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Amicus brief

1. Under what circumstances do fracking and other unconventional oil and gas extraction techniques breach substantive and procedural human rights protected by international law as a matter of treaty or custom?

Before we share our analysis on the primary question of whether or not fracking violates human rights, we must bear in mind that the discussion about fracking and human rights is not merely about the fracking procedure itself, but the whole industrial and commercial process that is inherently linked to this extraction technique. This inherently harmful extraction process and the development of the related infrastructure is not only detrimental to the climate, environment and public health, but it all too often challenges and threatens the democratic principles of freedom of expression, property rights and other fundamental protections. Finally, it is important to acknowledge that it is not “fracking” that violates human rights, but the corporations and state authorities that pursue and facilitate this dangerous practice.

1.1 Fracking: What is it?ⁱ

Hydraulic fracturing, or fracking, is a technique employed by the oil and gas industry to extract fossil fuels. Millions of litres of water (from drinking water reservoirs, rivers or lakes), mixed with tons of toxic chemicals and silica sand, are pumped deep underground under extreme pressure to crack oil or gas bearing rocks in order to set free so-called “unconventional” fossil fuel resources.

However, gas and oil are neither “conventional” nor “unconventional”. All oil and gas resources (fossil fuels) can be classified as hydrocarbons. “Unconventional” does not refer to the characteristics or composition of the oil or gas. Instead it refers to the porosity, the permeability, the fluid trapping mechanism, or other characteristics of the geological reservoir or bearing rock formation from which oil and gas could be extracted. These characteristics result in the need to artificially alter the geological features of the reservoir or bearing rock formation using stimulation techniques such as hydraulic fracturing to extract the hydrocarbons.

Unconventional fossil fuels refer to oil and gas produced from geological formations that are typically more difficult to access and require the use of specific stimulation techniques such as hydraulic fracturing to become productive. “Unconventional” is the collective term used to describe shale gas/oil, tight gas/oil and coal bed methane.

- Shale gas/oil: gas or oil that is tightly trapped in shale. It forms when black shale has been subjected to heat and pressure for millions of years. Its production requires hydraulic fracturing and is typically carried out with horizontal, multi-stage wells (i. e. multiple fracs).
- Tight gas: gas trapped in impermeable rock and non-porous sandstone or limestone formations. The viability of sandstone reservoirs is determined by their porosity and permeability, or how easily fluid or gas moves through the rock. Because the capacity of these formations to allow gas migration is too limited for conventional production methods to be successful, hydraulic fracturing is used to optimize gas recovery.
- Tight oil: Light crude oil trapped in shale, limestone and sandstone formations. Like shale gas/oil and tight gas, it is extracted by hydraulic fracturing.
- Coal bed methane (CBM): A form of natural gas trapped in coal reservoirs. Production may or may not require hydraulic fracturing. In the past wells were usually drilled vertically, but more recently horizontal and directional drilling has been used.

1.1.1 Definition of “fracking” by the EU Commission, the UK and Germany

Some states, like Germany and the United Kingdom (as well as the EU Commission), have tried to re-define the definition of fracking in order to avoid stronger regulation or fracking bans for the industry. The UK and EU Commission limit their definition of fracking to “*high volume hydraulic fracturing*’ [which] means injecting 1,000 m³ or more of water per fracturing stage or 10,000 m³ as more of water during the entire fracturing process into a well” operations.ⁱⁱ

However, water consumption at specific thresholds shouldn’t be the only defining practice for fracking. As explained above, “*hydraulic fracturing*” is a question of geology, depth, injection pressure, water intensity, chemicals and sands, but also of technology and well density. The amount of water involved significantly varies from one drilling site to another, depending on the nature and the depth of the shale layers; regardless of the amount of water injected into a well, the unconventional process used to extract these fossil fuels is, indeed, fracking.

