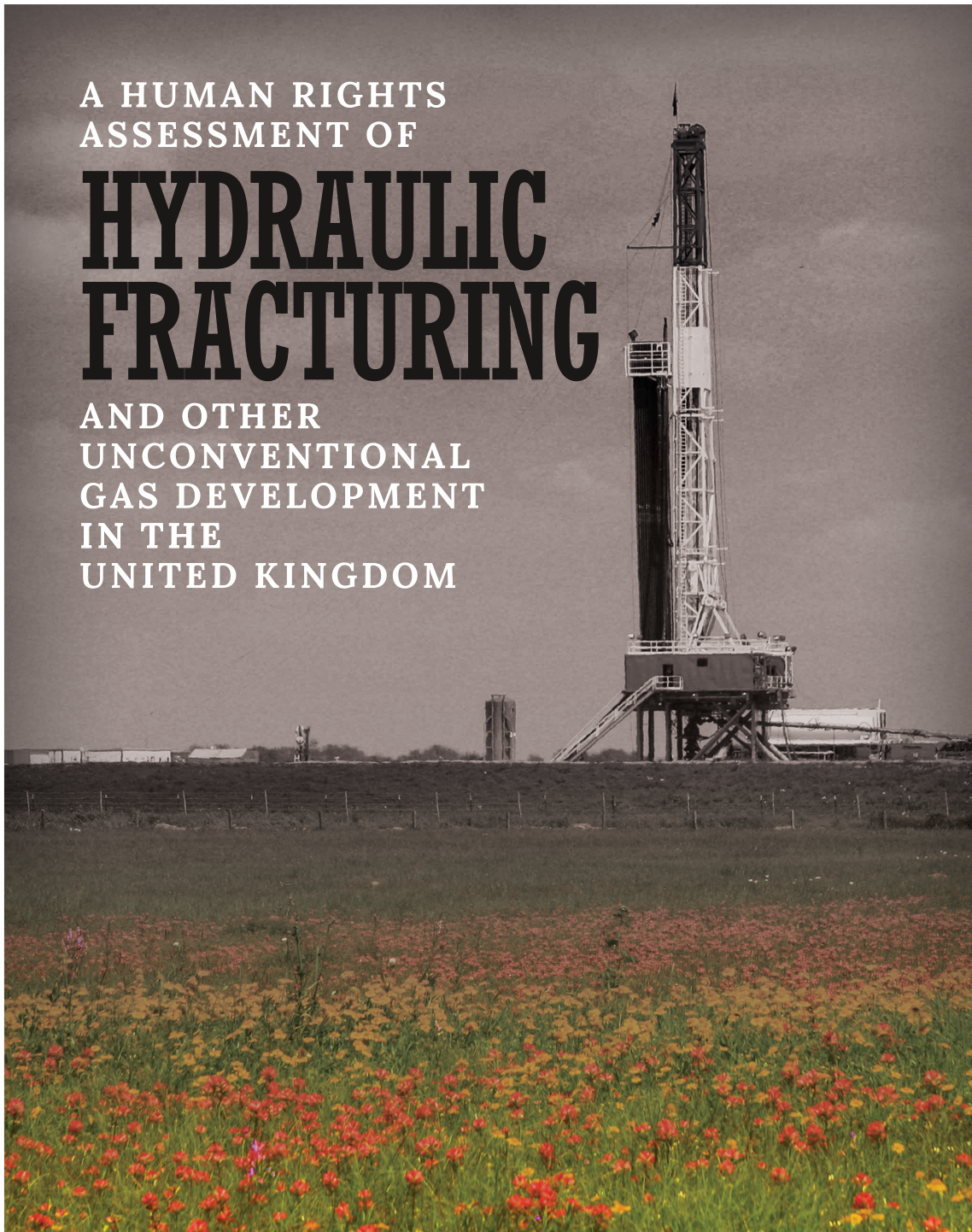


A HUMAN RIGHTS
ASSESSMENT OF

HYDRAULIC FRACTURING

AND OTHER
UNCONVENTIONAL
GAS DEVELOPMENT
IN THE
UNITED KINGDOM



Global Network for the Study of
Human Rights and the Environment
<http://gnhre.org>



Environment and Human Rights Advisory
<http://environmentandhumanrights.org>



Human Rights Consortium
<http://www.sas.ac.uk/hrc>



A Human Rights Assessment of Hydraulic Fracturing and Other Unconventional Gas Development in the United Kingdom

Prepared for:

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Commissioned by:

The Bianca Jagger Human Rights Foundation

Matter of Concern:

Environmental, Human Health and Climate
Impacts Associated with Hydraulic Fracturing
Operations

Date:

October 30, 2014



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Appendix A: Compendium of Scientific, Medical and Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Gas and Oil Extraction, Concerned Health Professionals of New York, July 10, 2014

Appendix B: Report of the Independent Expert on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, John H. Knox

Executive Summary

This Report argues that the UK Government has a clear and urgent duty to fully investigate the human rights implications of fracking before authorising any exploratory or extractive fracking operations in the UK. It strongly recommends a moratorium on the conduct of fracking operations until such a time as a full, industry-independent, publicly funded Human Rights Impact Assessment has been properly undertaken and placed in the public domain.

1. Introduction

This Report focuses on the human rights implications of the proposed adoption in the UK of a particular technique of oil and gas extraction, known as hydraulic fracturing or 'fracking'. While conventional oil and gas deposits are fairly easily recovered from permeable rocks such as sandstone, unconventional deposits are trapped in low permeability rock, like shale, and are extracted by drilling hundreds of metres below the surface and creating tiny fractures (hence the term 'fracking') to release the oil or gas. An earlier form of fracking has previously been used in the UK (and elsewhere), but the use of directional drilling (horizontal as well as vertical) and the pumping of large volumes of water containing sand and additive chemicals at high pressure to bring about fracturing together pose new challenges and risks. These include a range of potentially adverse and serious effects on health and the environment and, importantly for this Report, on human rights. While much has been written about the likely risks associated with fracking operations, there has been virtually no consideration at the policy level of the human rights dimensions of the issue. This Report seeks to make good this omission by offering a brief account of the human rights implications of fracking.

Before proceeding, it is important to note that this report is concerned primarily with fracking for shale gas since this has been the focus of much of the recent policy debate in the UK. However, while references herein are specifically directed towards fracking, many of the issues raised are relevant for unconventional gas production generally.

1.1 Policies

The current UK Government is proactively and publicly committed to a pro-fracking stance.¹ Its enthusiasm for unconventional gas production is said to

¹ Oral Statement to Parliament by the Rt. Hon George Osborne MP, 26th June 2013, <<https://www.gov.uk/government/speeches/spending-round-2013-speech>>, accessed 14th March 2014; Written Statement to Parliament by the Rt. Hon Edward Davey MP, 'Exploration for shale gas', 13th

have been inspired by developments in the United States, where a widely publicised shale gas 'boom' has transformed the perceptions of some about the place of unconventional gas in the future global energy mix.² The discovery of shale gas resources in the UK has led to calls for its exploitation based on the assumption that the technology will produce economic benefits similar to those claimed in the US. Although the consensus is that shale gas is unlikely to be a 'game changer' in the UK, the Government claims it could be an important energy resource in the UK's transition to a low-carbon future. In particular, it has been suggested that fracking for shale gas will contribute to overcoming the UK's so-called 'energy trilemma' by reducing energy bills, reducing emissions and enhancing energy security.³ To avoid any doubt about the Government's position, Prime Minister David Cameron recently confirmed that 'we're going all out for shale'.⁴

To that end, the Government has introduced a range of policy initiatives designed to encourage shale gas development in the UK. These include tax reductions to incentivise industry investment, as well as proposals to allow local councils to retain 100% (instead of 50%) of the business rates collected from shale gas sites.⁵ The Government has also published several guidance documents to supplement existing regulatory provisions, since those provisions currently make no specific mention of hydraulic fracturing or 'fracking'.⁶ These forms of guidance aim to clarify the application of regulations to fracking in order to avoid delays in the environmental permitting and planning permission processes. The Government has also worked closely with industry representatives to ensure that local communities also benefit from fracking operations. For instance, the UK Onshore Operators Group (UKOOG) has issued a Community Engagement Charter to ensure 'open and transparent communications between industry, stakeholder groups and the communities' in which unconventional oil and gas reservoirs are worked.⁷ Under the Charter, communities will also be entitled to £100,000 for every exploratory site fracked and a 1% share of profits from commercial production.

December 2012, <<https://www.gov.uk/government/speeches/written-ministerial-statement-by-edward-davey-exploration-for-shale-gas>>, accessed 13th March 2014.

² Department of Energy and Climate Change and The Rt Hon Michael Fallon MP, Speech 'Michael Fallon addressed the Tudor Pickering Holt seminar: UK in Focus - government's role in the investment environment', 22 November 2013, <<https://www.gov.uk/government/speeches/speech-to-a-tudor-pickering-holt-seminar>> accessed 12 June 2014.

