

Divest Fracking

**How UK councils are
banking on dirty gas**

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Data analysis

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Cover photo

Aerial photo of fracking in Neuquén, Argentina
Credit: No Fracking Brasil

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Introduction

The fracking industry is now poised to frack for gas in the UK for the first time in seven years. This is devastating news for the community in Lancashire, where local democracy was overturned to make way for the industry.

Fracking is not just happening in the UK. From Australia to Argentina – fracking projects are threatening communities, destroying local landscapes, and fuelling climate change.

Big companies like BP won't frack in the UK because it "would attract the wrong kind of attention".¹ But they have no problem getting their hands dirty in other countries.

Our local councils are investing in these companies – and by investing, they're supporting the

fracking industry worldwide.

Lots of local councils already understand the threat that fracking poses to their communities, and many have stood against drilling in their own areas. In Scotland, Wales and Northern Ireland fracking has been effectively halted, but local councils still manage pension funds investing heavily in fracking companies. This cannot be right.

In this report we reveal the extent of council investments in the fracking industry and shine a light on some of the individual fracking companies involved.

Background

What is fracking?

Fracking, or hydraulic fracturing, is a technique for extracting gas or oil that is trapped in shale and other rock formations. It involves pumping large volumes of water down a well at high pressure, along with sand and chemicals. This fractures the rock² and releases the gas or oil which can then flow out to the head of the well. Using a horizontal drilling technique, several boreholes can be drilled off one well which increases the amount of hydrocarbons that can be recovered. Fracking can also be executed on a well that has already been drilled³ using conventional techniques, as a means of extracting further fossil fuels.

The clean gas myth is the 'new climate denial'

The fossil fuel industry has spent decades undermining climate science and creating doubt about the certainty of human-made climate change. It is now known that companies like Shell⁴ and Exxon⁵ were aware of their contribution to climate change as early as 1981, but this did not stop them from funding climate denial groups.⁶ The climate of doubt created by this industry has slowed down action on climate change; this will cost humanity dearly, and is already having serious impacts on millions of people⁷ around the globe.

Today, the scientific debate on climate change is effectively over and so most fossil fuel companies have been forced to accept that climate change is real. As a result, fossil fuel companies have changed tack with their efforts to propagate climate misinformation. Many of them have claimed to support the Paris Climate Agreement, and are spending large amounts on PR that paints them in a positive light.⁸ As part of this strategy to look responsible, fossil fuel companies are promoting a myth that expansion of



Climate protest in Edinburgh, 2015

gas production can play a role in averting the climate crisis. This narrative is dangerous, as it is being used to persuade politicians and policy makers that we need more gas,⁹ a proportion of which could be supplied by fracking.

The extraction and use of conventional fossil fuels has already brought us to dangerous levels of global warming. Advances in hydraulic fracturing technology open up a new frontier of previously inaccessible gas (and oil) locked into shale and coal. This is very concerning, given the fact that the temperature limits set in the Paris Climate Agreement require that the fossil fuel industry be put into managed decline.¹⁰ Ironically however, Shell has claimed that the largest contribution it can make to “reducing emissions globally in the near term, is to continue to grow the role of natural gas”¹¹ while BP sees gas as “playing an absolutely key role”¹² in the transition to a low carbon economy.

Last year, the Dutch Advertising watchdog censured¹³ Shell and Exxon for misleading claims on gas but, for the most part, the industry continues to get away with aggressively promoting the fossil fuel. Fossil fuel companies have successfully lobbied¹⁴ many G20 governments¹⁵ and the EU¹⁶ to support gas expansion and to host investment in numerous new gas projects.¹⁷

In reality, gas expansion is now threatening to undermine¹⁸ efforts to limit global warming to the temperature limits set out in the Paris Agreement.

Fossil fuel companies have successfully lobbied many G20 governments and the EU to support gas expansion and to host investment in numerous new gas projects

Analysis by Oil Change International¹⁹ has shown that the potential carbon emissions from the oil, gas, and coal in the world's currently operating fields and mines would take us beyond 2°C of warming. The reserves in currently operating oil and gas fields alone, even with no coal, would result in warming beyond 1.5°C. This means that fossil gas must be phased out, not increased.

High levels of fugitive methane emissions²⁰ from shale gas extraction could mean that its carbon footprint is close to, or even higher than, that of coal. There is considerable uncertainty over how much methane escapes during fracking and transport of shale gas, with widely varying estimates. Global levels of methane – a powerful greenhouse gas – have risen significantly in the last decade, coinciding with the fracking boom in the US. Scientists from NASA have recently concluded that the oil and gas industry is largely responsible²¹ for the rise.

Even if methane leakages could be reduced, increased gas would still present a serious climate problem as gas is a fossil fuel that releases carbon dioxide on combustion. The coal, oil, and gas in the world's currently producing and under-construction projects, if fully extracted and burned, would bring the world far beyond²² safe climate limits. Therefore opening new gas fields is inconsistent with the goals of Paris Climate Agreement. Furthermore, solar and wind are now cheaper than coal and gas in many regions. This means that new gas, rather than displacing coal, often displaces new renewable energy.²³

Global levels of methane – a powerful greenhouse gas – have risen significantly in the last decade, coinciding with the fracking boom in the US

The UK doesn't want or need fracking

In the UK, public support²⁴ for fracking is low (only 18% of the population support fracking) and in stark contrast to the public's strong support (85%) for renewables. A Scottish Government consultation on fracking last year attracted more than 65,000 responses,²⁵ of which 99% of respondents opposed fracking.

The governments of Wales and Scotland both oppose fracking, with the Scottish parliament²⁶ effectively banning the technology last year.