By limiting this definition to projects above a fixed threshold of water use, the United Kingdom has improperly excluded a number of fracking operations from the legislation framework that would be otherwise legally binding for this kind of unconventional oil and gas extraction. The UK’s arbitrary limitation on the definition of fracking has consequences: Cuadrilla’s exploratory fracking operations for shale gas at Preese Hall in Lancashire used „only“ 8,400 m³ of water in total – but nonetheless caused the earthquakes that have started the fracking debate in the UK.ⁱⁱⁱ

The artificial limit used by the UK and the EU Commission would also exclude thousands of fracking projects in the United States if applied there. As the US EPA study assessing the “*Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources*” stated: “*there was wide variation in the water volumes reported per well, with 10th and 90th percentiles of 74,000 gallons (280,000 liters) and 6 million gallons (23 million liters) per well, respectively. There was also variation in water use per well within and among states (Table ES-1). This variation likely results from several factors, including the type of well, the fracture design, and the type of hydraulic fracturing fluid used. An analysis of hydraulic fracturing fluid data from Gallegos et al. (2015) indicates that water volumes used per well have increased over time as more horizontal wells have been drilled.*”^{iv}

None of these water use variations, however, alter the fact that fracking is occurring and having significant impacts.

In Germany, fracking is officially banned outright in shale and coal bed methane layers. In addition, fracking and fracking waste disposal in or under designated water protection areas, areas with water bodies linking to natural lakes or dams which serve for public water supply and areas with wells for the production of beverages/drinks, or which fall under the water security law, is also prohibited.

However, the details of Germany's current fracking legal framework reveal a number of cracks. Just as in the UK, nature protection zones and national parks appear to be protected. However this protection only applies to the construction of facilities related to fracking projects directly in the park. It does not prohibit drilling projects from being authorised just outside the protected areas, allowing operators to drill horizontally under them, thereby detrimentally affecting these areas.

The proposal also includes a ban on fracking within Natura-2000 areas, but this only covers the construction of facilities related to shale gas and coal bed methane projects. In other words, other kinds of tight gas/oil development involving the use of fracking would be allowed. Tight gas is usually extracted from sandstone/limestone layers. The ongoing lobby of the oil and gas industry^v has been so successful that the German Government has even re-branded sandstone/limestone layers as "conventional layers" in order to create the artificial term of "conventional fracking" that helps tight gas fracking by-pass the otherwise applicable ban^{vi}. With this fracking policy, the German government undermines its own goal of being a climate protection leader.

The definition of "fracking" must therefore take the actual need for stimulation – regardless of the targeted geological layers and the amount of water usage – into account. Only then we can fully address the risks and negative impacts for the climate, environment and public health as well the implications for human rights.

1.2 Human (or Natural) Rights: What are they?

Human rights belong to all human beings and are inalienable; they cannot be taken away by any law or government. Governments are explicitly obliged to act in certain ways or to refrain from certain acts in order to promote and protect these inalienable human rights and fundamental freedoms of individuals or groups.^{vii} Once, these were called natural rights, meaning that humans possess them as a gift from nature (or a higher being) prior to the existence of states or governments.^{viii}

Some of them are directly linked to the fracking case, for example:

- right to life, liberty and security of person,
- right to physical and mental health and well-being,
- right to prevention of diseases,
- right to safe and clean drinking water and sanitation,
- right to freely pursue self-determined economical, social and cultural development,
- right to territory,
- right of free disposal of natural wealth and resources,
- right to property—whether alone or in association with others,
- right to public consultation,
- right to protection of motherhood and childhood,
- right to actions preventing the risks and impacts of climate change,
- right to sustainable development.

These rights are non-negotiable and no human being needs an administrative order to legally demand protection of these rights.^{ix} Infringing upon them means infringing upon written and non-written universal/international law.