³ HM Treasury, A Fiscal Regime for Shale Gas: Summary of Responses, December 2013, Foreword by Nicky Morgan, Economic Secretary to the Treasury, at page 3: 'It could create thousands of jobs, generate billions of pounds of business investment, lead to substantial revenue for the Exchequer and increase our energy security. Critically, it also has the potential to drive down energy bills for households and businesses'.

⁴ 'Local councils to receive millions in business rates from shale gas developments', 13 January 2014, <<https://www.gov.uk/government/news/local-councils-to-receive-millions-in-business-rates-from-shale-gas-developments>> accessed 16 April 2014.

⁵ Ibid.

⁶ Department for Communities and Local Government, *Planning practice guidance for onshore oil and gas*, July 2013.

⁷ UKOOG, *Community Engagement Charter: Oil and Gas from Unconventional Reservoirs*, June 2013.

As intimated above, arguments concerning the anticipated and putative benefits of fracking focus upon three main concerns:

- Cleaner energy, reduced carbon emissions

It is often argued that, because shale gas is said to be cleaner than coal, it will lead to lower greenhouse gas (GHG) emissions. The UK Government has committed itself to reducing GHG emissions by at least 80% by 2050 compared with 1990 levels⁸ and has been advised by the statutory Committee on Climate Change that gas-fired power stations have a role to play in the GHG reduction strategy, since the burning of gas emits 57% carbon dioxide per kilowatt hour less than coal-fired power plants.⁹ The Department for Energy and Climate Change (DECC) also claims that 'emissions from the production and transport of UK shale gas would likely be lower than from the imported Liquefied Natural Gas that it could replace',¹⁰ and that '[r]eplacing coal or petroleum with natural gas can help us reduce greenhouse gas emissions in the near-to-mid-term'.¹¹

- Indigenous energy supply — improved energy security

It is clear that conventional gas resources in the UK are rapidly depleting and that UK conventional gas production has declined.¹² Estimates concerning future production also point towards this trend continuing.¹³ Accordingly, it is clear that any further increase in the use of gas for power generation will require increasing levels of imports from beyond the UK. Accordingly, the current Government has concluded that increasing our indigenous energy supply will contribute to the UK's energy security, and make it less vulnerable to market volatilities.

- Lower gas prices

In a situation in which dual fuel bills for the average UK household have increased 40% between 2006-2013¹⁴ — and despite the fact that this may in part reflect existing industry practices and profit margin expansion¹⁵ — a dash for cheap natural gas has been embraced as part of the UK Government's strategy.

⁸ Climate Change Act 2008, s 1(1).

⁹ Department of Energy and Climate Change (DECC), *Digest of United Kingdom energy statistics 2012* — Chapter 5: *Electricity*, (London: DECC, 2012).

¹⁰ DECC, *Developing Onshore Shale Gas and Oil – Facts about 'Fracking'*, December 2013, 10.

¹¹ DECC, *Fracking UK Shale: Climate Change*, February 2014, 3.

¹² S Bassi, et al, 'A UK 'dash' for smart gas: Policy Brief' March 2013 (London, Grantham Research Institute on Climate Change and Environment, 2013), 19, citing National Grid, *UK Future Energy Scenarios* (London, National Grid, 2012) available at <<http://www2.nationalgrid.com/uk/industry-information/future-of-energy/future-energy-scenarios/>> accessed 10th July 2014.

¹³ Ibid.

¹⁴ Ofgem, *Electricity and gas supply market indicators* (London: Ofgem, 2013).

¹⁵ K McCann 'Big Six Energy Firms Face Fresh Accusations of Profiteering': June 27, 2014—A M News. Available at <<http://www.cityam.com/1403831554/energy-firms-face-probe-over-competition>> (date of last access: 20th July (2014)).

1.2 Risks and uncertainties

Fracking is associated with a range of risks to health and/or the environment. Among the principal concerns are:

- Risk of surface water and soils contamination from surface spills;¹⁶
- Risk of groundwater contamination from leaks at depth;¹⁷
- Poorly designed or maintained wells and risk of well casing failures over time;¹⁸
- Radiation risks to surface and groundwater from documented radiation in waste fluids and drill cuttings;¹⁹
- Increased pressure on and competition for water resources;²⁰
- Impact on local air quality of direct emissions from drilling sites at each stage of the process;²¹
- Traffic, noise, light and dust pollution associated with fracking operations;
- Risk of spills from improper disposal of waste fluids and drill cuttings;²²
- Seismic risks associated with injection well disposal of waste fluids;²³
- Impact on climate change caused by fugitive emissions and the subsequent burning of gas;²⁴
- Landscape disruption;
- Compromised land stability.²⁵

In 2012, the UN Environment Programme (UNEP) issued a 'Global Environment Alert' on the issue of fracking, warning of the considerable health and environmental risks associated with unconventional gas production.

¹⁶ SM Olmstead et al., 'Shale Gas Development Impacts on Surface Water Quality in Pennsylvania' *Proceedings of the National Academy of the Sciences*, March 11, (2013), doi:10.1073/pnas.1213871110

¹⁷ M Fischetti, 'Groundwater Contamination May End the Gas-Fracking Boom', *Scientific American*, Aug 20, (2013). <http://www.scientificamerican.com/article/groundwater-contamination-may-end-the-gas-fracking-boom/>. Accessed July 19, 2013.

¹⁸ A Ingraffea, et al., 'Assessment and risk analysis of casing and cement impairment in oil and gas wells in Pennsylvania, 2000-2012', May, (2014) *Proceedings of the National Academy of the Sciences*. doi/10.1073/pnas.1323422111

¹⁹ Concerned Health Professionals of New York, *Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Gas and Oil Extraction)* 10 July 2014, 5, 29-32, <http://concernedhealthny.org/wp-content/uploads/2014/07/CHPNY-Fracking-Compendium.pdf>, accessed 14 July 2014. P Mobbs, 'An abuse of science - concealing fracking's radioactive footprint', *The Ecologist*, 8th July (2014). Available at http://www.theecologist.org/News/news_analysis/2469495/an_abuse_of_science_concealing_frackings_radioactive_footprint.html

²⁰ S Postel, 'As oil and gas drilling competes for water, one New Mexico County says no', *National Geographic*, May 3, (2013).

²¹ T Colborn, et al 'An Exploratory Study of Air Quality Near Natural Gas Operations', *Human and Ecological Risk Assessment: An International Journal* [Volume 20, Issue 1](#), (2014).

²² Olmstead et al, n 16 above.

²³ N J Van der Elst, 'Enhanced Remote Earthquake Triggering at Fluid-Injection Sites in the Midwestern United States', *Science* 12 July 2013: Vol. 341 no. 6142 pp. 164-167 DOI: 10.1126/science.1238948

²⁴ RW Howarth, R Santoro and A Ingraffea, 'Methane and the Greenhouse-Gas Footprint of Natural Gas from Shale Formations' (2011) 106 *Climate Change* 679; RA Howarth. 'A bridge to nowhere: methane emissions and the greenhouse gas footprint of natural gas', (2014) *Energy Science and Engineering*, doi: 10.1002/ese3.35

²⁵ R Heinberg, *Snake Oil* (Sussex: Clairview Books, 2014) at 87-89.

UNEP also cautioned that the potential benefits of coal-to-gas substitution 'are both less clear and more limited than initially claimed'.²⁶ Other studies show that industry estimates of shale gas reserves have been notoriously unreliable.²⁷ Consequently, it is not entirely clear that the unconventional production of shale gas is the best way forward, despite the Government's current commitment to development by offering support for fracking companies to begin exploration and production.

For example, while it is conceivable that domestically produced shale gas may contribute to reducing the impact of potential price shocks caused by supply interruption or shortages of imported gas, it is unclear that a) the amount of domestic shale gas will be sufficient to achieve the Government's energy security goal and b) the commercial production of shale gas will be worth the human and environmental risks — particularly given the availability of alternative, safer forms of energy supply that could be invested in and pursued. Furthermore, while fracking for shale gas is commonly represented as a convenient 'bridging' fuel to a low-carbon future, there is little evidence of energy policy beyond the short or medium term, a fact undermining the plausibility of such a future-facing climate argument.

Regarding the purported economic benefit for consumers, the Grantham Research Institute's examination of energy costs and the implications of shale gas production for wholesale prices and consumer bills suggests that despite the fact that 'domestic shale gas production could benefit the economy by generating jobs and tax revenues while displacing imports, it is unlikely that gas consumers would see much, if any, benefit in terms of reduced gas and electricity bills'.²⁸ A report published by the DECC also notes that '[b]ecause the UK is well-connected to the Western European gas market, the effect of UK shale gas production on gas prices is likely to be small'.²⁹

Likewise, the emissions benefits of UK shale gas production are not universally accepted or known for certain. It has been reported, for example, that the UK production of shale 'could increase global cumulative GHG emissions if the fossil fuels displaced by shale gas are used elsewhere'.³⁰ This 'carbon leakage' problem is not unique to fracking, but it is brought into

²⁶ UNEP Global Environmental Alert Service, *Thematic Focus: Resource Efficiency, Harmful Substances and Hazardous Waste, Gas fracking: can we safely squeeze the rocks?* November 2012, 1, <http://na.unep.net/geas/archive/pdfs/GEAS_Nov2012_Fracking.pdf>. Accessed 10 July 2014.