More and more governments across the world are also taking action to ban fracking – with the Irish²⁷ and French²⁸ parliaments passing legislation to ban fracking, and local governments from New York²⁹ to Victoria³⁰ (Australia) also disallowing it.

We need to keep fossil fuels in the ground to stop dangerous climate change. And we definitely can't afford to start using advanced fracking techniques to open up new frontiers of fossil fuels, such as shale gas, if we're serious about meeting climate targets. Combining these new resources with traditional oil, gas and coal resources add up to far more than our climate can cope with.

Clean Up Our Pension protest



UK Councils' investments in the fracking industry

UK councils are fuelling the global fracking industry through their investment in global fracking companies.

Our analysis shows that UK local government pensions currently invest over nine billion pounds in companies with fracking companies, totalling £9,075,754, 080

The ten largest fracking holdings are held by:

Local Authority Pension Funds	Fracking Investment in £
Greater Manchester Pension Fund	989,047,680.30
West Yorkshire Pension Fund	513,639,500.00
Strathclyde Pension Fund	388,132,081.26
Tyne and Wear Pension Fund	257,665,638.09
West Midlands Pension Fund	251,108,619.72
South Yorkshire Pension Fund	240,541,258.64
Nottinghamshire County Council Pension Fund	216,686,595.32
East Riding Pension Fund	210,374,819.01
Merseyside Pension Fund	198,579,766.68
Lancashire County Pension Fund	186,958,925.94

The top ten authorities with the highest percentage fracking investments are:

Local Authority Pension Funds	% Fracking Investment
Dumfries and Galloway Pension Fund	6.73%
Greater Manchester Pension Fund	5.76%
London Borough of Merton Pension Fund	5.69%
Torfaen Pension Fund	5.55%
Dyfed Pension Fund	5.48%
London Borough of Hammersmith and Fulham Pension Fund	5.44%
Isle of Wight Council Pension Fund	5.44%
East Riding Pension Fund	4.65%
Nottinghamshire County Council Pension Fund	4.59%
London Borough of Redbridge Pension Fund	4.57%