1.3 The development of the unconventional oil and gas industry has significantly detrimental impacts on the social, community and health wellbeing of the targeted areas:

A. Land use implications of fracking – Industrialisation of the targeted areas

The fracking industry has—through the necessary construction of a network of thousands of wells and other support infrastructure - a significant impact on the regional development of the targeted regions and it inevitably affects areas where either populated communities or environmentally and culturally sensitive zones can be found^x. To be economically viable, continuous drilling of new commercially producing wells is required (especially in shale layers, but also in sandstone and clay formations) over a period of 20 - 40 years. Depending on the geological and topological circumstances, we can expect each well pad to cover 2 – 4 km^{2xi}.

The fracking industry also designs its operations to condense as many wells as possible in a limited geographic area to reduce production costs and maximize extraction and profits.

This densely concentrated industrialisation process is the one of the reasons why the German Advisory Council on the Environment (SRU) pointed out in their report on fracking for shale gas production in Germany^{xii} that:

"In a densely populated industrialised country like Germany, land use for shale gas production competes with other uses, especially agriculture, forestry and human settlement, and also recreation and nature conservation. This is particularly true of the reservoirs in Lower Saxony and North Rhine/Westphalia, which are covered by land used for intensive agriculture where there is already great pressure on land. This increases the competition for use, and the reduced availability of land can lead to intensification of agricultural use. It also increases the pressure on land not used for agriculture."

Hydraulic fracturing is also a crucial part of the exploration phase or oil and gas extraction. Without the so-called "stimulation drilling" a company cannot ascertain if there is enough economically viable gas in the underground. Once companies make that positive determination, full scale fracking will inevitably ensue. Individual applications must therefore be viewed and assessed as part of a larger plan by the companies to develop an extraction industry more broadly in the targeted regions. We strongly disagree with the view that **exploratory vertical wells** development should not be regarded as an integral part of a more substantial project. The cumulative impacts must be taken into account from the beginning. Otherwise it will be difficult to set a limit for the needed scale of industrialisation at a later stage.

The cumulative impacts must therefore be taken into account from the beginning of the proposed development (including seismic surveys and exploratory wells). Unfortunately, this is not always the case. Communities should not be forced to prioritize the single economic interest of a private company over the other existing, competing public interest.s in the targeted area. Local councils must therefore have the freedom to decide whether or not their region should become the target of an industrialization process of 20 – 40 years.

B. Environmental and public health implications of fracking

More than a decade of large-scale use of the fracking technique (mainly in the US and Canada) has shown how harmful and destructive this extraction process can be, as confirmed and acknowledged by countless peer-reviewed scientific studies. There are numerous proven risks and impacts related to the development of fracking projects, such as heavy freshwater consumption, water and soil contamination, and public health impacts.

The Concerned Health Professionals of New York and the Physicians for Social Responsibility conclude in their fifth edition (March 2018) of the “Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Gas and Oil Extraction)” that^{xiii}:

„Emerging data from a rapidly expanding body of evidence continue to reveal a plethora of recurring problems and harms that cannot be sufficiently averted through regulatory frameworks. There is no evidence that fracking can operate without threatening public health directly or without imperiling climate stability upon which public health depends.“

Already back in 2012, the UN Environment Programme (UNEP) issued a “Global Alert” on fracking, concluding that fracking may have environmental impacts even if done properly^{xiv}.

Since 2005, according to industry and state data, nearly 140,000 fracking wells have been drilled or permitted in more than 20 US states^{xv}. According to industry-reported data in the FracFocus database, oil and gas wells fracked across the U.S. between 2005 and 2015 used at least^{xvi}:

- 5 billion pounds of hydrochloric acid, a caustic acid;
 - 1.2 billion pounds of petroleum distillates, which can irritate the throat, lungs and eyes; cause dizziness and nausea; and can include toxic and cancer-causing agents; and
 - 445 million pounds of methanol, which is suspected of causing birth defects.
- 239 billion gallons of water since 2005, an average of 3 million gallons per well. Water used in fracking becomes unsuitable for most uses other than fracking another well.

Farmers can be particularly impacted by the oil and gas industry’s demand for freshwater, especially in drought-stricken regions of the country. In one water auction in Colorado in 2012, oil and gas companies paid up to \$3,300 for an acre-foot of water, as much as 100 times what farmers typically pay.