²⁷ Concerned Health Professionals of New York, *Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Gas and Oil Extraction)* 10 July 2014, 7, 62-64, <http://concernedhealthny.org/wp-content/uploads/2014/07/CHPNY-Fracking-Compendium.pdf>, accessed 14 July 2014.

²⁸ S Bassi, et al, 'A UK 'dash' for smart gas' Policy Brief March 2013 (London, Grantham Research Institute on Climate Change and Environment, 2013), 18. In this connection, it is worth noting that current regulatory controls of market actors in the energy sector consistently fail to protect consumers adequately against price hikes or (particularly apposite here) to ensure that supply-side price falls are passed on to consumers: See M Beech: 'Davey: There is a problem with passing on wholesale costs' at <http://www.utilityweek.co.uk/news/davey-there-is-a-problem-with-passing-on-wholesale-costs/1022042#.U8keOFJOMw> 19/06/2014.

²⁹ DECC, D MacKay, T Stone, *Potential Greenhouse Gas Emissions Associated with Shale Gas Extraction and Use*, September 2013, 5.

³⁰ Howarth et al, n 24 above.

particularly sharp focus by the oft-repeated argument that shale gas is 'part of the answer to climate change',³¹ an argument undermined by recent peer reviewed academic research.³² A Tyndall Centre report concludes that emissions from large-scale shale gas fracking in the UK 'would likely be very substantial in their own right',³³ going on to note that '[i]f the UK Government is to respect its obligations under both the Copenhagen Accord and Low Carbon Transition Plan, shale gas offers no meaningful potential as even a transition fuel'.³⁴ Moreover, a recent peer reviewed academic research paper from Cornell University in the US casts doubt on the 'bridge fuel' argument. After analysing the latest and best data available, the paper concluded that over the crucial 20-year time period that must be prioritised because of the urgent need to reduce methane emissions over the coming 15–35 years, and comparing the warming potential of methane to carbon dioxide, both shale gas and conventional natural gas have a larger GHG impact than do coal or oil.³⁵ Furthermore, shale gas may divert attention and, more importantly, investment, from alternative, renewable energy sources.³⁶ In summary, the Government and industry's 'bridge fuel'/climate change arguments in favour of shale gas production face considered and serious refutation by well-established independent research and policy institutions.

In light of the considerable uncertainty concerning the proposed benefits of fracking, the Government is in favour of proceeding for now with exploratory fracking for shale gas in order to determine how much is likely to be technically or commercially recoverable in the UK, and to develop a more accurate assessment of the risks.³⁷ This position, however, seems somewhat at odds with David Cameron's 'all out for shale gas' statement and the other signals visible in the Government's policy decisions, such as the recently announced plan to modify trespass law in order to enable the intrusion into a landowner's subsoil by fracking companies irrespective of the landowner's absence of consent or even active resistance to the prospect. Moreover, the uncertainty in this field extends beyond technical aspects of risk and cannot

³¹ DECC and The Rt Hon Edward Davey, Speech, 'The Myths and Realities of Shale Gas Exploration', 9 September 2013, <<https://www.gov.uk/government/speeches/the-myths-and-realities-of-shale-gas-exploration>> accessed 10 July 2014.

³² 'A range of studies have shown high levels of methane leaks from gas drilling and fracking operations, undermining the notion that natural gas is a climate solution or a transition fuel. Major studies have concluded that early work by the EPA greatly underestimated the impacts of methane and natural gas drilling on the climate. Drilling, fracking and expanded use of natural gas threaten not only to exacerbate climate change but also to stifle investments in, and expansion of, renewable energy'.

Concerned Health Professionals of New York, *Compendium of Scientific, Medical, and Media Findings Demonstrating Risks and Harms of Fracking (Unconventional Gas and Oil Extraction)* 10 July 2014, 7, 50-55, <http://concernedhealthny.org/wp-content/uploads/2014/07/CHPNY-Fracking-Compendium.pdf>, accessed 14 July 2014.

³³ Tyndall Centre for Climate Change Research, 'Shale gas: an updated assessment of environmental and climate change impacts', November 2011, 7.

³⁴ Ibid.

³⁵ Howarth, 'A bridge to nowhere', n 24 above.

³⁶ DP Schrag, 'Is shale gas good for climate change?' (2012) 141(2) *Daedalus*, 72.

³⁷ See, for example, the conclusions of the House of Commons Energy and Climate Change Committee: 'The Impact of Shale Gas on Energy Markets', Seventh Report of Session 2012-13, Volume 1. Available at <<https://www.publications.parliament.uk/pa/cm201213/cmselect/cmenergy/785/785.pdf>>. (date of last access: 12th July 2014).

responsibly be resolved simply by giving the green light to fracking exploration and operations. Indeed, the broader social implications of shale gas fracking remain significantly under-explored. For example, opportunities for public consultation on the Government's strategy on shale gas have so far been limited. Additionally, the appropriateness of existing regulation — as it applies to fracking — is subject to important and well-informed disagreement. Whereas some might argue that existing regulatory frameworks are able to deal with any associated risks, others contend that fracking exposes a host of problematic regulatory gaps.³⁸

In its Global Alert, UNEP concluded that '[u]ltimately the best solution would be to lessen our dependency on fossil fuels'.³⁹ Moreover, it warned that:

Given the uncertainty in terms of GHG emissions, public health, environmental issues and depletion of water resources, the continued development of UG [unconventional gas] reserves is an option which brings with it great responsibility.⁴⁰

This responsibility is (at best) incompletely expressed in any situation where the full range of human, environmental and social factors is not fully, independently and rationally weighed up before permission is given to proceed with the exploration and exploitation of shale gas reserves. A failure properly to take all relevant factors into consideration amounts to a most serious breach of public trust. The human rights dimensions of fracking are a central consideration in ensuring the requisite degree of respect for relevant substantive international and national law and principles. The human rights implications of fracking are extremely pressing — as is increasingly made clear in international law and policy fora — and the absence of a full and proper assessment of the human rights implications of fracking in the UK

³⁸ See for example, European Commission, Impact Assessment Accompanying the Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on 'Exploration and production of hydrocarbons (such as shale gas) using high volume hydraulic fracturing in the EU' SWD(2014) 21 final, especially Annex 9. Also E Stokes, 'Do we need new laws to regulate fracking? Available at: <http://rationalist.org.uk/articles/4446/do-we-need-new-laws-to-regulate-fracking> (date of last access: 12th July 2014); 'Energy Generation in Wales: Shale Gas': Written Evidence from Dr. Elen Stokes, Law School, Cardiff University (ESG 16), available at <http://www.publications.parliament.uk/pa/cm201314/cmselect/cmwelaf/writev/esg16.htm> (date of last access, 12 July 2014. See also V Moore, A Beresford and B Gove, 'Hydraulic Fracturing for Shale Gas in the UK: Examining the Evidence for Potential Environmental Impacts (RSPB, March 2014), especially at p. 47, where the authors of the report conclude that '[a]ctivities associated with unconventional gas exploration and production in the UK are covered by existing EU and national environmental legislation. Our analysis suggests that the current regulatory regime is not fit for purpose and therefore unable to adequately manage serious environmental risks that may arise from individual projects and cumulative developments, such as species disturbance, water stress and inevitably the residual risk around pollution. Additionally, there is a significant risk that taxpayers and third parties could be forced to pick up liability for damage caused'; furthermore see RSPB and others, 'Are We Fit to Frack? Policy Recommendations for a Robust Regulatory Framework for the Shale Gas Industry in the UK' (RSPB, Version 1.2 Amended, March 2014).

³⁹ UNEP Global Environmental Alert Service, *Thematic Focus: Resource Efficiency, Harmful Substances and Hazardous Waste, Gas fracking: can we safely squeeze the rocks?* November 2012, 10, < http://na.unep.net/geas/archive/pdfs/GEAS_Nov2012_Fracking.pdf > accessed 10 July 2014.

⁴⁰ Ibid.

represents a glaring omission in the current Government's approach to the issue.

This report now turns to a consideration of the human rights dimensions of fracking and the duties of the UK government under the most directly relevant human rights law and standards. There are multiple and overlapping sources of human rights obligations, particularly since the European Court of Human Rights increasingly draws upon a convergent range of international and national standards in its jurisprudence concerning environment and human rights questions. However, this report, as a *purely preliminary case* for a comprehensive, evidence-led Human Rights Impact Assessment of Fracking in the UK, focuses on the most compelling and direct sources of human rights liability for the current UK Government, in particular, the Human Rights Act 1998, the European Convention on Human Rights and Fundamental Freedoms and core English common law sources relevant to the protection of human rights.

2. UK and European Human Rights Law

The purpose of this Report is to call on the UK Government fully to consider the human rights dimensions of shale gas fracking activities and unconventional gas production — and to take seriously its own responsibility under human rights laws, both national and international.