UK Pension Funds investment in Fracking Companies

Local Authority Pension Funds	Total Fund Amount	Fracking Investment	% Fracking Investment	Direct Fracking Investment	Estimated Indirect Fracking Investment (through pooled funds)	Fossil Fuel Investment
Totals	289,861,006,324.83	9,075,754,080.74	3.13%	3,678,015,479.37	5,397,738,601.37	16,105,248,076.23
Avon Pension Fund	4,299,723,923.33	105,396,873.56	2.45%	29,836,458.72	75,560,414.84	187,866,216.83
Bedfordshire Pension Fund	2,073,598,890.75	40,884,015.47	1.97%	0.00	40,884,015.47	74,334,573.58
Buckinghamshire County Council Pension Fund	2,631,178,698.35	61,459,817.38	2.34%	35,088,467.42	26,371,349.96	106,787,459.22
Cambridgeshire Pension Fund	2,243,600,000.00	90,893,000.00	4.05%	0.00	90,893,000.00	165,260,000.00
Cardiff and Vale of Glamorgan Pension Fund	1,601,270,687.45	45,287,802.34	2.83%	14,533,061.88	30,754,740.46	86,367,269.89
Cheshire Pension Fund	4,167,287,023.00	46,902,863.78	1.13%	36,600,836.00	10,302,027.78	92,838,887.60
City and County of Swansea Pension Fund	1,852,775,000.00	73,795,645.00	3.98%	0.00	73,795,645.00	134,173,900.00
City of London Pension Fund	964,660,000.00	33,576,400.00	3.48%	0.00	33,576,400.00	61,048,000.00
Clwyd Pension Fund	1,380,322,000.00	11,155,430.00	0.81%	0.00	11,155,430.00	20,282,600.00
Cornwall Pension Fund	1,679,243,571.69	30,547,383.49	1.82%	0.00	30,547,383.49	55,540,697.26
Cumbria County Council Pension Fund	2,602,559,414.37	63,658,923.60	2.45%	39,106,265.06	24,552,658.54	100,519,209.03
Derbyshire County Council Pension Fund	4,196,857,286.96	183,429,493.51	4.37%	145,842,258.00	37,587,235.51	257,440,766.20
Dorset County Council Pension Fund	2,706,610,000.00	77,832,535.00	2.88%	0.00	77,832,535.00	141,513,700.00
Dumfries and Galloway Pension Fund	834,357,000.00	56,115,835.00	6.73%	28,638,000.00	27,477,835.00	78,597,700.00
Durham County Council Pension Fund	2,894,951,018.29	48,795,007.70	1.69%	0.00	48,795,007.70	107,797,266.06
Dyfed Pension Fund	2,385,496,536.00	130,721,187.09	5.48%	70,923,447.00	59,797,740.09	196,560,496.80
East Riding Pension Fund	4,525,118,402.00	210,374,819.01	4.65%	170,425,828.00	39,948,991.01	318,155,216.10
East Sussex Pension Fund	3,185,010,788.01	85,393,765.54	2.68%	2,834,911.10	82,558,854.44	154,934,732.53
Environment Agency Pension Fund	3,272,966,000.00	78,263,130.00	2.39%	0.00	78,263,130.00	142,296,600.00
Essex Pension Fund	6,012,349,710.27	113,549,415.19	1.89%	3,225,123.96	110,324,291.23	219,858,263.30
Falkirk Council Pension Fund	2,060,756,341.65	78,533,555.71	3.81%	52,801,161.21	25,732,394.50	142,185,394.68
Fife Council Pension Fund	2,158,050,749.64	71,616,276.45	3.32%	13,186,937.53	58,429,338.92	118,451,231.66
Gloucestershire Pension Fund	2,069,445,589.27	78,367,513.99	3.79%	21,474,631.03	56,892,882.96	140,448,348.78
Greater Manchester Pension Fund	17,182,862,772.00	989,047,680.30	5.76%	704,920,042.00	284,127,638.30	1,758,099,024.00
Gwynedd Council Pension Fund	1,864,232,862.00	51,849,148.62	2.78%	0.00	51,849,148.62	94,271,179.30
Hampshire Pension Fund	6,146,509,966.13	180,626,797.49	2.94%	121,726,685.34	58,900,112.15	320,343,130.76
Hertfordshire Pension Fund	4,202,354,323.37	84,335,225.55	2.01%	30,975,195.69	53,360,029.86	140,475,249.33
Highland Council Pension Fund	1,762,942,027.27	50,633,441.63	2.87%	36,090,140.31	14,543,301.32	80,934,458.90
Isle of Wight Council Pension Fund	559,848,933.00	30,439,754.20	5.44%	18,363,897.00	12,075,857.20	43,342,601.00
Kent County Council Pension Fund	4,494,761,273.13	165,488,941.90	3.68%	100,570,792.60	64,918,149.30	267,488,689.45
Lancashire County Pension Fund	7,122,909,367.73	186,958,925.94	2.62%	0.00	186,958,925.94	339,925,319.89
Leicestershire County Council Pension Fund	3,135,335,512.87	114,106,868.35	3.64%	17,630,689.64	96,476,178.71	199,213,830.05
Lincolnshire Pension Fund	2,076,602,920.91	53,132,645.51	2.56%	21,381,030.48	31,751,615.03	108,092,428.57
London Borough of Barking and Dagenham Pension Fund	906,316,007.00	21,281,702.15	2.35%	0.00	21,281,702.15	34,617,534.00
London Borough of Barnet Pension Fund	1,039,022,000.00	20,580,780.00	1.98%	0.00	20,580,780.00	37,419,600.00
London Borough of Bexley Pension Fund	795,473,873.00	23,250,568.00	2.92%	23,250,568.00	0.00	46,874,979.00
London Borough of Brent Pension Fund	802,700,000.00	20,608,500.00	2.57%	0.00	20,608,500.00	37,470,000.00
London Borough of Bromley Pension Fund	943,444,212.00	22,495,088.26	2.38%	11,867,024.00	10,628,064.26	32,454,201.20
London Borough of Camden Pension Fund	1,518,407,554.17	39,683,032.97	2.61%	0.00	39,683,032.97	72,157,038.60
London Borough of Croydon Pension Fund	1,091,543,000.00	31,943,615.00	2.93%	0.00	31,943,615.00	58,079,300.00
London Borough of Ealing Pension Fund	1,126,664,633.23	44,927,205.67	3.99%	0.00	44,927,205.67	82,710,070.43
London Borough of Enfield Pension Fund	1,077,221,000.00	33,326,205.00	3.09%	0.00	33,326,205.00	60,593,100.00
London Borough of Hackney Pension Fund	1,143,845,000.00	37,231,315.00	3.25%	0.00	37,231,315.00	67,693,300.00
London Borough of Hammersmith and Fulham Pension Fund	1,002,161,068.32	54,533,755.07	5.44%	18,544,738.10	35,989,016.97	90,296,580.81
London Borough of Haringey Pension Fund	1,309,093,000.00	36,000,057.50	2.75%	0.00	36,000,057.50	65,454,650.00
London Borough of Harrow Pension Fund	804,720,000.00	29,247,020.00	3.63%	0.00	29,247,020.00	53,176,400.00
London Borough of Havering Pension Fund	657,188,535.23	21,401,952.93	3.26%	0.00	21,401,952.93	39,589,583.38
London Borough of Hillingdon Pension Fund	954,442,059.04	36,847,227.64	3.86%	20,216,082.15	16,631,145.49	61,466,611.92

UK Pension Funds investment in Fracking Companies (continued)