Fracking wells in the US produced at least 14 billion gallons of wastewater in 2014. Wastewater production data is not available in some of the states with the most wells, including Texas and North Dakota, meaning that the total amount of fracking wastewater produced in the United States is higher than is estimated here.

Pennsylvania regulators have confirmed at least 260 instances of private well contamination from fracking operations since 2005, a number that is likely a severe underestimate. Data from fracking wells in Pennsylvania from 2010 to 2012 show a 6 to 7 percent rate of well failure due to compromised structural integrity.

Of the 685 peer-reviewed studies, commentaries, and reviews published on fracking^{xvii}:

- 84 percent of the studies on health impacts identified potential public health risks or actual observed poor public health outcomes;
- 69 percent of the studies on water quality showed potential, positive association, or actual incidence of water contamination associated with shale gas development;
- 87 percent of the studies on air quality indicated elevated levels of air pollutant emissions and/or increased atmospheric concentration.

C. Water consumption

Water contamination and massive freshwater consumption presents a very existential threat of fracking development. Yet, the industry doesn't even shy away from operating in water scarce or arid regions. This means that fracking directly competes for freshwater that should be allocated for drinking water or irrigation (including water rights access for the projected lifetime of a project). Apart from the fact that over 50 percent of the US fracking wells are located in regions with high or extremely high water stress (including basins in Texas, Colorado, Oklahoma and Colorado), we should also be concerned with large and deep transboundary aquifers (like the Continental Intercalaire Aquifer in North Africa, the Karoo Aquifer in Southern Africa, or the Guarani Aquifer in South America). They represent the only drinking water source for entire regions. Their potential contamination could have dramatic effects on health and could result in serious social and economic consequences on top of this turmoil that we're just moving through on a global scale. Almost 40 percent of global shale basins are in regions that are either arid or under high to extremely high levels of water stress. On top of that, almost 390 million people live above these shale layers. Therefore, with broader deployment of fracking, competition for freshwater access and incited social conflicts are inevitable.^{xviii}

1.4 Fracking has a devastating impact on climate conditions

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^{xix}. Since methane is at least eighty-six times more powerful as a greenhouse gas than CO₂ 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°C"^{xx}. These crucial commitments do not leave much room for improvisation as there is little time before these thresholds are reached: We already reached the 1.1°C point in 2016^{xxi} and the 1.5°C point will be reached in less than 10 years with current emissions^{xxii}.

The World Health Organization highlighted the following in its recent published "State of Climate in 2017 – Extreme Weather and High Impacts" briefing^{xxiii}:

"Global mean temperatures in 2017 were about 1.1 °C above pre-industrial temperatures. The five-year average 2013–2017 global temperature is the highest five-year average on record. The world's nine warmest years have all occurred since 2005, and the five warmest since 2010. ..."

Climate impacts hit vulnerable nations especially hard, as evidenced in a recent study by the International Monetary Fund, which warned that a 1 °C increase in temperature would cut significantly economic growth rates in many low-income countries.

The overall risk of heat-related illness or death has climbed steadily since 1980, with around 30% of the world's population now living in climatic conditions that deliver potentially deadly temperatures at least 20 days a year, according to information from the World Health Organization quoted in the Statement. ...

The negative impact of floods on crop production further aggravated the food security conditions in the country already stricken by drought, according to FAO and WFP. ...

Over the past 10 years, various studies have confirmed that ocean acidification is directly influencing the health of coral reefs, the success, quality and taste of aquaculture raised fish and seafood, and the survival and calcification of several key organisms. These alterations have cascading effects within the food web, which are expected to result in increasing impacts on coastal economies."

