

# Fracking, Do Something!

## References and Background Sheet

Sheet  
**A1R**

Version 1, Sheet 1R, The *Activism* ('A') Series, Free Range Energy Beyond Oil Project, March 2012.  
web: [http://www.fraw.org.uk/projects/energy\\_beyond\\_oil/](http://www.fraw.org.uk/projects/energy_beyond_oil/) email: [ebo@fraw.org.uk](mailto:ebo@fraw.org.uk)

**30p**  
(where sold)

**This is the “references and further information” sheet for the 'A-series' sheet A1 – *Fracking, Do Something!* This provides the web links/references from the text of sheet A1, and a list of further web sites and information you may find useful.**

You can access revisions to this sheet, and the main handout itself, via the web page for this sheet in the publications section of the Free Range Activism Website –  
<http://www.fraw.org.uk/publications/a-series/a01/>

### Text references

Below are the text references listed in the main handout:

1. Free Range Sheet S1. *Limits to Growth*, Free Range Energy Beyond Oil Project, October 2008 – <http://www.fraw.org.uk/fwd?s1>  
See also Wikipedia: 'Limits to Growth' – [http://en.wikipedia.org/wiki/Limits\\_to\\_growth](http://en.wikipedia.org/wiki/Limits_to_growth)
2. See Part V. 'Disruptive Trespassers', *Criminal Justice and Public Order Act 1994* – <http://www.legislation.gov.uk/ukpga/1994/33/part/V/crossheading/disruptive-trespassers>
3. Sheet E11. *Fracking and Coalbed Methane: Unconventional gas in the UK* (version 1), Free Range Energy Beyond Oil Project, October 2011 – <http://www.fraw.org.uk/fwd?e11>
4. 'Lords of the Manor' to cash in on 'fracking', Louise Gray, Daily Telegraph, 5<sup>th</sup> November 2011 – <http://www.telegraph.co.uk/earth/earthnews/8869801/Lords-of-the-Manor-to-cash-in-on-fracking.html>
5. *Onshore UK 13<sup>th</sup> Licensing Round Report* – see 'further reading' section.
6. *Petroleum Act 1998: Onshore Licensing*, Department of Energy and Climate Change, March 2012 – <http://og.decc.gov.uk/assets/og/data-maps/maps/landfields-lics.pdf>
7. *Licence Data: Recent Licences*, Department of Energy and Climate Change – [http://og.decc.gov.uk/en/olgs/cms/licences/licence\\_data/recent\\_licence/recent\\_licence.aspx](http://og.decc.gov.uk/en/olgs/cms/licences/licence_data/recent_licence/recent_licence.aspx)
8. *Strategic Environmental Assessment for a 14<sup>th</sup> – and subsequent – onshore oil and gas licensing round* – see 'further reading' section.
9. *Protecting manorial rights and chancel repair liability*, Landnet 25, Land Registry, June 2011 – [http://www1.landregistry.gov.uk/upload/documents/landnet\\_25.html#m3](http://www1.landregistry.gov.uk/upload/documents/landnet_25.html#m3)
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11. *What We Do: Coal Mining Records*, The Coal Authority – <http://coal.decc.gov.uk/en/coal/cms/services/records/records.aspx>
12. Wikipedia: 'Strategic environmental assessment' – [http://en.wikipedia.org/wiki/Strategic\\_environmental\\_assessment](http://en.wikipedia.org/wiki/Strategic_environmental_assessment)
13. Wikipedia: 'Aarhus Convention' – [http://en.wikipedia.org/wiki/Aarhus\\_convention](http://en.wikipedia.org/wiki/Aarhus_convention)
14. We're collating information on this issue in order to make a complaint to the UNECE on the specific issue of onshore oil and gas licensing. We'd like to hear from anyone affected by past or present licensing round decisions who'd like to work with us on this process. Email Paul Mobbs – [mei@fraw.org.uk](mailto:mei@fraw.org.uk) – for information.
15. There's a summary of how the different national minerals planning systems work, produced by the British Geological Survey, *Minerals UK: Legislation & policy* – <http://www.bgs.ac.uk/mineralsuk/planning/legislation/>
16. Paragraph 2(d), Schedule 2, *The Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999* – <http://www.legislation.gov.uk/ukxi/1999/293/contents/made>
17. You'll have to look at the planning and pollution policy for each nation:
  - ◆ In England see, *Planning Policy Statement 23: Planning and Pollution Control*, ODPS, November 2004 – <http://www.communities.gov.uk/documents/planningandbuilding/pdf/planningpolicystatement23.pdf>
  - ◆ In Scotland see, *The Interaction Between Land Use Planning and Environmental Regulation*, ERM for Scottish Executive Social Research, October 2004 – <http://www.scotland.gov.uk/Resource/Doc/26350/0026152.pdf>
  - ◆ In Wales see, *Planning Policy Wales*, Welsh Assembly Government, February 2011 – <http://wales.gov.uk/topics/planning/policy/ppw/?lang=en>
18. Page EV107, *Shale Gas*, Energy and Climate Change Select Committee – see 'further reading' section.
19. See the recent permits issued by SEPA to Greenpark Energy for their CBM exploration works near Canonbie. The examples in this paper are taken from SEPA "Controlled Activities Regulations" Licence no. CAR/L/1089447 issued March 2011, and CAR/L/1092847 issued in December 2011.
20. *The Groundwater Regulations 1998*, SI.2746/1998 – <http://www.legislation.gov.uk/ukxi/1998/2746/contents/made>
21. *Council Directive 80/68/EEC: The protection of groundwater against pollution caused by certain dangerous substances*, 17<sup>th</sup> December 1979 – <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:1980:020:0043:0048:EN:PDF>
22. Paragraph 3, Schedule 22, *The Environmental Permitting (England and Wales) Regulations 2010*, SI.675/2010 – <http://www.legislation.gov.uk/ukdsi/2010/9780111491423/schedule/22>

