned companies for which treaty obligations will not necessarily apply. Therefore, beyond calling for judicial intervention in the O&GI, a robust ESG Agenda which seeks to curtail activities that negatively affect a society, is a more efficient tool in achieving meaningful change. Additionally, when one considers the lack of targeted accountability legislation, policy or regulation, for wrongdoing in the O&GI, the continued spread of these kinds of medical consequences will be left unabated. This leads naturally into a discussion of the governance pillar of the ESG Agenda.

⁵⁴ UPESON, 'Health, Safety, and Environment in the Oil and Gas Industry' <https://upesonline.ac.in/blog/safety-in-oil-and-gas-industry>

⁵⁵ Bogumil Terminski, 'Oil-Induced Displacement and Resettlement: Social Problem and Human Rights Issue' (Vancouver, 28 March 2012).

⁵⁶ Ibid.

⁵⁷ Supra n. 57.

⁵⁸ Supra n. 57.

⁵⁹ Augusta Nkem, Stephanie Topp, Sue Devine, Wendy Li and Daprim Ogaji, 'The Impact of Oil Industry-Related Social Exclusion on Community Well-Being and Health in African Countries' (2022) Public Health (18 October).

⁶⁰ Ibid.

4(C) GOVERNANCE DIMENSION

The impact of the O&GI on the governance element of the ESG Agenda is profound. At the heart of the governance dimension is the sustainable harvesting and use of energy. The world in 2021, burnt 144 billion cubic metres (bcm) of gas at oil and gas facilities.⁶¹ This burnt gas had the potential to generate 1800 terawatt hours of energy or nearly two-thirds of the European Union's net domestic electricity generation.⁶² The effect of this is that in a world where energy facilitates modern living, aspects of the O&GI are resulting in significant wasted energy. Energy wastage was also assessed by the United States in its Energy Information Administration data which revealed that the United States wastes roughly one billion dollars of gas each year by flaring.⁶³ Meanwhile, on public lands over four hundred million dollars of gas was vented or flared in 2019 alone.⁶⁴ That translates to roughly \$50 million in lost revenue and taxpayer resources.⁶⁵ This shows that the O&GI employs activities that are wasteful, harmful and largely unregulated. However, the ESG Agenda has the potential to serve as a guide on how to modify and modernise practices that are necessary but harmful.

Pervasive practices within the O&GI, such as flaring can also erode operators' social license to operate and has spurred campaigns to regulate such emissions through oversight, penalties, and taxes on flaring.⁶⁶ Methane emissions have also emerged as a concern among some energy customers, as seen in the abandonment of plans by France's Engie to import US liquefied natural gas, due to its climate footprint.⁶⁷ It can therefore be seen that the O&GI impacts a company's corporate social responsibility which may in turn affect its reputation and resultant revenue.

Beyond the internal corporate governance perspective of the ESG Agenda, is the governmental feature. Globally there has been the intervention of legislation and/or regulations to guide ESG.

In April 2022, the UK enacted two mandatory ESG disclosure laws. These are the Companies

⁶¹ DTE Staff, 'Global Warming: 400 Million Tonnes CO₂ Pumped to Atmosphere a Year from This Source the World Is Blind To' (*Down to Earth*, 6 May 2022) <https://www.downtoearth.org.in/news/environment/global-warming-400-million-tonnes-co2-pumped-to-atmosphere-a-year-from-this-source-the-world-is-blind-to-82726>

⁶² Ibid.

⁶³ Jon Goldstein, 'New Study Finds Flaring Source of Five Times More Pollution Than Previously Thought' (*Environmental Defense Fund*, 30 September 2022)

⁶⁴ Ibid.

⁶⁵ Supra n. 65.

⁶⁶ W Blundell and A Kokoza, 'Natural Gas Flaring, Respiratory Health and Distributional Effects' (2022) 208 *Journal of Public Economics*.

⁶⁷ Ibid.