2.1 Duties of UK Government

The UK is legally bound to respect and to protect human rights, both under the auspices of its own Human Rights Act 1998,⁴¹ and of the European Convention on Human Rights and Fundamental Freedoms 1950 (ECHR).⁴² The UK is also bound to respect multiple and interlocking standards under international human rights law — which includes the Universal Declaration of Human Rights,⁴³ the International Covenant on Civil and Political Rights (ICCPR),⁴⁴ and the International Covenant on Economic, Social and Cultural Rights (ICESCR).⁴⁵ Further specific human rights instruments of relevance include the European Social Charter,⁴⁶ the EU Charter of Fundamental Rights,⁴⁷ the Convention on the Rights of the Child,⁴⁸ and the 1998 'Aarhus'

⁴¹ Human Rights Act 1998. (c.42), London: HMSO.

⁴² Convention for the Protection of Human Rights and Fundamental Freedoms, opened for signature 4 November 1950, 213 UNTS 262 (entered into force 3 September 1953).

⁴³ GA Res 217 (111) of 10 December 1948, UN Doc A/810 at 71 (1948).

⁴⁴ Opened for signature 16 December 1966, 999 UNTS 171 (entered into force 23 March 1976).

⁴⁵ Opened for signature 16 December 1966, 993 UNTS 3 (entered into force 3 January 1976).

⁴⁶ European Social Charter, opened for signature 18 October 1961, 529 UNTS 89 (entered into force on 26 February 1965).

⁴⁷ Charter of Fundamental Rights of the European Union (2007/C 303/01).

⁴⁸ Opened for signature 20 November 1989, 1577 UNTS 3 (entered into force 2 September 1990).

Convention⁴⁹ which provides rights of access to information, to participation and to justice in environmental matters — and which draws extensively upon international human rights law.

2.2. Fracking as a Human Rights Issue

Fracking is clearly an issue through which human rights and the environment — and human rights and climate change — come into especially sharp focus. A 2011 UN Human Rights Council (HRC) Resolution on human rights and the environment specifically recognises that ‘environmental damage can have negative implications, both direct and indirect, for the effective enjoyment of human rights’.⁵⁰ More explicitly, a report submitted to the HRC in 2011 argues that the environmental damage caused by hydraulic fracturing for natural gas poses ‘a new threat to human rights’.⁵¹ Indeed, a range of negative effects of fracking has led one international NGO to petition the HRC⁵² to condemn the fracking process as a threat to basic human rights, particularly to the rights to water and to health.

More recently, the UN Special Rapporteur on the human right to safe drinking water and sanitation, Catarina de Albuquerque, concluded her recent mission to the United States by outlining serious concerns over the effect of a range of polluting activities associated with the hydraulic fracturing process, observing a distinct,

policy disconnect ... between polluting activities and their ultimate impact on the safety of drinking water sources. The absence of integrated thinking has generated enormous burdens, including increased costs to public water systems to monitor and treat water to remove regulated contaminants and detrimental health outcomes for individuals and communities.⁵³

The UN Special Rapporteur on the human rights obligations related to environmentally sound management and disposal of hazardous substances and waste, Calin Georgescu, also warned of the potential contamination of

⁴⁹ Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters, opened for signature 25 June 1998, 2161 UNTS 447 (entered into force 30 October 2001).

⁵⁰ Document A/HRC/RES/16/11, Resolution adopted by the Human Rights Council: Human Rights and the environment, distributed 12th April 2011.

⁵¹ Document A/HRC/18/NGO/91, Written statement submitted by UNANIMA International, a non-governmental organization in special consultative status: ‘Hydraulic fracturing for natural gas: A new threat to human rights’, distributed 19th September 2011.

⁵² Human Rights Council (2011) Eighteenth session, Agenda 3, Promotion and protection of all human rights, civil, political, economic, social and cultural rights, including the right to development. A/HRC/18/NGO/91 ‘Hydraulic fracturing for natural gas: A new threat to human rights’, Written statement submitted by UNANIMA International, a non-governmental organization with special consultative status.

⁵³ United Nations (2011) A/HRC/18/33/Add.4 ‘*Report of the Special Rapporteur on the human right to safe drinking water and sanitation*’, Catarina de Albuquerque, Mission to the United States of America, 10-11, <http://www2.ohchr.org/english/bodies/hrcouncil/docs/18session/A-HRC-18-33-Add4_en.pdf> accessed 10 July 2014.

water supplies caused by fracking, specifically by the toxic substances in fracking fluids.⁵⁴

We turn now to address human rights norms of particular application to the UK and its Government in relation to the risks presented by fracking.

2.3 Principal Substantive UK Human Rights Obligations

Human Rights Act 1998

The Human Rights Act (HRA) 1998⁵⁵ incorporates a range of fundamental human rights contained in the European Convention on Human Rights and Fundamental Freedoms (ECHR), into UK law, enabling citizens to bring human rights claims directly before UK courts. Section 3 of the Act requires all UK legislation (past and present) to be read and given effect compatibly with the Convention, ‘so far as it is possible to do so’. Moreover, in terms of section 6 it is ‘unlawful for a public authority to act in a way which is incompatible with a Convention right’ — a provision with direct relevance for a wide range of authorities involved in the present and future conduct of fracking related hearings, enquiries and decision making. Under section 7 HRA, any ‘victim’ of such an unlawful act by a public authority may bring proceedings under the Act.

Under section 2 UK courts are obliged to ‘take into account’ relevant jurisprudence of the European Court of Human Rights (ECtHR). In particular, UK Courts and tribunals must take into account any ‘judgment, decision, declaration or advisory opinion of the European Court of Human Rights, or opinion of the Commission given in a report adopted under Article 31 of the Convention, or decision of the Commission in connection with Article 26 or 27(2) of the Convention, or decision of the Committee of Ministers taken under Article 46 of the Convention’. This is a relatively extensive set of potential sources of human rights authority of varying kinds with direct bearing on the development of UK human rights duties, although the UK courts and tribunals are also able to evolve, and have cautiously evolved, a distinctive UK human rights jurisprudence.⁵⁶ The UK higher Courts⁵⁷ have the power to make ‘a declaration of incompatibility’ concerning a legislative provision deemed incompatible with Convention rights.⁵⁸ However, Parliament has

⁵⁴ ‘Report of the Special Rapporteur (Calin Georgescu) on the human rights obligations related to environmentally sound management and disposal of hazardous substances and waste’ also warned that toxic substances in fracking fluids and resulting mud can be released into the surface water during the extraction, transport, storage and waste disposal stages. The storage of wastewater and other waste products may result in further contamination of water supplies due to spills, leaks and/or floods. (2012) UN doc A/HRC/21/48.

⁵⁵ Human Rights Act 1998. (c.42), London: HMSO.

⁵⁶ For a discussion of the constrained openness permitting the independent development of UK human rights jurisprudence, see Sir Philip Sales, ‘Strasbourg Jurisprudence and the Human Rights Act’ (2012) 2 *Public Law* 253.

⁵⁷ These are principally, the UK Supreme Court; the Judicial Committee of the Privy Council and the Court Martial Appeal Court; in Scotland the High Court of Justiciary (sitting otherwise than as a trial court of the Court of Session and in England and Wales, the High Court or the Court of Appeal)

⁵⁸ Human Rights Act 1998, s 4.

reserved the power for a Minister of the Crown, in either House of Parliament, under section 19 of the HRA, to ‘make a statement to the effect that although he is unable to make a statement of compatibility the government nevertheless wishes the House to proceed with the Bill’.

Certain of the fundamental ECHR rights enshrined in UK law by the HRA 1998 have already become directly relevant to the question of fracking in the UK. Here we focus upon the most directly applicable rights that have significant relevance to fracking and to associated questions of the public’s democratic and human rights interests.

European Convention on Human Rights

The ECHR remains fundamental, and independently significant for the legal position of the UK Government with respect to ECHR rights violations. Even if the current UK Government were to repeal the HRA 1998, the UK remains bound as a Contracting Party to the ECHR⁵⁹ to respect the human rights standards enumerated therein. Under the ECHR, the UK government and individuals holding public authority are obligated to uphold various human rights,⁶⁰ many of which are potentially infringed by fracking. In addition, UK litigants, provided that they have exhausted all national remedies, retain an individual right of appeal to the Strasbourg Court, a right making ECHR jurisprudence of continuing and direct relevance to the question of potential future UK human rights accountability, irrespective of the future direction of UK human rights jurisprudence.

Significantly, the ECtHR has taken an approach increasingly responsive to shifting social realities in ECHR Member States (an approach often referred to as ‘evolutive’⁶¹) to the scope of guaranteed rights, and which — crucially — expresses ‘growing and legitimate concern both in Europe and internationally about offences against the environment’.⁶² The Court has emphasised that effective enjoyment of Convention rights depends on a healthy environment and as environmental concerns have moved up the agenda both internationally and domestically, the Court has increasingly reflected the idea that human rights law and environmental law are mutually reinforcing.⁶³ In this respect, it is also highly significant that the ECtHR has shown increasing willingness to draw upon international environmental principles, standards and norms to draw out the human rights implications of environmentally risky actions.⁶⁴ The ECtHR is highly responsive, indeed, to ‘evolving convergence

⁵⁹ Convention for the Protection of Human Rights and Fundamental Freedoms, opened for signature 4 November 1950, 213 UNTS 262 (entered into force 3 September 1953).