23. Paragraphs 3.35-3.39, *Environmental Permitting Guidance – Core Guidance*, version 3.2, DECC/DEFRA, September 2011 – <http://www.defra.gov.uk/publications/files/pb13560-ep2010guidance-110909.pdf>
24. RGN No.2. *Understanding the meaning of regulated facility*, Environment Agency, April 2010 – [http://www.environment-agency.gov.uk/static/documents/Business/RGN\\_2\\_Regulated\\_Facility\\_\(v2.0\)\\_30\\_March\\_2010.pdf](http://www.environment-agency.gov.uk/static/documents/Business/RGN_2_Regulated_Facility_(v2.0)_30_March_2010.pdf)
25. For example, see *Hydrogeological Risk Assessments for Landfills and the Derivation of Groundwater Control and Trigger Levels*, Environment Agency, 2003 – [http://www.environment-agency.gov.uk/static/documents/Business/hydrogeological\\_0403.pdf](http://www.environment-agency.gov.uk/static/documents/Business/hydrogeological_0403.pdf)  
The Scottish equivalent of this document is *SEPA Technical Guidance Note: Hydrogeological Risk Assessment for Landfills and the Derivation of Control and Trigger Levels*, SEPA, April 2005 – [http://www.sepa.org.uk/waste/waste\\_regulation/idoc.ashx?docid=c015b4b5-c355-40e0-aab5-5beb4fb8ed73&version=-1](http://www.sepa.org.uk/waste/waste_regulation/idoc.ashx?docid=c015b4b5-c355-40e0-aab5-5beb4fb8ed73&version=-1)
26. *The Halliburton Loophole*, Editorial, The New York Times, 2<sup>nd</sup> November 2009 – <http://www.nytimes.com/2009/11/03/opinion/03tue3.html>
27. *Working together: Your role in our environmental permitting*, Environment Agency, 2010 – [http://www.environment-agency.gov.uk/static/documents/Business/working\\_together\\_PPS\\_v2.0.pdf](http://www.environment-agency.gov.uk/static/documents/Business/working_together_PPS_v2.0.pdf)
28. *Your Right to Know: Public Registers*, Environment Agency – <http://www2.environment-agency.gov.uk/epr/search.asp>
29. *Gasland*, Josh Fox, Dogwoof Studios, 2011 – <http://www.gaslandthemovie.com/>
30. Wikipedia: 'Well drilling' – [http://en.wikipedia.org/wiki/Well\\_drilling](http://en.wikipedia.org/wiki/Well_drilling)
31. Wikipedia: 'Drilling mud' – [http://en.wikipedia.org/wiki/Drilling\\_mud](http://en.wikipedia.org/wiki/Drilling_mud)
32. Wikipedia: 'Casing (borehole)' – [http://en.wikipedia.org/wiki/Casing\\_%28borehole%29](http://en.wikipedia.org/wiki/Casing_%28borehole%29)
33. Wikipedia: 'Hydraulic fracturing' – [http://en.wikipedia.org/wiki/Hydraulic\\_fracturing](http://en.wikipedia.org/wiki/Hydraulic_fracturing)
34. For example see: *CSG headache on the Powder River*, Colin Bettles, FarmOnline, 8<sup>th</sup> March 2012 – [http://sl.farmonline.com.au/news/national\\_rural/agribusiness-and-general/general/csg-headache-on-the-powder-river/2480726.aspx](http://sl.farmonline.com.au/news/national_rural/agribusiness-and-general/general/csg-headache-on-the-powder-river/2480726.aspx)  
See also *CSG effects washing far downstream*, Colin Bettles, FarmOnline, 8<sup>th</sup> March 2012 – [http://sl.farmonline.com.au/news/national\\_rural/agribusiness-and-general/general/csg-effects-washing-far-downstream/2480730.aspx](http://sl.farmonline.com.au/news/national_rural/agribusiness-and-general/general/csg-effects-washing-far-downstream/2480730.aspx)