The scientific study "Natural Gas and Climate Change" by Professor Kevin Anderson and Doctor John Broderick of the Tyndall Centre for Climate Change Research reveals the urgency with which Europe needs to phase-out all fossil fuels, including fossil gas. All EU countries can afford just nine more years of burning gas and other fossil fuels at the current rate before they will have exhausted their share of the earth's remaining carbon budget for maximum temperature rises of 2°C.^{xxiv} By 2035 the substantial use of fossil fuels, including natural gas, within the EU's energy system will be incompatible with the temperature commitments enshrined in the Paris Agreement – leaving no room for investments in gas infrastructure that will inevitably lead to a further fossil lock-in.

According to a new report by the European Academies' Science Advisory Council (EASAC), senior scientists from across Europe – who have evaluated the potential contribution of negative emission technologies (NETs) to allow humanity to meet the Paris Agreement's targets of avoiding dangerous climate change find that:

„NETs have “limited realistic potential” to halt increases in the concentration of greenhouse gases in the atmosphere at the scale envisioned in the Intergovernmental Panel on Climate Change (IPCC) scenarios. This new report finds that none of the NETs has the potential to deliver carbon removals at the gigaton (Gt) scale and at the rate of deployment envisaged by the IPCC, including reforestation, afforestation, carbon-friendly agriculture, bioenergy with carbon capture and storage (BECCs), enhanced weathering, ocean fertilisation, or direct air capture and carbon storage (DACCs).“^{xxv}

This means, that we need to act even more swiftly and decisively on the full-scale elimination of global methane emissions. If we don't drastically reduce methane and other non-CO2 GHGs immediately, we will deliberately risk passing climate tipping points and creating runaway climate change – with all the consequences for increased social and military conflicts. Setting aside the industry's problems with methane leaks, further extracting and burning fracked hydrocarbons will generate significantly more GHG-emissions than the world can afford. To avoid the irreversible effects of climate change, almost all of the natural gas that could be extracted by fracking must stay underground, unextracted and unburned.

A new World Bank report has found that by 2050 the worsening impacts of climate change in three densely populated regions of the world could see more than 140 million people move within their countries' borders.^{xxvi}

With concerted action, however, including global efforts to cut greenhouse gas emissions and robust development planning at the country level, this worst-case scenario could be dramatically reduced by as much as 80 percent, or 100 million people.

Examining the human health benefits of reducing fossil fuel related emissions, scientists recently estimated that the decreased air pollution could lead up to 190 million fewer premature deaths worldwide, with around 40% occurring during the next 40 years. More than a million premature deaths would be prevented in many metropolitan areas in Asia and Africa, and more than 200,000 in individual urban areas on every inhabited continent except Australia.^{xxvii}

2. **Second, under what circumstances do fracking and other unconventional oil and gas extraction techniques warrant the issuance of either provisional measures, a judgment enjoining further activity, remediation relief, or damages for causing environmental harm?**

Nothing short of an outright ban on fracking and rapid cessation of fossil fuel extraction and consumption will remedy the many associated harms of the oil and gas industry. Other provisional measures, a judgment enjoining further activity, remediation relief, or damages for causing environmental harm are simply inadequate halfmeasures. The industry will always try to avoid taking responsibility for any damages and/or environmental harm they've done.

2.1 The most prominent case to highlight the core problem is perhaps the #ExxonKnew case^{xxviii}.

There is increasing evidence that in the 1980s, and maybe even much earlier, oil and gas goliath ExxonMobil had concrete information^{xxix} about the dangers of CO2 for climate change. ExxonMobil's own in-house scientists warned about the impacts of global warming and the company considered this in their plans and operations. And while carefully keeping the facts to themselves, ExxonMobil started a climate denial campaign^{xxx} covering up the certainty that climate change and fossil fuel extraction are closely linked.

The fossil fuel industry gave more than \$30 million^{xxxi} to climate denier think tanks and politicians, to support and disseminate its false narrative that its activities do not pose a threat for the global climate. For years the industry earned billions by contributing significantly to global warming while not taking any responsibility for the damage its caused to our environment, economy and society.