Local Authority Pension Funds	Total Fund Amount	Fracking Investment	% Fracking Investment	Direct Fracking Investment	Estimated Indirect Fracking Investment (through pooled funds)	Fossil Fuel Investment
Totals	289,861,006,324.83	9,075,754,080.74	3.13%	3,678,015,479.37	5,397,738,601.37	16,105,248,076.23
London Borough of Hounslow Pension Fund	935,637,336.00	33,745,081.84	3.61%	31,640,848.00	2,104,233.84	45,488,294.70
London Borough of Islington Pension Fund	1,262,711,447.91	31,313,047.29	2.48%	25,946,752.29	5,366,295.00	48,271,475.12
London Borough of Lambeth Pension Fund	1,346,000,000.00	32,395,000.00	2.41%	0.00	32,395,000.00	58,900,000.00
London Borough of Lewisham Pension Fund	1,271,236,000.00	47,090,340.00	3.70%	0.00	47,090,340.00	85,618,800.00
London Borough of Merton Pension Fund	633,626,884.26	36,082,651.54	5.69%	24,666,293.57	11,416,357.97	54,792,192.50
London Borough of Newham Council Pension Fund	1,156,100,987.00	16,397,836.21	1.42%	859,515.00	15,538,321.21	29,281,757.10
London Borough of Redbridge Pension Fund	743,257,000.00	33,993,300.00	4.57%	0.00	33,993,300.00	38,260,700.00
London Borough of Southwark Pension Fund	1,487,862,000.00	7,825,620.00	0.53%	0.00	7,825,620.00	14,228,400.00
London Borough of Tower Hamlets Pension Fund	1,356,705,680.80	40,647,960.66	3.00%	2,981,359.79	37,666,600.87	91,941,766.46
London Borough of Waltham Forest Pension Fund	764,900,000.00	29,661,500.00	3.88%	0.00	29,661,500.00	53,930,000.00
London Borough of Wandsworth Pension Fund	2,185,838,012.55	89,310,464.76	4.09%	26,649,970.11	62,660,494.65	137,628,568.77
London Pension Fund Authority	5,304,639,078.40	134,251,964.94	2.53%	2,128,600.04	132,123,364.90	242,152,247.31
Lothian Pension Fund	5,440,186,442.00	47,936,564.02	0.88%	44,869,370.00	3,067,194.02	152,615,424.40
Merseyside Pension Fund	7,964,102,478.00	198,579,766.68	2.49%	119,327,316.86	79,252,449.82	387,219,375.30
Norfolk Pension Fund	1,656,425,000.00	55,640,255.00	3.36%	0.00	55,640,255.00	101,164,100.00
North East Scotland Pension Fund	3,999,909,195.37	100,049,911.71	2.50%	36,873,912.19	63,175,999.52	179,194,145.60
North Yorkshire Pension Fund	3,036,748,097.33	81,445,452.00	2.68%	5,470,398.03	75,975,053.97	175,702,288.57
Northern Ireland Pension Fund	4,150,840,054.46	178,378,828.80	4.30%	72,144,218.73	106,234,610.07	348,957,569.59
Northumberland County Council Pension Fund	1,057,604,835.64	39,824,537.73	3.77%	0.00	39,824,537.73	72,408,250.42
Nottinghamshire County Council Pension Fund	4,717,224,227.00	216,686,595.32	4.59%	174,817,349.00	41,869,246.32	327,312,727.40
Orkney Islands Council Pension Fund	338,195,640.18	5,045,714.82	1.49%	5,045,714.82	0.00	5,719,691.64
Oxfordshire County Council Pension Fund	2,174,177,881.39	83,645,908.90	3.85%	38,875,599.46	44,770,309.44	132,642,636.59
Peninsula Pension Fund	3,917,046,189.06	106,995,247.06	2.73%	12,870,177.77	94,125,069.29	191,792,230.80
Powys County Council Pension Fund	594,162,271.63	15,041,357.40	2.53%	0.00	15,041,357.40	27,347,922.55
RHONDDA CYNON TAFF Pension Fund	3,004,479,000.00	122,640,760.00	4.08%	0.00	122,640,760.00	222,983,200.00
Royal Borough of Greenwich Council Pension Fund	1,234,032,000.00	29,135,755.00	2.36%	0.00	29,135,755.00	52,974,100.00
Royal Borough of Kensington and Chelsea Pension Fund	1,049,729,305.72	28,130,434.89	2.68%	0.00	28,130,434.89	51,146,245.25
Royal Borough of Kingston Pension Fund	795,898,793.59	20,980,321.53	2.64%	5,681,248.28	15,299,073.25	40,409,985.30
Royal County of Berkshire Pension Fund	1,918,759,958.68	21,766,889.58	1.13%	11,631,540.40	10,135,349.18	53,463,812.73
Scottish Borders Pension Fund	655,220,426.00	18,813,771.11	2.87%	6,000,707.00	12,813,064.11	30,317,010.20
Shetland Islands Pension Fund	449,703,247.00	19,858,645.73	4.42%	0.00	19,858,645.73	36,106,628.60
Shropshire Pension Fund	1,711,531,448.05	55,087,759.63	3.22%	19,725,528.76	35,362,230.87	90,890,649.47
Somerset County Council Pension Fund	1,962,135,001.39	69,768,426.89	3.56%	61,932,040.48	7,836,386.41	125,126,256.99
South Yorkshire Pension Fund	7,539,811,791.00	240,541,258.64	3.19%	225,094,093.00	15,447,165.64	388,326,763.70
Staffordshire Pension Fund	3,734,959,000.00	152,828,280.00	4.09%	0.00	152,828,280.00	277,869,600.00
Strathclyde Pension Fund	19,658,803,553.91	388,132,081.26	1.97%	126,210,089.00	261,921,992.26	802,759,409.10
Suffolk County Council Pension Fund	2,636,546,639.00	72,586,024.78	2.75%	28,916,091.00	43,669,933.78	128,513,586.60
Surrey County Council Pension Fund	3,763,033,789.00	161,368,578.73	4.29%	108,047,713.00	53,320,865.73	256,604,881.60
Tayside Pension Fund	3,427,706,411.95	135,441,754.71	3.95%	91,536,243.22	43,905,511.49	183,718,656.88
Teesside Pension Fund	3,843,434,264.14	168,316,572.70	4.38%	168,316,572.70	0.00	275,422,217.21
Torfaen Pension Fund	2,700,194,120.00	149,930,309.43	5.55%	62,615,822.00	87,314,487.43	245,856,815.50
Tyne and Wear Pension Fund	7,761,342,119.00	257,665,638.09	3.32%	101,478,495.00	156,187,143.09	472,872,654.80
Warwickshire County Council Pension Fund	2,021,017,618.33	42,901,887.13	2.12%	13,113,544.08	29,788,343.05	74,181,735.01
West Midlands Pension Fund	13,794,157,521.36	251,108,619.72	1.82%	218,604,822.21	32,503,797.51	490,383,239.10
West Sussex Pension Fund	3,755,019,000.00	119,726,255.00	3.19%	0.00	119,726,255.00	217,684,100.00
West Yorkshire Pension Fund	13,540,100,000.00	513,639,500.00	3.79%	0.00	513,639,500.00	933,890,000.00
Westminster City Council Pension Fund	1,261,893,000.00	52,871,445.00	4.19%	0.00	52,871,445.00	96,129,900.00
Wiltshire Pension Fund	2,174,100,000.00	37,609,000.00	1.73%	0.00	37,609,000.00	68,380,000.00
Worcestershire Pension Fund	2,453,471,046.30	86,391,061.05	3.52%	13,889,261.36	72,501,799.69	191,168,673.27