⁶⁰ Article 4 of the Draft Articles on the Responsibility of States for Internationally Wrongful Acts, International Law Commission. Annex to GA Res 56/83 of 12 December 2001.

⁶¹ D Shelton, ‘Developing substantive environmental rights’ (2010) 1/1 Journal of Human Rights and the Environment 89, 94.

⁶² *Mangouras v Spain* (App no 12050/04) (8 January 2009), para 41.

⁶³ Council of Europe, *Manual on Human Rights and the Environment* (Council of Europe Publishing, 2edn 2012) 30.

⁶⁴ *Oneryildiz v Turkey* [GC] Reports 2004-V1 (30 November) (drawing on Convention on Civil Liability for Damage resulting from Activities Dangerous to the Environment, ETS No 150 – Lugano, 21 June 1993 and on the Conventions on the Protection of the Environment through Criminal Law: ETS No 172

as to the standards to be achieved'⁶⁵ and has held that it is 'of critical importance that the Convention is interpreted and applied in a manner which renders its rights practical and effective, not theoretical and illusory'.⁶⁶ This approach strongly suggests that the current and growing convergence between environmental standards and human rights will feature strongly in any ECtHR deliberations concerning the human rights impacts of fracking.

- Article 2: Right to life

The right to life has powerful and direct implications for the use of fracking technologies and contaminants in the UK. The right establishes that no one may be intentionally deprived of his or her life and can be interpreted more broadly as the right to security of person and to bodily integrity.⁶⁷ In the environmental context, Article 2 is applicable when activities harmful to the environment also endanger human life. The ECtHR has interpreted Article 2 to include not only negative State obligations to prevent deaths arising from State actions, but also positive obligations of protection. This means that States are under an obligation to take action to protect the right to life from threats by persons or activities not directly connected with the State.⁶⁸

The ECtHR has held that this right can be infringed by the failure of the State to inform residents living near potentially dangerous sites of any environmental safety risks or by failure to take practical measures to avoid safety risks, as well as by the use of a defective regulatory framework or planning policy.⁶⁹ This interpretation of the right has clear relevance, accordingly, for the potential lawfulness of fracking operations in certain situations.

Case law⁷⁰ makes it clear that the State has a positive obligation to take measures to prevent infringements of the right to life as a result of dangerous activities. Minimally, the jurisprudence implies that the UK government is under a clear duty to ensure a robust regulatory framework that should in particular ensure that measures are in place to protect people whose lives might be endangered by dangerous activities, including activities that cause environmental destruction which endangers lives.⁷¹ In addition, the public

– Strasbourg 4 November 1998; *Taskin and Others v Turkey* (App no 49517/99) §§99 and 119, 2004 IX (2005) Eur Ct HR 145, drawing on the Aarhus Convention on Access to Information and Public Participation in Decision Making and Access to Environmental Matters (despite Turkey being a non-signatory at the date of the judgment).

⁶⁵ Shelton, n 61 above, 94.

⁶⁶ *Christine Goodwin v The United Kingdom* [GC], (App no 28957/95) (2002) 35 EHRR 18, (11 July 2002) para 74.

⁶⁷ A number of exceptions apply, including self defence and lawful arrest. The death penalty was abolished in 1999 when the UK ratified the Second Optional Protocol to the International Covenant on Civil and Political Rights (1989).

⁶⁸ Council of Europe, *Manual on Human Rights and the Environment* (Council of Europe Publishing, 2edn 2012) 35.

⁶⁹ *Oneryildiz v Turkey* (2004) (App No 48939/99) (30 November 2004).

⁷⁰ See for example *Oneryildiz v Turkey* (2004) (App No 48939/99) (30 November 2004); and *Budayeva and Others v Russia* (2008) (App no's 15339/02, 21166/02, 20058/02, 11673/02, 15343/02) (29 September 2008).

⁷¹ Council of Europe, *Manual on Human Rights and the Environment* (Council of Europe Publishing, 2edn 2012) 38.

must be provided with information concerning activities which potentially pose a danger to life. Moreover, the State is responsible for providing for the necessary procedures for identifying shortcomings in the technical processes concerned and errors committed by those responsible.⁷² The suitability of existing frameworks, as noted above, is at present a question of considerable doubt.

- Article 8: Right to respect for private and family life

The ECtHR has been particularly adept at using environmental standards to interpret environmental harm as a breach of the right to private life and the home. Article 8 provides that '[e]veryone has the right to respect for his private and family life, his home and his correspondence'. This right may not be interfered with 'except such as is in accordance with the law and is necessary in a democratic society in the interests of national security, public safety or the economic well-being of the country, for the prevention of disorder or crime, for the protection of health or morals, or for the protection of the rights and freedoms of others.' The ECtHR has interpreted the right broadly to include both respect for the quality of family life as well as the enjoyment of the home as living space. Breaches of the right to the home as living space is not confined to interferences such as unauthorised entry, but may also result from noise, smells, emissions or other intangible sources.⁷³ Moreover, the Court has indicated a close connection between the notions of private and family life and home, indicating that the home is the place where private and family life is able to flourish.⁷⁴ Environmental damage comes into play if such damage affects private and family life or the home. As is the case for Article 2, State obligations are not limited to protection against interference by public authorities, but include obligations to take positive steps to secure the right. Moreover, the obligation does not only apply to State activities causing environmental harm, but to activities of private parties as well.⁷⁵

Environmental human rights cases in the ECtHR strongly imply that in the context of fracking, Article 8 may be infringed if the State does not reasonably act to balance community economic interests alleged to attach to a polluting activity (which would include fracking) with the effects on individual 'well-being'⁷⁶ or if adequate information on pollution risks is not provided to those living near fracking industry sites.⁷⁷

In its first major decision on environmental harm as a breach of the right to respect for home, private and family life, *Lopez Ostra v Spain*,⁷⁸ the ECtHR was clear that environmental pollution can be severe enough to constitute a violation of Article 8 due to its effect on individual 'well-being'. Importantly, the

⁷² Ibid, 39.

⁷³ Ibid, 45.

⁷⁴ Ibid, 45.

⁷⁵ *Hatton and Other v UK* (App no 36022/97) (Grand Chamber) 100, 119, 123 (08 July 2003); Council of Europe, *Manual on Human Rights and the Environment* (Council of Europe Publishing, 2edn 2012) 51-52.

⁷⁶ *Lopez Ostra v Spain* (1994) 16798 ECHR 90.

⁷⁷ *Guerra and Others v Italy* (1998) 14967 ECHR 89.

⁷⁸ *Lopez Ostra v Spain* (1994) Eur Ct Hum Rts Series A no 303C.

pollution in question 'need not reach the point of affecting health, if the enjoyment of home, private and family life are reduced and there is no fair balance struck between the community's economic well-being and the individual's effective enjoyment of guaranteed rights'.⁷⁹

The finding in *Lopez Ostra* was elaborated in *Fadayeve v Russia*.⁸⁰ The applicant's claim succeeded in that case because she was made more vulnerable to various diseases, despite the fact that there was no proven quantifiable harm to her health. Significantly, it is sufficient that serious risks are posed. The applicant's increased vulnerability to disease was held sufficient adversely to affect the applicant's quality of life in her home, engaging Article 8 protection. Thus it seems that deleterious consequences or serious impacts, including the posing of serious risk, and increased vulnerability to disease, will attract a protective interpretation of Article 8. While, in resolving the complex causal and evidential questions relevant to questions invoking the 'quality of life', the ECtHR will 'repose trust primarily, although not exclusively, in the findings of the domestic courts and other competent authorities in establishing factual circumstances of the case', the Court will step in 'to assess the evidence in its entirety' when 'the decisions of the domestic authorities [are] . . . obviously inconsistent or contradict each other'.⁸¹

Another case with potential significance for fracking operations is *Taskin and Others v Turkey*.⁸² This case involved challenges to the development and operation of a gold mine, which the applicants alleged detrimentally affected people in the region due to environmental damage caused such as to constitute a violation of Article 8 ECHR. The ECtHR drew on a range of standards (Rio Principle 10, the Aarhus Convention) and in particular a Council of Europe Parliamentary Assembly Recommendation on environment and human rights,⁸³ which proved decisive in the reasoning of the ECtHR which found a violation of Article 8 despite the absence of any accidents or incidents at the time. The mine was deemed to present an unacceptable risk.

The case is highly significant, it is submitted, for the likely liabilities of the UK Government with respect to fracking operations. The relevant Council of Europe Parliamentary Assembly Recommendation states at paragraph 3 that '[t]he Assembly believes that in view of developments in international law on both the environment and human rights as well as in European case-law, especially that of the European Court of Human Rights, the time has now come to consider legal ways in which the human rights protection system can contribute to the protection of the environment', and recommends (paragraph 9) that the governments of member states:

⁷⁹ Shelton, n 61 above, 105.