The United Nations published in February 2018 the "Framework Principles on Human Rights and the Environment" report. It outlines the legal framework for the international community to recognize a healthy environment and climate as a human right.^{xxxi}

John H. Knox, the United Nations Special Rapporteur on Human Rights and the Environment, presented the report to the Human Rights Council in Geneva and urged the UN to recognize the human right to a safe environment.^{xxxiii}

And it is exactly our climate and environment that is being constantly threatened and damaged through the business model of oil and gas companies – in particular by using the fracking technique that is also increasingly used to extract hydrocarbons for the production of plastics, petrochemicals and fertilizers.

According to the World Health Organisation^{xxxiv}:

„With climate change, temperatures and levels of carbon dioxide are rising, favouring pollen growth which is associated with increased rates of asthma in children. Worldwide, 11–14% of children aged 5 years and older currently report asthma symptoms and an estimated 44% of these are related to environmental exposures. ... Children are also exposed to harmful chemicals through food, water, air and products around them. Chemicals, such as fluoride, lead and mercury pesticides, persistent organic pollutants, and others in manufactured goods, eventually find their way into the food chain.“

Climate change is one of the most urgent and complex threats to our human rights today. Fracking poses significant risks to the natural environment through loss or fragmentation of habitat, disturbance of wildlife and potential pollution of watercourses that support sensitive ecosystems and biodiversity and as driver of climate change.

3. Third, what is the extent of responsibility and liability of States and non-state actors for violations of human rights and for environmental and climate harm caused by these oil and gas extraction techniques?

3.1 General implications on Human Rights

No matter which perspective of the fracking universe we look at, the summary remains the same: The development of fracking projects violates human rights in multiple, ongoing ways. All risks and impacts, such as those described above, that are linked to fracking represent the inevitable outcomes of this technique to extract fossil fuels.^{xxxv} And each impact violates human rights in some way or another. Fracking benefits only a minority of industry profit seekers to the detriment of the vast majority of people on this planet.

It is not surprising that the notion of producing even more climate-toxic fossil fuels, especially with such a high-risk method like fracking, is rejected by many people worldwide. No matter if in the United States, Canada, the UK, Romania, Algeria, South Africa or Australia, people are fighting everywhere for our basic rights as human beings.^{xxxvi}

Unfortunately, the companies and states involved in these harmful practices remain fixed on the fossil fuel-based economic model, despite this system's ongoing contributions to the imminent harms of climate change; the proven risks and hazards of fracking for water resources and health; the unresolved problems of getting rid of the industrial waste in an environmentally suitable fashion; and the social and ecologic conflicts involved in fracking.

Our human and natural rights are therefore not only at risk but they are being, rather deliberately torpedoed at an international level by the frackers themselves and governments (which should, instead, be representing the broader population).

The democratic deficits that go along with the usage of the technique are obvious and make resistance inevitable. The anti-fracking struggle is not only about the protection of environmental standards. It is basically a political pro-democracy fight, defending our basic natural rights as human beings.

3.2 The UK

The UK Government was/is – apart from Poland –the most active pro-fracking country of Europe. Nonetheless, the UK anti-fracking movement was capable of preventing fracking operations/development from taking place in the country for over six years. The last fracking operation happened back in 2011 when the oil and gas company Cuadrilla caused earthquakes^{xxxvii} and subsequently the deformation of the well^{xxxviii} during the operation.

This struggle between the government and the industry on one side and the concerned/targeted community members and citizens on the other creates critical tensions for even basic democratic rights.

3.2.1 Lancashire case

In 2015, the Lancashire council had rejected the fracking plans by Cuadrilla^{xxxix} but the UK Government overturned the local decision and gave the go-ahead in 2016^{xl}. Ongoing protests followed and, with daily clashes between activists, Cuadrilla's private security and the police^{xli}. Campaigners also launched a court appeal to stop fracking in Lancashire but the court dismissed it in January 2018^{xlii}. So far, fracking protesters have, nonetheless, prevented Cuadrilla from conducting the first fracking operation in the country since 2011^{xliii}.