The fracking companies



Royal Dutch Shell

Shell has fracked or conducted exploratory work for fracking in locations dotted all over the world. It has significant live fracking operations at present and is planning to spend between \$2 billion and \$3 billion per year³¹ on shales between 2018 and 2020. Earlier this year Shell stated³² that it would increase its shale output to 200,000 barrels of oil equivalent per day by 2020.

Where in the world?

Countries in which Shell has current fracking operations include the USA,³³ Canada,³⁴ Australia³⁵ and Argentina.³⁶ Shell expects its production in Argentina's Vaca Muerta shale to expand tenfold³⁷ by early in the next decade.

Shell's fracking ambition has left a trail of unrest in its wake

Shell has fracked or attempted to frack or drill exploratory wells in numerous more countries and has left a trail of angry communities in its wake. In Canada, Shell's attempt to extract coal bed methane from the Klappan, also known as the Sacred Headwaters³⁸ was met with much local, national and international opposition. Klapan is culturally important for many First Nations people and is the source of three major wild salmon rivers. While preparing to drill, Shell's relationship with the local community was fraught with conflict; it seems clear that First Nations people were not adequately consulted in decision-making processes. Following sustained protests by First Nations communities and local people, as well as protests by international groups, Shell was eventually forced to abandon its extraction plans in the region.

Shell has fracked or attempted to frack or do exploratory drilling in Algeria, Tunisia, Egypt and South Africa³⁹ which has sparked much local protest and concern. In 2011, the South African Advertising Standards Authority upheld complaints against Shell's fracking advert campaign as being unsubstantiated and misleading.⁴⁰

Shell's fracking activities in the US are putting water supplies under severe strain. In Texas (where Shell is now automating⁴¹ parts of its extensive fracking operations) research has shown that fracking

is having significant impacts⁴² on water stress challenges.

In March 2018, Dutch residents reacted in horror⁴³ as the ministry of economic affairs stated its intention to approve fracking operations by Nederlandse Aardolie Maatschappij (NAM) in Pieterzijl-Oost. NAM⁴⁴ is a 50-50 joint venture between Shell and ExxonMobil which allows Shell to shelter its brand from fracking's poor reputation in its home country. Pieterzijl-Oost borders the ill-fated province of Groningen, where conventional gas extraction by Shell and Exxon Mobil has caused hundreds of earthquakes⁴⁵ which have damaged homes and reduced some farmhouses to piles of rubble.

Shell's fracking lobby

Shell's annual spend on obstructive climate lobbying has been estimated at \$22 million and it is now aggressively promoting climate misinformation about gas. In a 2017 speech,⁴⁶ the Shell CEO stated that "the largest contribution Shell can make to reducing emissions globally in the near term, is to continue to grow the role of natural gas."

Despite clear evidence⁴⁷ to the contrary, Shell continues to propagate the myth⁴⁸ that gas can be part of the solution to climate change. Shell has successfully lobbied to undermine EU renewable energy targets,⁴⁹ pushing the EU to favour gas expansion over an increased ambition on renewables.

Writing to the European Commissioner, a Shell director boasted that "Gas is good for Europe, and Europe is good at gas". Thanks to the efforts of Shell and other gas lobbyists, European investment in new gas infrastructure⁵⁰ is now putting the goals of the Paris Agreement in jeopardy.

UK council investment in Shell

The largest single investor in Shell, among the UK local government pension funds, was the Greater Manchester Pension Fund, which according to our data had a £285 million stake in the company.

BP

BP is aggressively promoting gas as a “solution” to climate change, stating that it sees gas as “playing an absolutely key role”⁵¹ in the transition to a low carbon economy. The company also likes to boast that it is the inventor⁵² of fracking. However BP but does not frack in its home country, the UK, for fear that it might “attract the wrong kind of attention”⁵³; it has indicated that its damaged safety record from the Gulf of Mexico spill would make it a target for protesters if it were to frack in the UK. BP has no problem with fracking overseas however, even when this is associated with violations⁵⁴ of the rights of local communities.

Where in the world?

Countries in which BP currently has fracking operations include the USA, Argentina and Oman. In collaboration with China National Petroleum Corporation (CNPC), BP is also conducting exploratory drilling for shale gas in southwestern China’s Sichuan basin. BP’s operations in this region involve drilling wells that are over 4000m in depth.

In 2017, BP’s started production at its Khazzan project in Oman,⁵⁵ a giant 200 well + fracking operation that will tap gas three miles below the earth’s surface. BP is looking to expand its shale operations in the USA; in July 2018 it spent \$10.5 billion⁵⁶ to acquire BHP’s interests in 470,000 acres of shale fields in the Eagle Ford, Permian and Haynesville – with enough undeveloped land for thousands of new wells.

In January 2018 it was alleged⁵⁷ that BP was working with the UK Government to side step sanctions that could prevent it fracking in Russia.