35. *AEA Harwell: Nuclear and Environmental Hazards*, Paul Mobbs, Banbury Environmental Research Group, published in SCRAM, no.76, 1990 – <http://www.fraw.org.uk/mei/archive/harwell-scram.pdf>
36. *Ohio Earthquake Likely Caused by Fracking Wastewater*, Mark Fischetti, Scientific American, 4<sup>th</sup> January 2012 – <http://www.scientificamerican.com/article.cfm?id=ohio-earthquake-likely-caused-by-fracking>
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39. *Marcellus fire at Chesapeake well site*, Anya Litvak, Pittsburgh Business Times, Thursday 24<sup>th</sup> February 2011 – <http://www.bizjournals.com/pittsburgh/blog/energy/2011/02/marcellus-fire-at-chesapeake-well-site.html?page=all>
40. *Infrared Video of Drilling Air Pollution* – see 'videos' section.
41. *Methane and the greenhouse-gas footprint of natural gas from shale formations* – see 'further reading' section.
42. *Greenhouse Gas Footprint of Shale Gas Obtained by High-Volume, Slick-Water Hydraulic Fracturing* – see 'further reading' section.
43. *Air sampling reveals high emissions from gas field* – see 'further reading' section.
44. *Natural Gas Operations from a Public Health Perspective*, Colborn et.al. (draft), Journal of Human and Ecological Risk Assessment, vol.17 no.11 pp.1039-1056, October 2011 – <http://www.endocrinedisruption.com/files/Oct2011HERA10-48forweb3-3-11.pdf>
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46. *What you need to know about natural gas production* – see 'videos' section.
47. UK-AIR: Air Information Resource, DEFRA – <http://uk-air.defra.gov.uk/>
48. *Air quality: the UK's invisible health crisis*, Caroline Lucas, Guardian Blogs, Tuesday 12<sup>th</sup> July 2011 – <http://www.guardian.co.uk/environment/blog/2011/jul/12/air-quality-health-crisis>
49. *Act now or face costly consequences, warns OECD*, OECD Press Release, 15<sup>th</sup> March 2012 – [http://www.oecd.org/document/34/0,3746,en\\_21571361\\_44315115\\_49897570\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/34/0,3746,en_21571361_44315115_49897570_1_1_1_1,00.html)
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51. *Company's plan for coal gasification in Swansea Bay* – see 'videos' section.
52. Wikipedia: 'The Limits to Growth' – [http://en.wikipedia.org/wiki/The\\_Limits\\_to\\_Growth](http://en.wikipedia.org/wiki/The_Limits_to_Growth)
53. *The Limits to Growth Revisited* – see 'further reading' section.
54. *Doubt is not an agreeable condition, but certainty is an absurd one* – see 'further reading' section.
55. *A Comparison of the Limits to Growth with Thirty Years of Reality* – see 'further reading' section.
56. *Oil's tipping point has passed* – see 'further reading' section.
57. *Natural Gas Extraction: Hydraulic Fracturing*, United States Environmental Protection Agency – <http://www.epa.gov/hydraulicfracture/>
58. *Is the future of British coal burning it underground?* – see 'videos' section.