⁸⁰ *Fadayeve v Russia*, (App no 55723/00) 2005/IV Eur Ct H R 255 (9 June 2005).

⁸² *Taskin and Others v Turkey* (App no 46117/99) (2004) Eur Ct H R 621 (10 November 2004).

⁸³ Parliamentary Assembly Recommendation 1614 (2003) of 27 June 2003.

- should 'ensure appropriate protection of the life, health, family and private life, physical integrity and private property of persons in accordance with Articles 2, 3 and 8 of the European Convention on Human Rights and by Article 1 of its Additional Protocol, by also taking particular account of the need for environmental protection';
- should 'recognise a human right to a healthy, viable and decent environment which includes the objective obligation for states to protect the environment, in national laws, preferably at constitutional level';
- should 'safeguard the individual procedural rights to access to information, public participation in decision making and access to justice in environmental matters set out in the Aarhus Convention' and 'harmonise their legislation on environmental protection and safety'.

It was this particular Recommendation that proved decisive in the *Taskin* decision, and it is important to note the mutual references made between the Recommendation (which refers to the developing jurisprudence of the ECtHR) and the judgment which refers to the Recommendation.

Another aspect of the interpretation of Article 8 by the ECtHR which is relevant to fracking is the recognition of an obligation on the part of the State to inform the public about environmental risks.⁸⁴ In *Guerra and Others v Italy* the applicants lived a short distance from a chemical factory with a known history of accidents affecting the health of people living in the area. The Court held that the State had failed to act to secure their rights under Article 8 on the basis that the applicants had not been provided with the necessary information for them to be able to assess the risks of living in the vicinity of the factory.

It is highly significant that the ECtHR draws increasingly upon a set of converging international and national standards and references to the relationship between human rights and the environment. The case-law concerning Article 8 and other directly relevant Articles of the ECHR suggests that the Court is expanding its concern with the potential impacts and environmental risks as human rights matters. In *Taskin* the Court, in holding that 'where the dangerous effects of an activity to which individuals are *likely to be exposed* have been determined as part of an environmental impact assessment procedure in such a way as to establish a sufficiently close link with private and family life for purposes of Article 8',⁸⁵ moreover, clearly expands the reach of a precautionary approach in a manner directly relevant to fracking. This conclusion is strengthened by the holding *Bacila v Romania*.⁸⁶ The applicant lived close to a large industrial plant which was a major long-term source of pollution, yet, as Morrow notes, '[d]espite repeated attempts to get the state to act to curb the plant's emissions, the problems were not effectively addressed and ultimately the applicant's health was adversely affected. A violation of Article 8 was found based on the state's

⁸⁴ *Guerra and Others v Italy* (App no 14967/89) 19 February 1998.

⁸⁵ *Taskin and Others v Turkey* (App no 46117/99) (2004) Eur Ct H R 621 (10 November 2004), para. 113, emphasis added.

⁸⁶ *Bacila v Romania* (App no 19234/04) (30 March 2010, ECtHR).

relative inaction, which was prompted by the economic need to keep the plant open. Significantly, the court explicitly stated that the economic arguments should not have been allowed to prevail over the locals' "right to enjoy a healthy environment".⁸⁷ It is therefore essential, we submit, that each fracking operation, whether exploratory or extractive, should be subject to detailed environmental impact assessment and health impact assessment procedures sensitive to the human rights implications of the proposed operation.

Such a recommendation is further reinforced, in particular, by the findings of the ECtHR in the case of *Tatar v Romania*.⁸⁸ Of particular significance in that case is the ECtHR's declaration that the precautionary principle has evolved. It has 'moved from being a philosophical concept to being a juridical norm with content to be applied'.⁸⁹ Significantly, the ECtHR observed that 'pollution could interfere with a person's private and family life by harming his or her well-being and that the State had a duty to ensure the protection of its citizens by regulating the authorising, setting up, operating, safety and monitoring of industrial activities, especially activities that were dangerous for the environment and human health'. Despite the difficulties of establishing a causal link between the applicant's health condition and the toxicity of the sodium cyanide that escaped into local water systems, the Court held that the 'existence of a serious or material risk for the applicants' health and well-being' was sufficient to trigger the State's duty to 'assess the risks, both at the time it granted the operating permit and subsequent to the accident, and to take appropriate measures'.⁹⁰ A part of the judgment with particular relevance to the UK at present concerns the Court's insistence that 'the State had a duty to guarantee the right of members of the public to participate in the decision-making process concerning environmental issues'.

- ECHR Protocol 1, Article 1: *Protection of property*

Article 1 of Protocol 1 provides every natural and legal person with the right to peacefully enjoy his/her possessions. This is balanced by the right in the State to interfere with this enjoyment if such interference is justified by considerations of public interest and subjected to conditions provided for by law—including the payment of reasonable compensation. The State may enforce laws as 'necessary to control the use of property' for the general interest or 'to secure the payment of taxes or other contributions or penalties'. The UK has ratified Protocol 1 and it is included in Part II of the HRA 1998.

The ECtHR has held that protection of the right to property requires public authorities not only to refrain from direct interference but may also require the State to take positive measures to secure the right. The case of *Öneryildiz v*

⁸⁷ K. Morrow, 'After the Honeymoon: The Uneasy Marriage of Human Rights and the Environment Under the European Convention on Human Rights and in UK Law Under the Human Rights Act 1998' (2013) 43 *Revue générale de droit*, 317-368.

⁸⁸ *Tatar v Romania* (App no 67021/01) (2009) Eur Ct H R (27 January 2009).

⁸⁹ Shelton, n 61 above, 107.

⁹⁰ For further analysis of the human rights implications of non-definitive causality with respect to human health impacts, see also LM Collins, 'Security of the person, peace of mind: a precautionary approach to environmental uncertainty' (2013) 4 *Journal of Human Rights and the Environment* 79

*Turkey*⁹¹ discussed above, involved arguments relating to both the right to private and family life and the right to property. In spite of the fact that the applicant's house, which had been destroyed by an explosion at a rubbish tip, had been built illegally, the court held that the applicant could rely on the right to property. In the view of the court, regulation of waste treatment was the responsibility of the State and the failure to take measures to protect private property from environmental risks in this context amounted to a breach of the State's obligations under Article 1 of Protocol 1.

This right has become highly relevant to the UK fracking issue, particularly as changes to the common law of trespass have been discussed that would permit horizontal drilling below an individual's property without their consent.⁹² Furthermore, individuals living near fracking sites may arguably face violations of this right due to potential light,⁹³ noise,⁹⁴ water,⁹⁵ and air⁹⁶ pollution associated with all stages of the extraction process.

Given the importance attaching to the intimacy between Art 8 and property rights, it may be that (in accordance with the broad teleological interpretive practices associated with ECHR jurisprudence) litigants can draw upon the text and the spirit of Article 1 Protocol 1 when making arguments based upon the common law concerning the torts of nuisance and trespass.⁹⁷

Climate Change Act 2008⁹⁸

This Act is also central to the fracking issue. The Act requires the UK government (and the Secretary of State in particular) to cut net UK carbon emissions to 80% of the 1990 baseline by 2050. The Climate Change Act 2008 is highly pertinent to human rights-based considerations of fracking, because the connection between climate change and human rights violations

⁹¹ *Öneryildiz v Turkey* (App no 48939/99) (2004) Grand Chamber (30 November 2004).

⁹² L Armitstead, (2014) 'Queen's speech: IoD calls for trespass laws to be scrapped for fracking', *The Telegraph*, Jun 03. <<http://www.telegraph.co.uk/finance/newsbysector/banksandfinance/10873099/Queens-Speech-IoD-calls-for-trespass-laws-to-be-scrapped-for-fracking.html>> accessed 10 July 2014.

⁹³ A Hudson, (2013) 'Environmentalists claim night skies are being polluted by light', *The Colorado Observer*, May 29. <<http://thecoloradoobserver.com/2013/05/environmentalists-claim-night-skies-are-being-polluted-by-light/>> accessed 10 July 2014.

⁹⁴ B Gardner, (2013) 'Fracking firm stops drilling in Balcombe after "rattling" noise complaints', *The Argus*, Sep 09. <http://www.theargus.co.uk/news/10662407.Fracking_firm_ordered_to_stop_drilling_in_Balcombe_after_rattling_noise_complaints/> accessed 10 July 2014.

⁹⁵ K Begos, (2014) '4 states confirm water pollution from drilling', *USA Today*, Jan 05. <<http://www.usatoday.com/story/money/business/2014/01/05/some-states-confirm-water-pollution-from-drilling/4328859/>> accessed 10 July 2014.

⁹⁶ Center for Western Priorities, *Oil and Gas Drilling Linked to Air Pollution*. Denver, USA. <<http://westernpriorities.org/wp-content/uploads/2013/06/Oil-and-Gas-Emissions.pdf>> accessed 10 July 2014.

⁹⁷ This suggestion is somewhat reinforced by the *obiter* statement of Buckley J in *Dennis v Ministry of Defence* [2003] EWHC 793 (a nuisance case in which a claim based on interference with use and enjoyment of land caused by RAF activities succeeded) that the application of Article 8 of the ECHR and Article 1 of the First Protocol would have achieved the same result.