BP in the Vaca Muerta of Argentina

BP holds a 50% stake in the Pan American Energy Group (PAEG). Via, PAEG, BP is playing a leading role in advancing one of the world’s biggest carbon bombs,⁵⁸ the Vaca Muerta shale gas and oil mega-project in Patagonia, Argentina. The Vaca Muerta has been identified as the biggest shale play outside North America. Combined with the hydrocarbons contained in its sister shale formation, Les Molles, its total resources have been estimated to represent around 50 billion tons of CO2⁵⁹ that are currently locked in the ground.

The territory covered by Vaca Muerta is home to thirty nine Mapuche indigenous communities as well as to Argentina’s pear growing region, Allen, and several protected natural areas. 50 local municipalities and one province have passed



local regulation against fracking⁶⁰ in Argentina. One of these moratoria was passed by the agricultural town Vista Alegre whose territory overlaps with BP’s flagship shale gas concession Lindero Atravesado. However BP continues to muscle through with its fracking plans, in spite of local objections.

It is alleged that the rights of indigenous Mapuche communities, to free, prior, informed consent to drilling on their lands is being violated⁶¹ on a regular basis, moreover pear farmers are having to abandon agricultural land⁶² while working class neighborhoods are raising concerns that both fracking wells and polluting waste pits are being located in close proximity⁶³ to their homes. In addition to the obvious climate impacts, and concerning health risks, fracking operations in Argentina are also associated with other negative social impacts. For example, housing and food prices⁶⁴ are tied to privileged oil and gas workers’ salaries, even though they make up a minority of the population.

The previous track record of BP-Pan American Energy is further reason for concern. Platform London has revealed⁶⁵ that the company was involved in an alleged \$300 million bribe to regional government

officials in return for an extended oilfield licence. Other questionable practices by the company include using the gendarmes to suppress worker unrest and causing serious large-scale groundwater contamination at Koluel Kaike, where it was the last oil company of all operating in the area to introduce remediation measures.

BP is a major player in the Vaca Muerta alongside other fracking companies in which UK councils also invest, including Shell, ExxonMobil, Chevron and Statoil/Equinor. To read more about fracking in this region see recent reports by [Platform London](#)⁶⁶ and by [Enlace por la Justicia Energética y Socioambiental](#).⁶⁷

UK Council investment in BP

The largest single investor in BP, among the UK local government pension funds, was the Greater Manchester Pension Fund, which according to our data directly hold a £275 million stake in the company.

ConocoPhillips

ConocoPhillips is the world's [largest](#)⁶⁸ independent oil and gas exploration and production company. It is a company that seems steadfast in its devotion to unconventional fossil fuels, noting in April 2018, that they were "[driving our overall portfolio](#)"⁶⁹. Along with Shell and BP, ConocoPhillips has attempted to add language to US Climate Change Bill that would have essentially [blocked federal oversight of fracking](#).⁷⁰

Where in the world?

ConocoPhillips has major fracking operations in North America where vast new shale resources have been identified. It is fracking in big [US shale oil regions](#)⁷¹ such as the Permian Basin of Texas and New Mexico, the Eagle Ford in Texas and the Bakken in North Dakota. The company is also developing [shale assets in Canada](#),⁷² where it is sinking major investment into the [Montney](#)⁷³ formation. As described below, ConocoPhillips also has a major fracking presence in Australia and is doing exploratory or pilot work in Alaska and Colombia.

A threat to Alaska

ConocoPhillips is Alaska's [largest oil producer](#)⁷⁴ and its recent exploration in the region has found some large fossil fuel reserves, some of which are likely to [require fracking](#)⁷⁵ to be extracted. The prospect of fracking and disposal of waste in the Arctic's fragile ecosystem poses a host of environmental concerns.

The Obama administration banned oil and gas drilling on 3.65 million acres of land around Teshekpuk Lake, a 22-mile-wide water body that provides critical habitat for migratory birds, caribou and other wildlife. ConocoPhillips, which has fields just east of the protection area, has [called](#)⁷⁶ for a lift of the ban in the lands west of their fields. The Trump Administration is already moving to [lift drilling restrictions](#)⁷⁷ in Alaska.



Thousands of wells in Queensland

ConocoPhillips has a large stake⁷⁸ in the Australian Pacific LNG project (APLNG). APLNG is Australia's largest producer⁷⁹ of coal seam gas. While not shale gas, coal seam gas is another form of unconventional gas that often requires highly invasive extraction methods, including fracking. The APLNG project plans to develop up to 10,000⁸⁰ wells in Queensland to feed the Curtis Island⁸¹ Liquefied Natural Gas (LNG) plant. The production and transport of LNG present even more climate problems.⁸² The gas must be cooled to -162 degrees Celsius to reduce volume and facilitate shipping across the sea. On arriving in a country, or continent, the liquefied gas is generally re-gasified and then transported further by pipeline to its final destination. This intense process requires a lot of energy and therefore adds significantly to the full lifecycle emissions of producing and using the gas.

Trouble in Colombia

Despite huge public opposition, coming from wide-ranging sections of society, ConocoPhillips has been conducting exploratory work for unconventional hydrocarbons in San Martín, Cesar, Colombia. Several organisations such as CORDATEC,⁸³ and the Colombia Libre de Fracking alliance⁸⁴ have alleged that the company initiated its exploration work illegally,⁸⁵ operating without the specific environmental license for unconventional hydrocarbons.