(Strategic Report) (Climate-related Financial Disclosure) Regulations 2022 and the Limited Liability Partnerships (Climate-related Financial Disclosure) Regulations 2022.⁶⁸ These Regulations require certain companies to provide climate-related financial disclosures in their strategic report.⁶⁹ In 2023, the Non-Financial Reporting Directive (NFRD) was replaced by a new ESG reporting directive – the Corporate Sustainability Reporting Directive (CSRD).⁷⁰ The CSRD will significantly extend the scope of companies obliged to comply with approximately 50,000 companies in the EU, corresponding to 75% of the EU's companies turnover.

There are currently no mandatory ESG disclosure requirements on the federal level in the USA. In fact, ESG disclosure is voluntary in the USA.⁷¹ However, in May 2022, the US Securities and Exchange Commission (SEC) proposed “amendments to rules and reporting forms to promote consistent, comparable, and reliable information for investors concerning funds’ and advisers’ incorporation of environmental, social and governance (ESG) factors.”⁷² If the proposal is adopted, it will establish disclosure requirements for funds and advisers that market themselves as having an ESG focus and be a large win against ESG greenwashing.⁷³

In April 2022, the Canadian federal government released its 2022 budget, where they promised to bring mandatory climate-related reporting requirements to federally regulated banks and insurance companies.⁷⁴ The financial institutions in scope will be required to publish their climate disclosures in alignment with the TCFD framework starting in 2024.⁷⁵ Although the regulation focuses on federally regulated financial institutions, the government expects it to have an impact on Canada’s entire economy.⁷⁶ It should be noted that Canada has a long-term plan for ESG implementation but the delay in robust regulations could result in irremediable harm.⁷⁷

⁶⁸ Emmanuel Michael, *Mandatory Environmental, Social and Governance (ESG) Regulations: ESG Performance, Corporate Finance, and Investment* (PhD thesis, Te Herenga Waka—Victoria University of Wellington 2023).

⁶⁹ ‘Countries Affected by Mandatory ESG Reporting’ (*Worldfavor*, 2 September 2023)

⁷⁰ *Supra* n. 68.

⁷¹ Khanh Hoang, ‘Silent but Deadly: Political Corruption and Voluntary ESG Disclosure in the United States’ (2022) 43(7) *Managerial and Decision Economics* 2775.

⁷² *Supra* n. 68.

⁷³ *Supra* n. 68.

⁷⁴ *Supra* n. 68.

⁷⁵ Dong Ding, Bin Liu and Millicent Chang, ‘Carbon Emissions and TCFD Aligned Climate-Related Information Disclosures’ (2023) 182(4) *Journal of Business Ethics* 967; W Blundell and A Kokoza, ‘Natural Gas Flaring, Respiratory Health and Distributional Effects’ (2022) 208 *Journal of Public Economics*.

⁷⁶ *Supra* n. 68.

⁷⁷ Machado, Javier. “The Futures of Environmental, Social, and Governance (ESG) by 2043 in Canada, and the Potential Implications on Large and Public Companies.” (2023).

In Malaysia, ESG reporting has been mandatory for all public listed companies since 2016, making it one of the first countries to introduce this kind of disclosure requirement.⁷⁸

There is currently no mandatory ESG reporting legislation in China. However, with effect from 1 June 2022, China's first set of (voluntary) guidelines for Chinese companies to report on ESG metrics came into effect – the Guidance for Enterprise ESG Disclosure.⁷⁹

The New Zealand government has adopted legislation making climate-related disclosure mandatory for large publicly listed companies, insurers, banks, non-bank deposit takers, and investment managers from the 2023 financial year and forward.⁸⁰

