SCIENCE POLICY RESEARCH UNIT

Scope for public influence on shale gas decision-making through the planning system in England: Clues from Preston New Road

SEG Seminar, 02 October 2018

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Presentation

- Brief history of hydraulic fracturing ('fracking') / onshore unconventional hydrocarbon extraction ('shale development') as a public controversy in the UK
- UK public attitudes; and key perceptions and frames
- FFEfP – focus on 'accommodation'
- Preston New Road inquiry – the case of climate change
- Can publics influence shale development decision-making through the English planning system?

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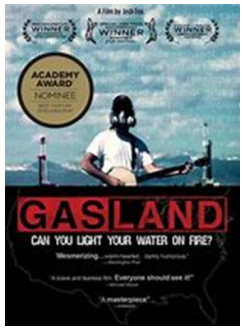
Fracking as a public issue in the UK – A brief history



HOME » FINANCE » NEWS BY SECTOR » ENERGY

Cuadrilla admits drilling caused Blackpool earthquakes

Private company Cuadrilla Resources has admitted that its activities probably caused two "seismic events" that occured in Blackpool earlier this year.

Department of Energy & Climate Change

Potential Greenhouse Gas Emissions Associated with Shale Gas Extraction and Use

Professor David J C MacKay FRS
Dr Timothy J Stone CBE

Fracking Go-ahead For National Parks as Controversial Infrastructure Act Becomes Law

By Kyla Mandel • Friday, February 13, 2015 - 04:47 *Read time: 3 mins*

UK DESMOG SERIES

Fracking application rejected by Lancashire county council

Anti-fracking campaigners visibly delighted as councillors reject Cuadrilla's application to drill for shale gas at Preston New Road

Lord Howell of Guildford Chair, Soft Power Committee

My Lords, does the Minister accept that it could be a mistake to discuss fracking in terms of the whole of the United Kingdom in one go? Obviously, in beautiful rural areas there are worries not just about drilling and fracking—which I think are exaggerated—but about trucks, deliveries, roads and disturbance, which are quite justified. However, there are large, uninhabited and desolate areas, certainly in parts of the north-east, where there is plenty of room for fracking, well away from anybody's residence, and where it could be conducted without any threat to the rural environment. Does the Minister agree that a distinction should be made between one area and another rather than lumping them together, and that if we can push ahead with this kind of gas production, it will take us fast away from coal burning, which is increasing at the moment because of the delays in authorising gas production that the noble Lord, Lord Teverson, talked about a moment ago?

Shale ga
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June 2012

The Carboniferous Bowland geology and resource

British Geological Survey

THE ROYAL SOCIETY

ROYAL ACADEMY OF ENGINEERING

Follow

By **Emily Gosden**, ENERGY EDITOR
6 OCTOBER 2016 • 8:22PM

Fracking beneath UK homes is set to take place for the first time next year after the Government overruled local councillors and approved Cuadrilla's plans to explore for shale gas in Lancashire.

Scottish government backs ban on fracking

3 October 2017 Share

Cuadrilla secures final approval for first UK frack since 2011

BY RUTH HAYHURST ON SEPTEMBER 24, 2018 • (26 COMMENTS)

The Oil and Gas Authority has cleared the way for fracking at Cuadrilla's shale gas site near Blackpool.

2010 2011 2012 2013 2014 2015 2016 2017 2018

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The "Battle of Balcombe"