ConocoPhillips' work in the region has been

Coal seam gas is another form of unconventional gas that often requires highly invasive extraction methods, including fracking

mired with controversy. In September 2016 large protests⁸⁶ took place to stop machinery accessing a test site; in October 2016, riot police moved to repress the protest, injuring 10 demonstrators.⁸⁷ Suspicious deaths⁸⁸ of local activists have also been alleged. In February 2018, villagers' drinking water was contaminated⁸⁹ close to ConocoPhillips' operations – the company rejected any involvement in causing the contamination.



Nao Fracking Brasil

Divestment as a tool to fight fracking

It's time to go on the offensive against the fracking industry

To stop fracking, we have to go on the offensive against the global fracking fuel industry and hit them where it hurts – their public image and their political support.

We also need to stand in solidarity with overseas communities who are resisting fracking by UK companies – and by companies in which UK councils invest.

Getting UK councils to divest from all fossil fuels represents a powerful way to do the above – as the following sections will illustrate.

What is fossil fuel divestment?

Divestment is the opposite of investment; it simply means getting rid of, or selling off, stocks, bonds or other investments that are unethical and/or pose a financial risk.

Fossil fuel divestment is now a global, rapidly growing phenomenon; all around the world cities, councils, organisations and institutions are showing moral leadership on climate change by selling off their shares and other investments in fossil fuel companies.

Who is divesting from fossil fuels?

Over \$6 trillion worth of funds⁹⁰ has now been committed to fossil fuel divestment worldwide. Full divestment commitments have so far been made by two UK local government pension funds, Southwark and Waltham Forest. Five more local government pension funds have made partial divestment commitments, namely Hackney, the Environment Agency Pension Fund, Haringey, South Yorkshire and Merseyside.

Many more councils have also passed supportive motions calling on their relevant pension fund to divest – at least 13 councils across the UK have policies officially supporting divestment, these include Sheffield, Bristol, Reading, Kirklees, Derby, Monmouthshire and

Birmingham.

Other bodies divesting from fossil fuels include the Royal College of GPs,⁹¹ many UK churches,⁹² more than 60 UK universities,⁹³ New York City's giant \$189bn pension funds⁹⁴ and the country of Ireland.⁹⁵ Unison⁹⁶ and the Trade Union Congress⁹⁷ have also voted to support fossil fuel divestment.

How does divestment work?

Fossil fuel divestment is modelled on movements such as the anti-Apartheid movement in the 1980s which weakened the South African Apartheid regime, and the tobacco divestment movement which helped to stigmatise the tobacco industry and led to restrictive legislation on smoking.

Fossil fuel divestment works by stigmatizing the fossil fuel industry's business practices and eroding its social license. This weakens its political power, opening up political breathing space for climate change action, legislation and the transition to renewable energy systems.

The political influence of the fossil fuel industry

Over \$6 trillion worth of funds has now been committed to fossil fuel divestment worldwide

The Paris Climate Agreement aims to pursue efforts to limit the temperature increase even further to 1.5°C

can be further weakened through restrictive legislation compelled by divestment; for example, through the introduction of bans on fossil fuel exploration and extraction or the cut back of government fossil fuel subsidies.

Divestment is a tool to break the political power of the fracking and fossil fuel industries – why is this important?

Scientists have understood the causes and consequences of climate change for decades. Despite this, efforts to address the climate crisis have been, and continue to be, vastly inadequate, despite the many co-benefits that action on climate change would bring.

The fossil fuel industry bears significant responsibility for this delay in climate action. It has huge political power and influence and is successfully lobbying to delay the transition away from fossil fuels. It uses its money to influence, and win the favour of, politicians from a range of political ideologies. In the UK, [Electoral Commission databases](#)⁹⁸ show that Conservative, Liberal Democrats and Labour MPs have all received donations from fossil fuel companies. Individual oil executives have also made multiple donations to UK politicians.

The fossil fuel industry's influence over politicians is making it very difficult for governments to take sufficient action on climate change. Rather than introducing legislation to restrict fossil fuels, world governments continue to support the industry. A June 2018 report showed that G7 governments continue to provide at least [US\\$100 billion](#)⁹⁹ annually to support the production and consumption of fossil fuels. The UK Government supports the fossil fuel industry

in many ways; such as through [tax breaks](#),¹⁰⁰ the provision of [UK Export Finance](#),¹⁰¹ [proposals to adjust planning regulations](#)¹⁰² in the industry's favour and by [lobbying overseas](#)¹⁰³ on the industry's behalf.

Divestment is required to remove the fossil fuel industry's 'clean image', to erode its lobbying power and to make its money politically dangerous for politicians to accept. This creates more favourable conditions for the introduction of legislation that restricts the fossil fuel industry, such as the introduction of exploration and extraction bans, cuts to fossil fuel subsidies or increased carbon taxation. It also stimulates support for renewable energy and opens up political space for real climate solutions.

These political and social impacts of divestment are really important because it is a lack of political and societal will – and [not a lack of technological capability](#)¹⁰⁴ – that is now preventing us from taking stronger action on climate change.

Fossil fuel divestment to protect local government pensions

The financial risks associated with continued investment in fossil fuel companies are now well documented. Many divesting funds have cited both ethical and financial reasons for their fossil fuel divestment decisions.

Mark Carney, Governor of the Bank of England and Chair of the Financial Stability Board, has warned that a carbon budget consistent with a 2°C target could “render the vast majority of reserves ‘stranded’ – oil, gas and coal that will be [literally unburnable](#)”¹⁰⁵. The Paris Climate Agreement aims to pursue efforts to limit the temperature increase even further to 1.5°C; even more resources are unburnable in a budget which complies with this target.