Interestingly, research has shown that there is a statistically significant difference in the level of ESG disclosure requirements between developed and emerging countries with the former having higher levels of compliance than less developed.⁸¹ The benefits consequently gained from the successful implementation of ESG include improved corporate performance and long-term sustainability of companies and organizations.⁸² Coupling the benefits gained with the countries capable of the investment in ESG, is the result that wealthier countries are able to retain their economic strength globally with those countries unable to expend the money to regulate and enforce ESG being left behind. Furthermore, as is seen in the reduction in funding of less developed countries in ESG reporting, it is easy to see why the SDGs are not being achieved globally. A noteworthy fact is the recently published Sustainable Development Report which ranked countries' ability to achieve the SDGs. As it relates to the ranking, ESG disclosure regulation influenced the position of the countries in the index and the more the country complied with ESG disclosure, the better the position was in the ranking.⁸³ The importance of this research is that SDG 7, which relates to clean and sustainable energy, is not capable of equal realisation by all states because energy transition, is ultimately an economically-driven initiative. If a state, with less available resources, cannot afford to engage in such a transition, and funding is unavailable, then the achievement of the SDG 7 is not possible. Therefore, the ranking, if used to identify gaps in global achievement with a resultant development of strategy on how to fill the

⁷⁸ Supra n. 68.

⁷⁹ Supra n. 68.

⁸⁰ Supra n. 68.

⁸¹ J A Van Zanten, & R Van Tulder, 'Multinational enterprises and the Sustainable Development Goals: An institutional approach to corporate engagement' (2018) 1 *Journal of International Business Policy* 208-233. <https://doi.org/10.1057/s42214-018-0008-x>

⁸² Tarun Kumar Soni, 'Demystifying the Relationship between ESG and SDG Performance: Study of Emerging Economies' (2023) 20(3) *Investment Management and Financial Innovations* 1-12.

⁸³ Oleksii Leonidovych Plastun et al, 'SDGs and ESG Disclosure Regulation: Is There an Impact? Evidence from Top-50 World Economies' (2020).

shortfalls, can be useful. However, if it is simply produced to allow developed states to engage in self-aggrandisement, then it serve little purpose.

It is therefore possible to see the role governance plays in the achievement of an ESG Agenda. In the context of the ESG Agenda, there are two sides to the governance element. There is first the corporate governance aspect of the actors in the O&GI and there is also the state governance which can lead to both statute and regulations to give the ESG Agenda the necessary teeth. The foregoing discussion reveals that there is still far to go in respect of regulating and/or eradicating the negative impacts of practices within the O&GI. Therefore, recognising that the ESG Agenda can be used to guide companies in their extractive process, leaving the regulation up to individual companies may only result in a maintenance of the status quo and further environmental harm.

5. RECOMMENDATIONS TO ACHIEVE THE ESG AGENDA IN THE O&GI

The immediate solution to the harm caused by the O&GI would be an immediate global transition to greener sources of energy. However, that may be a solution that is theoretically sound but practically impossible in the short-term due to the economic dependency the majority of the world has to oil and gas. To this end, there are ways in which the effects of the O&GI can be slowed or halted. Global policies on a better safeguards to prevent spillage is possible with the support of global organisations such as the United Nations, the World Bank, the European Union, the Organisation of American States and the African Union. A globally orchestrated approach to reducing reliance on the by-products of the O&GI could promulgate alternatives to these non-renewable resources. However, as global economies face diverse challenges, only time will tell if current trends continue, particularly as Russia is currently increasing its output.⁸⁴

At a more practical level, the O&GI can better fit within the ESG Agenda if exploration, extraction and processing are reduced and, where they continue, their efficiency is increased.⁸⁵

While it is important to address the deleterious effects of the O&GI, there is also a need to have a robust ESG policy. In this vein, aside from the monetary pressure on companies to implement ESG programs, there also is increasing pressure on companies

⁸⁴ Vladimir Afanasiev, 'Russian Flaring Spooks European Markets but Also Shows the Environmental Costs of War' *Upstream: Energy Explained* (1 September 2022) <https://www.upstreamonline.com/environment/russian-flaring-spooks-european-markets-but-also-shows-the-environmental-costs-of-war/2-1-1287194> accessed 4 April 2025.