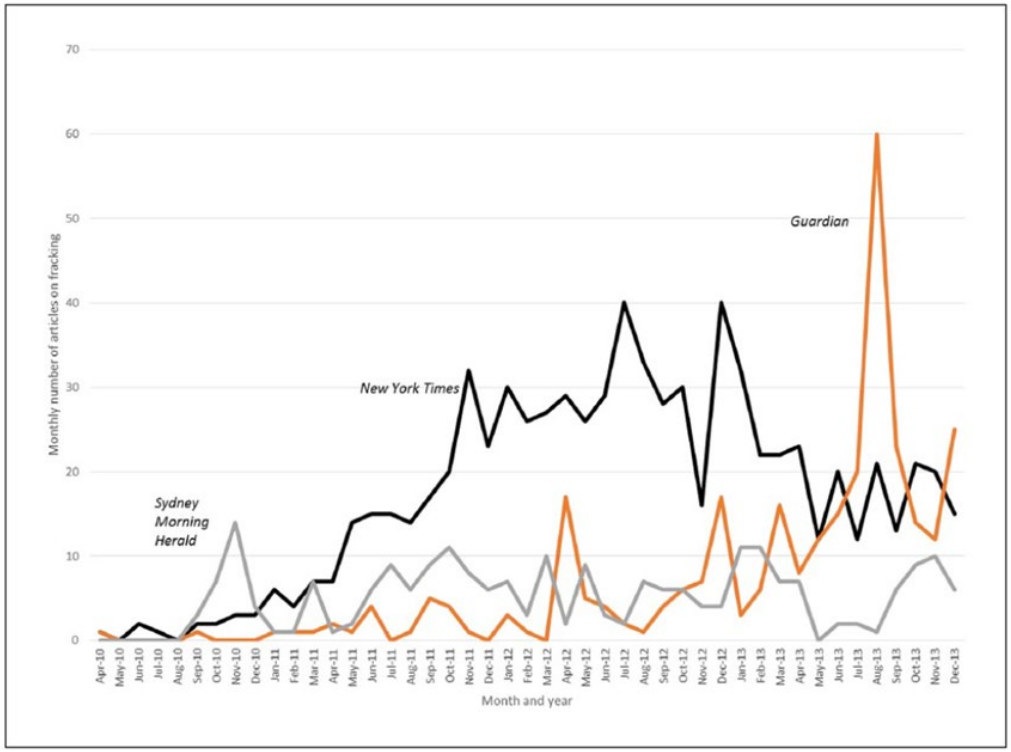
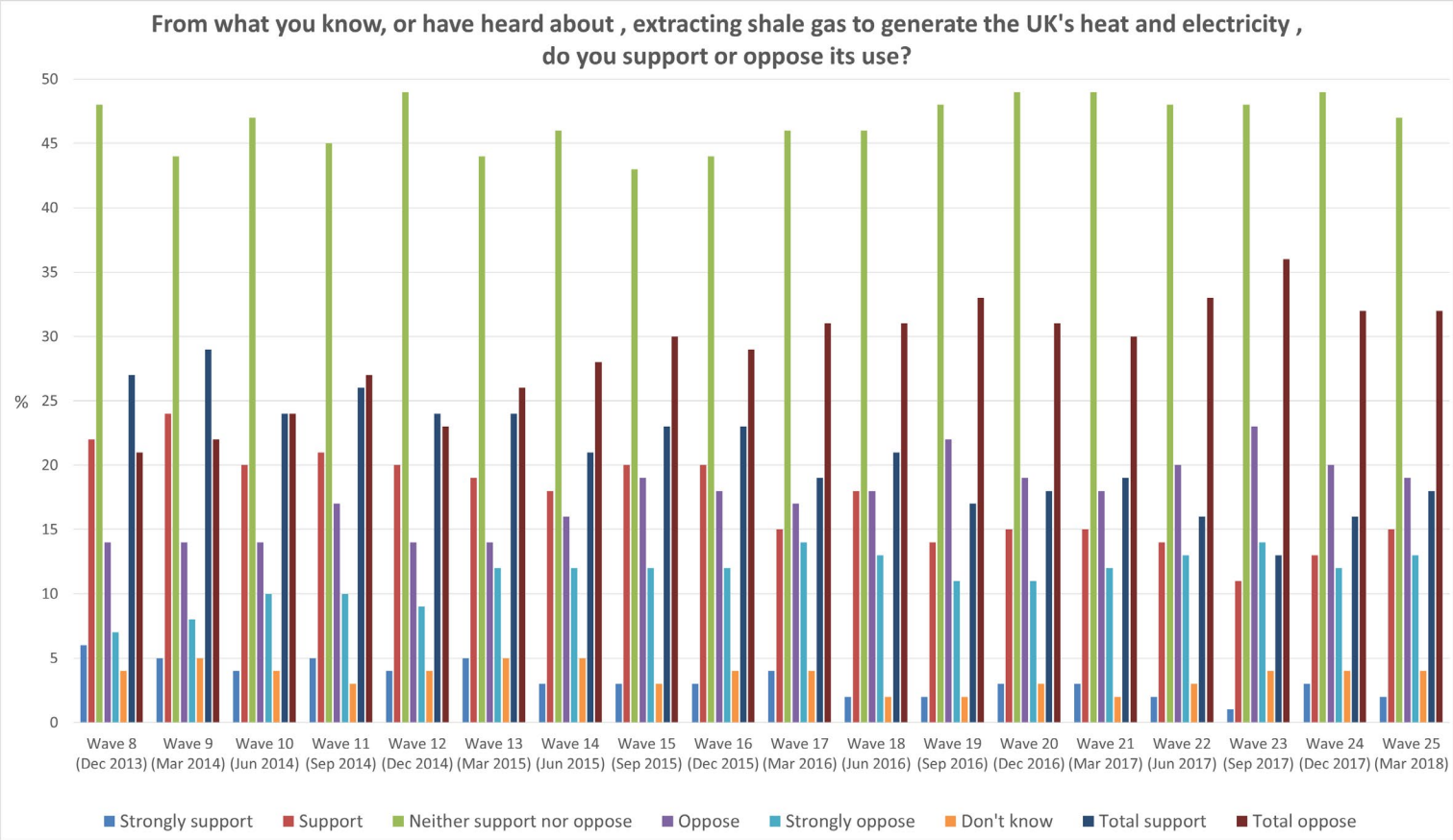


Figure 4. Coverage of fracking in *The New York Times*, the *Guardian* of London, and the *Sydney Morning Herald*, by date.