As low carbon technology gathers momentum, the risk that fossil fuel companies are overvalued is increasing. [Carbon Tracker analysis](#)¹⁰⁶ has shown that even if warming was allowed to rise as high as



INEOS protest, 2014

3°C, listed companies still could not burn all of their existing reserves. Very significantly, research just published in Nature Climate Change¹⁰⁷ has shown that fossil fuel asset stranding will occur because of an already ongoing technological trajectory, irrespective of whether or not new climate policies are adopted.

Carbon Tracker has also shown that asset stranding risk is skewed toward listed fossil fuel¹⁰⁸ companies (in which local government pension funds invest) rather than towards national fossil fuel companies as the former hold many of the riskier, and more expensive to extract, fossil fuel reserves.

Concerns that fossil fuel divestment could impose a cost in terms of reduced opportunities for portfolio diversification, or in terms of foregone potentially profitable investments, are not supported by good evidence. Case studies of funds¹⁰⁹ who have divested from fossil fuels are not reporting adverse impacts although it is admittedly early days. Fossil Free indices are performing as well or better than their parent indices – for example, the MSCI ACWI ex fossil fuel index has outperformed¹¹⁰ its parent MSCI ACWI index from 2010 to May 2018. It is true that this is a

relatively short time period over which to measure performance; however, recent modelling studies¹¹¹ have also found that fossil fuel divestment does not seem to impair long term portfolio performance. These findings can be explained by the fact that fossil fuel company stocks do not outperform other stocks on a risk-adjusted basis and provide relatively limited diversification benefits.

How to support divestment

Further information & advice

A network of community grassroots groups run the campaign to divest UK local government pension funds of fossil fuel and fracking companies.

This network is supported by 350.org, Friends of the Earth (England, Wales and Northern Ireland), Friends of the Earth Scotland and Platform London.

If you would like to raise the issue in your area then we would be happy to help. Contact ellen@350.org, deirdre.duff@foe.co.uk or sakina@platformlondon.org if you're based in England, Wales or Northern Ireland. If you're based in Scotland, contact Ric at rlander@foe.scot.

You might also like to consult the Fossil Free UK website; www.gofossilfree.org/uk.

Oil and gas drilling in Wyoming



Appendix

Methodology used to calculate council investments

Platform put in Freedom of Information requests through whatdotheyknow.com to the councils that manage all the UK local authority pension funds asking for a full list of investments for the financial year 2016/2017 in an excel spreadsheet. When 2016/2017 data was not available, data from 2015/2016 was used instead. Platform analysed the data provided – or pension fund annual reports and other official documents where data was not provided – to calculate the amount invested by each pension fund in oil and gas companies that frack for unconventional gas.

23 companies listed on the Carbon Underground 200 were identified as participating in fracking. This was based on companies making public statements (on websites, in annual reports) that they are involved in hydraulic fracturing or shale. We also included one company not on the Carbon Underground 200 – iGas, a smaller stock exchange-listed operator who are fracking in the UK – bringing our total list of fracking companies to 24.

A google spreadsheet was created for each pension fund, with a script identifying the direct investments into fracking companies. This provided the total direct investments into fracking companies, and listed the top 10 specific companies.

However, a significant proportion of UK council pension investments are through pooled investment vehicles and tracker funds – where the specific breakdown of each shareholding was not provided.

To estimate this, we selected five funds with large pooled fund investments: Greater Manchester, Merseyside, Tyne and Wear, Essex and NE Scotland. We identified the 13 largest indexes for pooled fund holdings invested into by these pension funds (FTSE All-Share, FTSE 250, FTSE World Europe ex UK, FTSE North America, FTSE World Asia Pacific ex Japan, FTSE Japan, MSCI AC Asia Pacific ex Japan, FTSE Emerging, MSCI Emerging Markets, MSCI Emerging Markets IMI, FTSE All-World ex UK Index,

FTSE RAFI All World 3000, MSCI All Country World). We cross-referenced these with other pension funds, and ascertained that these 13 make up a dominant proportion of tracker indexes and pooled holdings held by UK local government pension funds.

We then examined the market capitalisation ‘weight’ of the fracking companies within each index. From this, we could calculate the average percentage of fracking companies within these 13 pooled fund indexes. The average weighted percentage was 5.5% of the fund in fracking companies, which we used as an estimate for other similar equity pooled funds.

In our previous analysis of fossil fuel investments, published in our [Fuelling the Fire report](#),¹¹² we used a 10% figure as the estimate for all fossil fuel investments (as opposed to fracking investments) in pooled funds.

This 5.5% was then applied to relevant indexes and pooled funds within individual pension funds. To do this, we used a script to pull out the top 15 investments for each pension fund. We then analysed these manually, identifying the pooled investment funds/vehicles into equity that matched a similar profile to the 13 funds listed above (e.g. tracker funds focusing on large stock exchanges in UK, North America, Europe). We then applied the average 5.5% proportion of fracking investments to these investments into pooled funds/vehicles. This enabled us to calculate the total indirect investments into fracking companies for each pension fund.

By adding together the direct investments into fracking companies with the estimated indirect investments into fracking, we calculated the total fracking holdings for each pension fund.

Special Cases

Ealing and West Yorkshire’s pension funds listed “Oil & Gas” as a sectoral investment. In the 2017 calculations, 100% of these were assessed as fossil fuels. In this fracking analysis, we estimated that 55% of these holdings were in fracking companies. This is on the basis of fracking companies making up 5.5% of pooled fund holdings, while fossil fuel companies make up 10%. In the case of Ealing and West Yorkshire’s Oil & Gas investments, 55% in fracking should be an underestimate, as the investments are already limited to Oil & Gas, and not fossil fuels as a whole.

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West Yorkshire Pension Fund protest