⁹⁸ Climate Change Act 2008. (c.27), London: HMSO.

has been clearly demonstrated,⁹⁹ and is increasingly accepted by key human rights institutions, bodies and scholars alike. It is worth noting in this context that heavy investment in fracking exploration, extraction and infrastructure further extends the commitment to fossil fuels well into the future and thus contributes to climate change in that way as well.

2.4 The Common Law

*Civil Liberties: Entick v Carrington*¹⁰⁰

This 1765 case has iconic legal status as a guide to the proper parameters of state power with regard to the important boundary function of property as a form of limit protecting important private liberty interests. The case serves to demonstrate the common law principle that trespass to, and/or seizure of, property must be expressly approved by law. The direct implication of the case will inevitably be muted by the proposed legislation altering the law of trespass but nonetheless will retain vital argumentative resonance for the intimacy of the legal relationship between private space and the fundamental centrality to the common law of human dignity and inviolability. In this sense, the case confirms human rights values more broadly—as well as sharing normative values and texture with environmental and human concerns animating the common law of nuisance.

The references above to ‘private space’ as a human rights issue are highly pertinent to private nuisance, as are the references to limitations on relevant common law rights under statute (in a nuisance context most notably the defence of statutory authority).

Private nuisance has historically provided a critically important rights-based framework for protecting the amenity of property from polluting industrial enterprise of all kinds (‘polluting’ here having a broad meaning, encompassing toxic emissions to water, land and air, as well as noise, smells, vibrations, and even — though this is more contentious — injury to the way a neighbourhood looks aesthetically). But nuisance has tended to be difficult to enforce — and in some cases impossible — where the activity that gives rise to the tort is permitted by regulatory bodies and/or positively promoted by the government, as is currently the case with fracking.

In *Coventry v Lawrence*¹⁰¹ whilst the Supreme Court was unanimous in ruling that planning permission did not limit common law liability in nuisance, it was divided on the remedies available to a victim of a nuisance caused by an activity judged by the government to be in the ‘public interest’. Lord Sumption (at [161]) stated that a nuisance-causing development that has the approval of the appropriate local or national planning authority should not generally be

⁹⁹ S Humphreys, (2008), International Council on Human Rights Policy, *Climate Change and Human Rights: A Rough Guide*. Geneva, Switzerland. <http://www.ichrp.org/files/reports/45/136_report.pdf> accessed 10 July 2014.

¹⁰⁰ *Entick v Carrington & Others* (1765) EWHC KB J98.

¹⁰¹ [2014] UKSC 14.

subject to an injunction, with some support from Lord Neuberger (at [126]). On that reasoning, the victim of a 'permitted' development causing a nuisance should expect at most equitable damages in lieu of the nuisance continuing, for it would be inefficient (per Lord Sumption, at [160]) to injunct the offending activity (given its 'public interest').

These *dicta* raise an important human rights concern in the context of 'fracking nuisance', in that one's home is not typically (as Lord Mance in that case acknowledged at [168]) a commodity that can be exchanged for money (equitable damages). On the contrary (again as recognised by Lord Mance), a proprietor whose home is rendered uncomfortable by tortious pollution from a fracking enterprise would expect to be entitled to have that pollution halted by an injunction on an application to the court. As the common law stands, therefore, there is a danger that Government support for the tortious enterprise could deprive the victim of an effective remedy (an injunction).

Indeed, as a general matter, when it comes to the impact of permits on nuisance liability, individual rights claims clearly operate, as Morrow has argued, 'in a complex context in which public (and indeed commercial) interests compete, which makes determining cases a sensitive and highly nuanced matter'.¹⁰² There is a pressing need to 'map the contours of the interplay between modern regulatory law and private law rights'.¹⁰³ Morrow casts doubt on Carnwath LJ's suggestion, in *Barr v. Biffa Waste Services Ltd*¹⁰⁴ that the relative lack of case law on the subject is because these issues are 'relatively straightforward'.¹⁰⁵ The case concerned a nuisance caused by a smell emitted from a licensed waste tip operated by Biffa. In deciding for the appellants, who were appealing against an earlier decision to dismiss a group action against Biffa, Carnwath LJ stated that 'the common law of nuisance has co-existed with statutory controls . . . since the 19th century. . . . Short of express or implied statutory authority to commit a nuisance . . . there is no basis, in principle or authority, for using such a statutory scheme to cut down private law rights'.¹⁰⁶ While the interplay between private law rights and statutorily permitted operations remains uncertain, it currently appears to be the case, as Morrow argues, that '[t]he continued importance of the common law as a guarantor of redress for individuals whose individual rights are adversely affected by environmental pollution has, for now at least, once again been underlined'.¹⁰⁷

The gravity of the danger that Government support for a tortious enterprise could deprive the victim of an effective remedy remains. It would apply, for example, in circumstances where planning consent is granted under the Planning Act 2008, which applies to 'national infrastructure development'. Section 158 provides immunity from a nuisance action on the following terms:

¹⁰² K Morrow, 'Rights, Interests and the Water Resource: Crossing the Rubicon' (Oxford: The Foundation for Law, Justice and Society, 2013) at 5.

¹⁰³ Morrow, *ibid*, at 6.

¹⁰⁴ [2012] EWCA Civ 312.

¹⁰⁵ At para. 5.

¹⁰⁶ At para 44.

¹⁰⁷ Morrow, n 109 above, at 6.

Section 158 Nuisance: statutory authority

- (1) This subsection confers statutory authority for—
 - (a) carrying out development for which consent is granted by an order granting development consent;
 - (b) doing anything else authorised by an order granting development consent.
- (2) Statutory authority under subsection (1) is conferred only for the purpose of providing a defence in civil or criminal proceedings for nuisance.

Whilst fracking is not among the energy projects that have to date been designated by the relevant minister as falling within the scope of this Act (and in turn the defence of statutory authority), that could change in future.¹⁰⁸ Fracking could be brought within the scope of the Act by secondary legislation — something that would require Parliamentary approval, but not primary legislation.

A separate concern is that ‘mere’ residents of homes are not intrinsically protected by the rights provided for by private nuisance. That is to say, standing to sue is limited to the person with exclusive possession — a tenant or freeholder normally. *Dobson and Others v Thames Water Utilities Limited*,¹⁰⁹ emphasises this, and suggests important inconsistencies in the law concerning redress for environmental pollution. The case involved a mixed group of applicants seeking to bring actions in private nuisance and under the HRA 1998 (in respect of an alleged breach of Article 8 rights) in response to problems caused by negligence at a sewage treatment works. Those who held proprietary interests in the affected property could claim in nuisance, while those who had no such interests relied upon section 8(3) HRA 1998. The outcome of the case suggests that ‘for claimants with common law rights, human rights interests and redress for interference with them are virtually subsumed in the former’,¹¹⁰ while for those who lack a proprietary interest may receive an award for just satisfaction under the HRA 1998. However, the case leaves unresolved an inconsistent legal approach, while the proprietary qualification at the foundation of the law of private nuisance continues

¹⁰⁸ This will depend upon what is deemed to qualify as a ‘national infrastructure development’. See Department for Communities and Local Government, *Major infrastructure planning: extending the regime to business and commercial projects: Summary of responses and government response* (DCLG, 2013), page 8: ‘After considering the responses received and comments made during the passage of the Growth and Infrastructure Act, the Government has concluded that applications for planning permission for onshore oil and gas schemes, including any future planning proposals for shale gas development, should not be included in the new business and commercial category *but will keep this under review*’ (emphasis added). It is plausible that if shale gas extraction were to take place at a commercial scale, the Government would consider bringing it within the nationally significant infrastructure regime.

¹⁰⁹ [2009] EWCA Civ 28

¹¹⁰ K Morrow, ‘Worth the paper they are written on? Human rights and the environment in the law of England and Wales’ (2010) 1/1 *Journal of Human Rights and the Environment* 66 at 71.

potentially to exclude a large proportion of the community of neighbours affected by a nuisance arising from fracking (family members without exclusive possession and cohabitants for example).

Whether the doctrine of public nuisance adequately bridges the gaps implied by the *Dobson* case and the analysis above is as yet unclear. Concerning personal injury and physical damage to property, it might — though most relevant case on the point (*Corby Group Litigation v Corby DC*¹¹¹) was settled and thus fails to provide sufficiently definitive guidance. Certainly, statutory nuisance is limited by the defence of ‘best practicable means — and for that reason is also of limited and uncertain value in remedying human rights violations.

2.5 Procedural Human Rights Responsibilities

We turn now to a consideration of procedural rights, which though less ambitious in tone than their more substantive counterparts (largely canvassed above) are of particular practical significance to litigants seeking human rights protection for environmental harm. We focus entirely upon the law of England and Wales—but note that in international environmental law, procedural rights currently offer the most viable source of protection in the absence of clear agreement (where it does not exist) concerning the protective scope of substantive environmental rights. Of particular relevance for the analysis to follow is the ECHR (particularly Article 6: the right to a fair hearing) and the 1998 UNECE Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (the ‘Aarhus Convention’).