The current situation in the UK raises many questions regarding moral, legal and democratic legitimacy:

- a) Why is the Government quashing a basic democratic decision by a local council;
- b) Why are the courts ignoring the reasonable arguments brought forward by campaigners that the Environmental Impact Assessment has not considered the environmental impacts of both the exploratory stage and the full production stage that might be sought for in the future, and that the public health impacts of fracking had not been properly considered according to the precautionary principle;
- c) Why do the police act against citizens as if it were a security force for a private company?

3.2.2 The Ineos case

The secretive chemical company Ineos, owned by controversial billionaire Jim Ratcliffe, has been leading the charge to bring the environmentally destructive method of fracking to the United Kingdom (UK) and mainland Europe. The company's main and clear goal is to produce cheap gas for its own plastics and petrochemical production^{xliv}. Their corporate vision comes at a time in history when global warming and the plastic pollution of our oceans and shorelines are the most critical issues of our generation, and the ones to come^{xlv}.

Food & Water Europe and Food & Water Watch have published three issue briefs on UK's Ineos.

"The Trans-Atlantic Plastics Pipeline: How Pennsylvania's Fracking Boom Crosses the Atlantic^{xlvii}" issue brief explains the link between fracked US hydrocarbons and plastic production in Europe. Ineos developed a fleet of "dragon ships" to carry gas liquids from Pennsylvania to its petrochemical facilities in Scotland and Norway. Those shipments are likely to increase if the massive Mariner East 2 pipeline is completed. But that pipeline — a project of Sunoco/Energy Transfer Partners — has been a source of intense controversy, with construction causing drilling spills and water contamination. Most recently, a series of sinkholes caused state regulators to halt operations on the existing Mariner East 1 pipeline.^{xlviii} The Ineos dragon ships crossing the Atlantic draped with "Shale Gas for Europe"

banners are leaving more than a toxic legacy in Europe — they are proliferating fracking in Pennsylvania, a state that already has struggled enough with the impacts of oil and gas industry pollution.

Our second issue brief “Chemical Billionaire’s Bid for Fossil Fuel Empire”^{xlviii} discloses the history and corporate profile of the Ineos Group, a heavy debt-loaded, tangled maze of holding companies, subsidiaries and offshore branches, with Ineos Ltd., the ultimate parent company at its core, based on the Isle of Man - a low-tax offshore finance centre. Over the past dozen years, Ineos has transformed from a global chemical powerhouse into an oil, fossil fuel gas and petrochemical conglomerate. Ineos’ expansion into oil, gas and pipelines now supplies its refineries, power production and petrochemical plants and their number of shale licenses makes them UK’s dominant fracking advocate.

Since the company tries to downplay the risks of fracking, we’ve examined their existing environmental record in our third issue brief, “Ineos’ Chequered Environmental Track Record in Europe”^{xlix}. The company has operated chemical plants for nearly two decades, but in that short time many of its facilities have been plagued by environmental problems. Its dozens of manufacturing facilities across Europe have been responsible for releases of toxic chemicals, leaks, fires and explosions that have endangered workers, communities and the environment.

It is also noteworthy that Ineos – and its US partners – has been fined several million dollars and/or pounds for environmental, health and workplace safety violations.

It is therefore no surprise that Ineos’s fracking plans across the United Kingdom have been running into determined local opposition.

The first blow for Ineos came last year, when the Scottish Government voted for an indefinite moratorium on fracking – a proper, democratically supported move that has nonetheless prompted Ineos to launch a legal challenge against itⁱ – claiming that its human rights in accordance to the European Convention of Human Rightsⁱⁱ have been breached by the ban. Ineos refers to article 1 of the Protocol to the Convention for the Protection of Human Rights and Fundamental Freedoms and claims that it is being prevented from “the peaceful enjoyment of his possessions”ⁱⁱⁱ. This is a good example of how far oil and gas companies are willing to go in an attempt to degrade the human rights of the impacted community members and anti-fracking campaigners.