⁸⁵ Supra n. 68.

to properly manage ESG issues.⁸⁶ In a US context, the Biden Administration has made both the fight against climate change and environmental justice foundational to its Agenda.⁸⁷ Upon his inauguration, President Biden quickly rejoined the Paris Agreement and set a 2030 target to cut GHG emissions by 50 percent from 2005 levels. Getting there will require stepped-up federal regulation and enforcement of environmental protection across a wide range of industries.⁸⁸ Additionally, within days of his inauguration, President Biden signed Executive Order 14008 entitled *Tackling the Climate Crisis at Home and Abroad*, further making clear his intent to establish a government-wide approach to address the “climate crisis” and ensuring environmental and economic justice issues are key considerations in how the Administration governs.⁸⁹ This approach to central government taking an active role in the formalisation of an ESG Agenda serves as a template of how to effectively engage the “G” facet of any ESG Agenda. The reality is that any policy framework requires governmental support and where the government is willing to establish national policies, legislation and regulations, the ESG Agenda is given fertile ground on which it can operate. However, where the extent of governance is self-regulatory in nature, it operates in a place of voluntariness and inconsistency within the industry.

6. CONCLUSION

The O&GI feeds global energy needs and supports economies across the globe. It is, in reality, necessary and dangerous and reaffirms the urgency of green transition. From a health and safety perspective, there is, however, a devastating dimension to the O&GI, particularly when analysing through a lens of an ESG Agenda. An ESG Agenda serves as guidance on how to engage in commercial activities which are supportive of environmental, social and governance factors. While at first blush it may be difficult to fully articulate what each facet of the ESG Agenda entails, in a careful and deliberate exercise of the O&GI’s causes and effects, the ESG Agenda can be very useful.

The ESG Agenda seeks to refocus a company’s attention on core stakeholders within its sphere of operations paying particular attention to the environment, the society and governance structures. To thrive, a company/industry must ensure that it can operate within an ESG Agenda because it has the potential to increase a company’s success, commercial viability, protect a company’s goodwill and reputation; and ultimately increased revenue.

⁸⁶ Lisa Rushton, 'ESG: How It Applies to the Oil & Gas Industry and Why It Matters' *Womble Bond Dickinson* (22 September 2021) <https://www.womblebond Dickinson.com/us/insights/articles-and-briefings/esg-how-it-applies-oil-gas-industry-and-why-it-matters> accessed 2 September 2023.

⁸⁷ Ibid.

⁸⁸ Supra n. 88.

⁸⁹ Supra n. 88.

The issue is not whether an ESG Agenda is applicable but how compatible on-going activities are with an ESG Agenda. While numerous examples have been given in this Article relating to each limb of the ESG Agenda and the O&GI, the reality is that the industry is essential to modern existence. This utility makes an immediate stoppage of the O&GI impossible. This is why steps have been taken globally to better regulate the industry in an attempt to achieve a realistic realization of the ESG Agenda.

This incremental strategy to transition to a green economy and rely on renewable resources is set in the context of the ESG Agenda's incompatibility with the negative side-effects of the O&GI. However, the incompatibility must be balanced with the practicality and utility of the industry in a safety context and resource availability reality. It is advanced that investing in ESG can help organisations reduce their environmental impact, improve social outcomes, and build better governance structures.⁹⁰ This is why it would be an act of futility to abandon the ESG Agenda for the sole reason that the O&GI cannot be stopped immediately. To the contrary, the agreement by states to even embark on a transition from non-renewable to renewable energy demonstrates the importance of the ESG Agenda. It becomes that much more necessary in situations which pose high risks to the environment and people.

The O&GI, which causes significant harm to the environment and has the potential to cause cancer, destruction of water sources, elimination of wildlife and habitat, just to name a few, cannot satisfy an ESG Agenda. This is even more poignant when one considers the direct effect the O&GI has on global warming. It is to this end that regulation and proper corporate and state governance are essential to the survival of the planet. In a situation where the stakes are literally life and death, an ESG Agenda can serve as the last bastion of hope.

⁹⁰ Supra n. 18.