## Feedback and queries

We welcome any feedback or queries you have about the work of the Free Range Network. Sheet A1 is managed by the Network's Energy Beyond Oil Project – please send any comments to [ebo@fraw.org.uk](mailto:ebo@fraw.org.uk)

Note that the Network works on an entirely voluntary basis, and we're all busy people, so we can't promise to reply.

## Further reading

Here is a list of books which we recommend if you wish to learn more about the issues and ideas covered in sheet D1:

- ◆ *Onshore UK 13<sup>th</sup> Licensing Round Report*, Deloitte, June 2008 – [http://www.psg.deloitte.com/News/LicensingRounds\\_GB\\_ON\\_0806.asp](http://www.psg.deloitte.com/News/LicensingRounds_GB_ON_0806.asp)
- ◆ *Strategic Environmental Assessment for a 14<sup>th</sup> – and subsequent – onshore oil and gas licensing round*, Conference Papers, Department of Energy and Climate Change – [http://og.decc.gov.uk/en/olgs/cms/tech\\_papers/conf\\_papers/conf\\_papers.aspx](http://og.decc.gov.uk/en/olgs/cms/tech_papers/conf_papers/conf_papers.aspx)
- ◆ *Shale Gas, Volume I: Report, together with formal minutes, oral and written evidence, Fifth Report of 2010-2012 Session (HC795)*, Energy and Climate Change Select Committee, 23<sup>rd</sup> May 2011 – <http://www.publications.parliament.uk/pa/cm201012/cmselect/cmenergy/795/795.pdf>
- ◆ *Methane and the greenhouse-gas footprint of natural gas from shale formations – A letter*, Howarth et. al., Climatic Change, vol.106 no.4 pp.679-690, 2011 – <http://www.eeb.cornell.edu/howarth/Howarth%20et%20a1%20%202011.pdf>
- ◆ *Greenhouse Gas Footprint of Shale Gas Obtained by High-Volume, Slick-Water Hydraulic Fracturing*, Howarth et. al., 2012 – <http://www.eeb.cornell.edu/howarth/Marcellus.html>
- ◆ *Air sampling reveals high emissions from gas field*, Jeff Tollefson, Nature, 7<sup>th</sup> February 2012 – <http://www.nature.com/news/air-sampling-reveals-high-emissions-from-gas-field-1.9982>
- ◆ *The Unconventional Hydrocarbon Resources of Britain's Onshore Basins: Shale Gas*, DECC, 2010 – [https://www.og.decc.gov.uk/UKpromote/onshore\\_paper/UK\\_onshore\\_shalegas.pdf](https://www.og.decc.gov.uk/UKpromote/onshore_paper/UK_onshore_shalegas.pdf)
- ◆ *The Unconventional Hydrocarbon Resources of Britain's Onshore Basins: Coalbed Methane*, DECC 2010 – [https://www.og.decc.gov.uk/UKpromote/onshore\\_paper/Promote\\_UK\\_CBM.pdf](https://www.og.decc.gov.uk/UKpromote/onshore_paper/Promote_UK_CBM.pdf)
- ◆ *Natural Gas Operations from a Public Health Perspective*, Colborn et.al. (draft), Journal of Human and Ecological Risk Assessment, vol.17 no.11 pp.1039-1056, October 2011 – <http://www.endocrinedisruption.com/files/Oct2011HERA10-48forweb3-3-11.pdf>
- ◆ *Methane contamination of drinking water accompanying gas-well drilling and hydraulic fracturing*, Osborn et. al., Proceedings of the National Academy of Sciences, 2011 – <http://www.pnas.org/content/early/2011/05/02/1100682108.full.pdf+html>
- ◆ *Doubt is not an agreeable condition, but certainty is an absurd one*, Ecolonomics No.11, Paul Mobbs, April 2011 – <http://www.fraw.org.uk/mei/ecolonomics/01/ecolonomics-011-20110416.shtml>
- ◆ *A Comparison of the Limits to Growth with Thirty Years of Reality*, Graham Turner, Commonwealth Scientific and Industrial Research Organisation (CSIRO), June 2008 – <http://www.fraw.org.uk/fwd?csiro2008>
- ◆ *Oil's tipping point has passed*, James Murray and David King, Nature, vol.481 pp.433-435, 26<sup>th</sup> January 2012 – <http://www.fraw.org.uk/fwd?murrayking2012>
- ◆ *The Limits to Growth Revisited*, Ugo Bardi, Springer, June 2011. ISBN 9781-4419-9415-8. £45.
- ◆ *Limits to Growth: The 30 Year Update*, Donella Meadows, Jorgen Randers and Dennis Meadows, Earthscan, 2004. ISBN 978-1844071449. £14.99.