Despite all that, the opposition is growing in the specific communities targeted for drilling in England. In October 2017, the Rotherham Borough Council voted to ban fracking and seismic testing on council-owned landⁱⁱⁱⁱ. Then on January 25 of this year, the Rotherham Borough Council voted unanimously to oppose Ineos’s shale gas exploration plans at Harthill.^{lv}

This decision will also impact Ineos’s application to drill an exploratory well at Woodsetts in the same licensed area.

Ineos is now obviously very afraid. Their arguments did not convince local communities, so now the company is looking to bypass local decisions on its fracking proposals by appealing to the Government’s Planning Inspectorate for a decision on its proposed test wells at Harthill and Bramblemoor Lane^{lv}. This didn’t please the local leaders; Rotherham Borough Councillors expressed disappointment at “the contempt shown by Ineos for local democracy,” calling the company’s decision to appeal “shameful.”^{lvi}

It is not surprising that Ineos would seek to suppress local decision-making, since the company is actively seeking to suppress all democratic opposition to its projects. Ineos recently went to court to

obtain a draconian injunction against “persons unknown” for peaceful displays of protest by concerned community members. An arrest for breach of this injunction could result in a prison sentence of up to two years and/or a fine up to £5,000.^{lvii}

On top of that, Ineos is attempting to force its way into the National Trust’s Clumber Park, a sensitive and historically significant site that attracts hundreds of thousands of visitors every year. After blocking access to land surveyors, Ineos has responded by taking legal action against the National Trust – a move that has been met with strong criticism by big landowners, local groups, celebrities, national and international environmental NGOs and academics^{lviii}. At the same time the company has been exposed for apparently misleading the public over its plan to frack in Sherwood Forest.^{lix}

Instead of paying attention to the troublesome behaviour of Ineos and the reasonable arguments of local communities and councils, UK’s Prime Minister Theresa May, gave an interview in February 2018 to a local newspaper in a targeted region of North England stating that "Fracking across Yorkshire will be financially beneficial for communities." Downplaying the risks of fracking and overestimating the role of shale gas for UK’s energy security, she highlighted the creation of a £1bn "shale wealth fund" that will see money given to affected communities to spend how they wish.^{lx} This fund was first announced by former Chancellor George Osbornes in November 2015.

The one-sided stance of Prime Minister May, her ignorance towards the existing evidence concerning fracking and the attempt to bribe the impacted communities is bad enough.

However, concerns about the state of democracy and human rights in the UK couldn’t be high enough if we additionally take into account that

- a) anti-fracking campaigns have been listed alongside terrorist organisations, including the IRA, Al Qaeda and ISIL, in official counter-extremist documents from four regions of the UK^{lxi};
- b) Jim Ratcliffe, the main owner of petrochemical giant Ineos, secretly lobbied George Osborne when he was Chancellor of the Exchequer to muzzle the unions, cut company taxes and back fracking.^{lxii}

States and non-state actors are therefore fully responsible and should be held fully liable for the – in view of the existing knowledge and evidence deliberate – conducted violations of human rights and environmental and climate harm caused by the so-called unconventional oil and gas extraction techniques. See all points above.

4. **What is the extent of responsibility and liability of States and non-state actors, both legal and moral, for violations of the rights of nature related to environmental and climate harm caused by these unconventional oil and gas extraction techniques?**

States and non-state actors are fully responsible and should be held fully liable for the – in view of the existing knowledge and evidence deliberate – conducted violations of the rights of nature related to environmental and climate harm caused by the so-called unconventional oil and gas extraction techniques. See all points above.

Sincerely

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Article 1 International Covenant on Civil and Political Rights (CCPR); Article 10 UNDRIP; Article 1 CCPR; Article 17 UDHR; Article 5 and 6 Indigenous and Tribal Peoples Convention ILO 169, Aarhus Convention, Espoo Convention, Protocol on Strategic Environmental Assessment; Article 25 UDHR, Article 24 CCPR, Article 12 CESPR, Convention on the Rights of the Child; Paris Agreement on Climate Change; UN Sustainable Development Goals
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