The Aarhus Convention is not directly applicable in the UK courts, since it has not been incorporated into domestic law. However, it is an international treaty to which the UK is a signatory and can act as an aid to interpretation in UK courts where UK law is unclear. That said, the EU is a signatory to the Convention, which means that when a case involves EU law, the claimant’s ability to access Aarhus Convention rights is greatly increased.

Finally, it should be noted that procedural environmental rights and human rights litigation are predominantly pursued in UK law through a claim for judicial review. Cases brought on procedural failures with respect to environmental and human rights cases tend to draw upon an increasingly complex web of normative and legal sources, ‘calling into play inventive combinations of ECHR rights, Aarhus rights, participation rights in EU law and domestic administrative law’.¹¹²

As with substantive human rights protection in environmental matters, the relevant law and jurisprudence is far more extensive than the brief

¹¹¹ [2009] EWHC1944.

¹¹² Morrow, above n 117, 70.

introductory analysis offered here. The analysis here will simply aim to support the case, made above, for a full and independent human rights impact assessment to be undertaken before fracking operations are permitted in the UK.

The present analysis focuses most closely on rights to public participation, since this is of fundamental importance for communities affected by proposed fracking operations and prospective fracking licence grants — and for a wide range of concerned members of the public in the UK. Participation is an issue that is frequently rather technical, but raises profoundly important and highly visible issues of democratic principle. A case of particular potential relevance to the fracking question is *R (Greenpeace Ltd) v Secretary of State for Trade and Industry*.¹¹³ The case involved a claim for judicial review concerning a public consultation process — and an alleged failure with regard to participation — concerning future government policy on nuclear power in the UK. Greenpeace sought a quashing order in respect of a change of Government policy in 2006, deciding to support new nuclear facility building — a reversal of policy.¹¹⁴ The Government's decision came after the minimum period prescribed for consultation processes at the time (12 weeks).¹¹⁵ In reality, coverage of nuclear power and the related public processes was sparse. Greenpeace alleged breach of legitimate expectation on the consultation process itself, and on the change of policy. It further argued that the information provided was vague, inadequate and incomplete. Despite the policy-intensive nature of the issue, Sullivan J (as he then was) determined that the issue was justiciable. He also added — significantly for litigants wishing to dispute fracking policy and decisions — that the Government's obligations with respect to consultation in the environmental sphere were now to be examined in the light of the Aarhus Convention, although the case was decided on the basis of UK administrative law — the basis upon which it had been argued. Sullivan J found for the applicants: the consultation had been unfair, since it was inadequate and lacked precision in key respects. Furthermore, the judge disapproved of the deployment of the minimum consultation period. In particular, the notion of fairness deployed in Sullivan J's reading of the issues emphasises — critically for the fracking question — the needs and understandings of the general public,¹¹⁶ not simply specialised NGOs such as Greenpeace.

Procedural rights under the ECHR

As briefly noted above, Articles 2 and 8 ECHR may impose positive obligations on States to ensure access to information relating to environmental issues and to positively provide information to persons whose

¹¹³ [2007] EWHC 311 Admin, [2007] Env LR 29.

¹¹⁴ DTI, The Energy Challenge: Energy Review Report 2006 <<http://www.berr.gov.uk/files/file31890.pdf>> accessed 10 July 2014.

¹¹⁵ Cabinet Office, *Code of Practice on Consultation*, January 2004.

¹¹⁶ *R (Greenpeace Ltd) v Secretary of State for Trade and Industry* [2007] EWHC 311 Admin, [2007] Env LR 29, para 113.

rights under those provisions are threatened.¹¹⁷ In *Öneryildiz v Turkey* the ECtHR held that the obligation to provide information established in relation to article 8 in *Guerra and Others v Italy* was similarly applicable to article 2, with perhaps an even sharper focus, the Court finding that even if the applicant was in fact able to assess some of the risks, the State was not absolved of the duty to be proactive and inform the applicant. That Article 2 imposes both substantive and procedural obligations on States was reaffirmed in *Budayeva and Others v Russia*.

The ECtHR has furthermore established that where public authorities engage in dangerous activities with known risks to health, they must ensure that affected individuals are able to access relevant information.¹¹⁸ In addition, the Court has held that if environmental and health impact assessments are carried out, the public should have access to the results.¹¹⁹

The ECtHR has also broadened the interpretation of the right to private and family life by recognising that it includes a right to public participation in the decision making process in environmental matters.¹²⁰ This was first elaborated in *Hatton and Others v UK* and subsequently applied in a range of cases, including *Giacomelli v Italy*, *Tatar v Romania* and *Taskin and Others v Turkey* discussed above.

There is no doubt that a range of cases has seen new opportunities for litigating environmental claims related to human rights open up in UK domestic law — despite certain limitations.¹²¹ Minimally, such cases have ‘recontextualised and reinvigorated discussion of the common law in established areas, notably nuisance. They have also contributed to the development of the concept of fairness in judicial review. This type of litigation has also wrought more diffuse impacts. The enhanced profile that they offer to environmental interests has proved significant in forging greater publicity for “campaigning cases” than they have previously enjoyed’.¹²² This latter point, in particular, is a particularly strategic political reality in the light of the ultimately carefully constrained protection given to human rights under the HRA 1998, under which, as noted above, despite the issue of a declaration of incompatibility, the UK Government need not ultimately comply with a Convention right. However, and despite this, the UK remains fully exposed to the ECtHR’s jurisdiction — which, in combination with the increasing convergence between legal spaces in which human rights and environmental questions are brought into closer relationship, fully suggests the importance of adequate reflection on the potential and future human rights liabilities of the UK government. Most importantly of all, however, the UK Government owes a

¹¹⁷ Council of Europe, *Manual on Human Rights and the Environment* (Council of Europe Publishing, 2edn 2012), 81.

¹¹⁸ *McGinley and Egan v UK*, (App No’s 10/1997/794/995-996), (9 June 1998), para 97, 101.

¹¹⁹ *Giacomelli v Italy*, (App No 59909/00), (2 November 2006), para 83; *Lemke v Turkey* (App No 17381/02), (5 June 2007), para 41.

¹²⁰ Council of Europe, *Manual on Human Rights and the Environment* (Council of Europe Publishing, 2edn 2012), 88.

¹²¹ *Morrow*, n 117 above.

¹²² *Morrow*, n 117 above, 87.

fundamental democratic duty to the citizens of the UK fully to consider the human rights impacts, both substantive and procedural, of fracking in the UK.

3 Recommended Measures

It is strongly recommended that a moratorium should be issued preventing exploratory and extractive fracking operations until such a time as a full, publicly funded, industry-independent, evidence-led Human Rights Impact Assessment has been properly undertaken and provided in the public interest.

This assessment should provide:

- a) A clear scientific examination of human rights-impacting activities connected with fracking;
- b) An in-depth analysis of the legal duties placed upon the UK Government and UK public authorities with regard to fracking;
- c) A thorough and thoughtful human rights-based assessment of the balance of public interest with regard to the uncertain economic benefits of fracking and the potential risk of serious and irreversible human and environmental damage.
- d) A thorough analysis of the implications of fracking for climate change effects and the human rights implications of such climate impacts in the UK.
- e) A thorough analysis of the potential human rights impacts of fracking on future generations, from climate change and the eventual failure of well casings over time.

4 Conclusion

As a legal matter, it is abundantly clear that the ECtHR, like many other transnational and international courts, is moving towards giving environmental human rights substantive content and effect. Moreover, it is also clear that State responsibility can arise, not simply due to the State's direct involvement in causing environmental harm, but from its failure properly to regulate private sector activities¹²³ — a consideration of particular relevance to the UK Government's current approach, which strongly favours the interests of private actors despite extensive public concern and protest.

This preliminary assessment of directly relevant UK and ECHR human rights law and common law suggests that for the UK Government to proceed with fracking without adequate assessment of the human rights position would amount to a serious failure of responsibility. In particular, the profound nature of the core rights at stake: the rights to life, to respect for home and private life, to the peaceful enjoyment of possessions, in combination with the existing evidence of extremely deleterious health impacts of fracking around the world

¹²³ *Mareno Gomez v Spain*, (App no 4143/02), (16 November 2004), para 55; *Surugia v Romania* (App no 48995/99) (20 April 2004).

suggests the urgency of considering human rights properly before ‘the dash for gas’ produces irreversible, potentially serious and irreversible, health, human and environmental impacts.¹²⁴

¹²⁴ Furthermore, while this report addresses these core issues, emerging evidence from the front line of fracking protests in the UK suggests that there may also be cause for concern in relation to key civil and political rights: to liberty and security, to a fair trial, to freedom of expression and assembly and association (ECHR Articles, 5, 6, 10 and 11): D Short, K Nader, J Elliot, J and E Lloyd-Davies, ‘Extreme Energy, Fracking and Human Rights: A New Field for Impact Assessments?’ (2014) *International Journal of Human Rights*, forthcoming October, 2014.

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