## Videos

- ◆ *What you need to know about natural gas production*, Theo Colborn, TEDx, 2011 – <http://www.endocrine-disruption.com/chemicals.video.php>
- ◆ *Is the future of British coal burning it underground?*, Channel 4 News, Wednesday 4<sup>th</sup> January 2012 – <http://www.channel4.com/news/is-the-future-of-british-coal-burning-it-underground>
- ◆ *Fracking: Concerns over gas extraction regulations*, Susan Watts, BBC Newsnight, 20<sup>th</sup> March 2012 – <http://www.bbc.co.uk/news/uk-17448428>
- ◆ *Company's plan for coal gasification in Swansea Bay*, Iolo Dafydd, BBC News, 16<sup>th</sup> January 2012 – <http://www.bbc.co.uk/news/uk-wales-16567883>
- ◆ *Infra-red Video of Drilling Air Pollution*, Chesapeake Bay Foundation, YouTube, 9<sup>th</sup> November 2011 – <http://www.youtube.com/watch?v=d-ybofa09wI>
- ◆ *The hidden cost of the US hydraulic fracturing*, Ecologist Film Unit, 2011 – <http://www.youtube.com/watch?v=nCyHS7fKmXI>
- ◆ *Is Coal Seam Gas worth the risk? – The backlash to a billion dollar industry*, Peter McCutcheon, ABC News (Australia), 19<sup>th</sup> September 2011 – <http://www.abc.net.au/7.30/content/2011/s3321223.htm>

## Web sites

Here is a list of web sites we recommend if you wish to learn more about the issues and related ideas covered in sheet A1:

- ◆ *Jam Tomorrow: Unconventional Gas and Britain's Energy Future*, Free Range Energy Beyond Oil Project, 2011 – <http://www.fraw.org.uk/fwd?jamtomorrow>
- ◆ Frack Off! – <http://frack-off.org.uk/>
- ◆ No Fracking UK – <http://nofrackinguk.com/>
- ◆ Ribble Estuary Against Fracking – <http://reafg.blogspot.com/>
- ◆ The Vale Says NO! – <http://thevalesaysno.com/>
- ◆ Don't Frack with the Fylde – <http://dont-frack-with-the-fylde.blogspot.com/>
- ◆ Fracking Free Ireland – <http://frackingfreeireland.org/>
- ◆ FrackTracker (Center for Healthy Environments and Communities) – <http://www.fracktracker.org/>

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