Mazur, A. 2014. How did the fracking controversy emerge in the period 2010-2012?, *PUS*, 25(2): 207-222

Public Attitudes – BEIS tracker



BEIS Public Attitudes Tracker - https://www.gov.uk/government/collections/public-attitudes-tracking-survey

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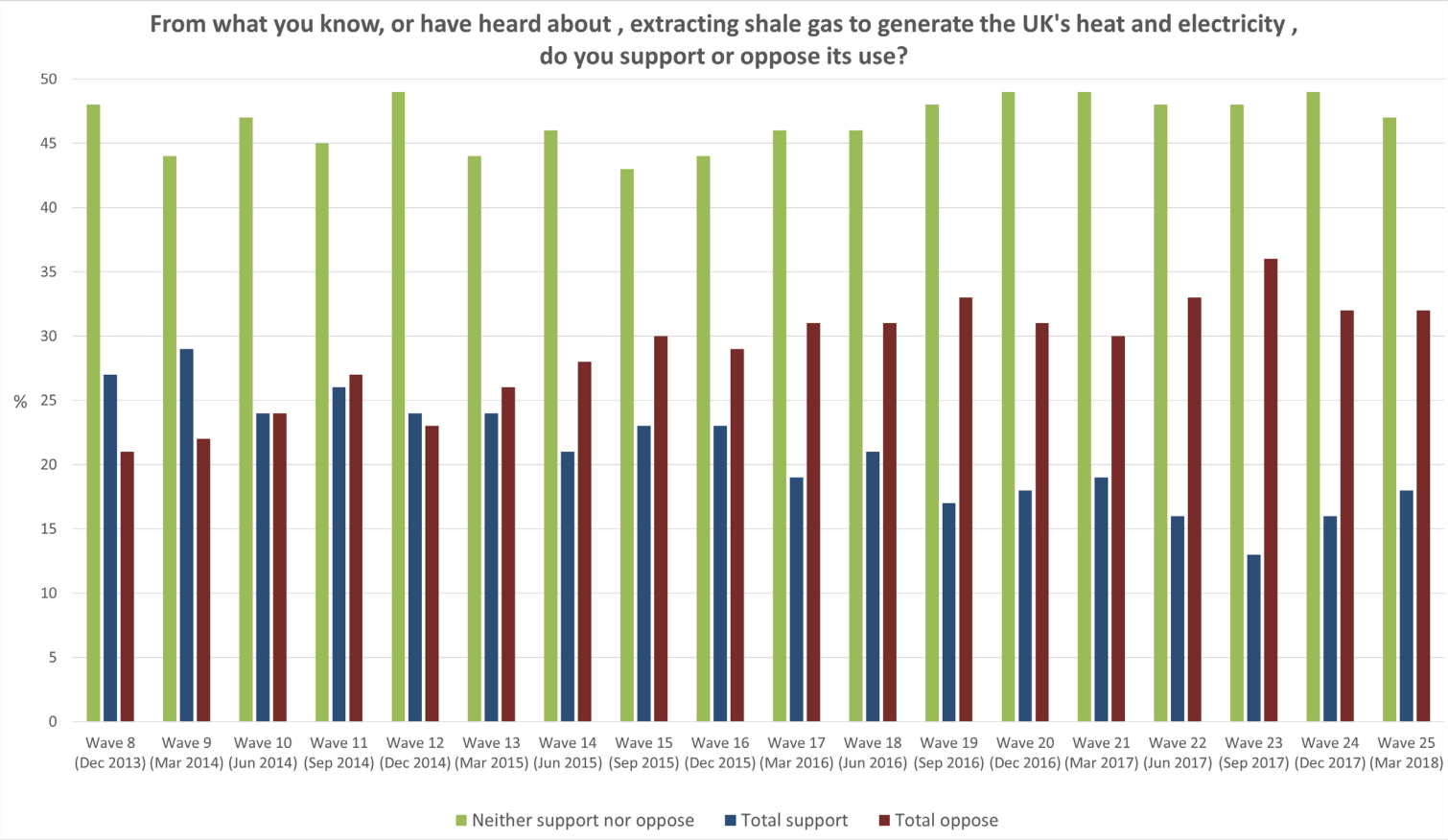
Public Attitudes – BEIS tracker



BEIS Public Attitudes Tracker - https://www.gov.uk/government/collections/public-attitudes-tracking-survey

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BEIS tracker: Reasons for opposition and support

- Wave 25 (Mar 2018) reasons for opposition:
  - Loss/destruction of natural environment (57%)
  - Risk of contamination of water supply (31%)
  - Risk of earthquakes (29%)
  - Not a safe process (29%)
  - Too much risk/uncertainty to support at present (28%)

- Wave 25 (Mar 2018) reasons for support
  - Reduce UK's dependence on other countries for energy supply (36%)
  - Need to use all available energy sources (35%)
  - Reduces dependence on other fossil fuels (31%)
  - May result in cheaper energy bills (26%)


HOME › NEWS › POLITICS

We cannot afford to miss out on shale gas

Safe fracking will cut energy bills and create wealth without ruining precious countryside, writes David Cameron

Britain has led the way in technological endeavour: fracking is part of this tradition Photo: AP

By David Cameron
10:04PM BST 11 Aug 2013

Politics
Finance » Energy »
Environment »

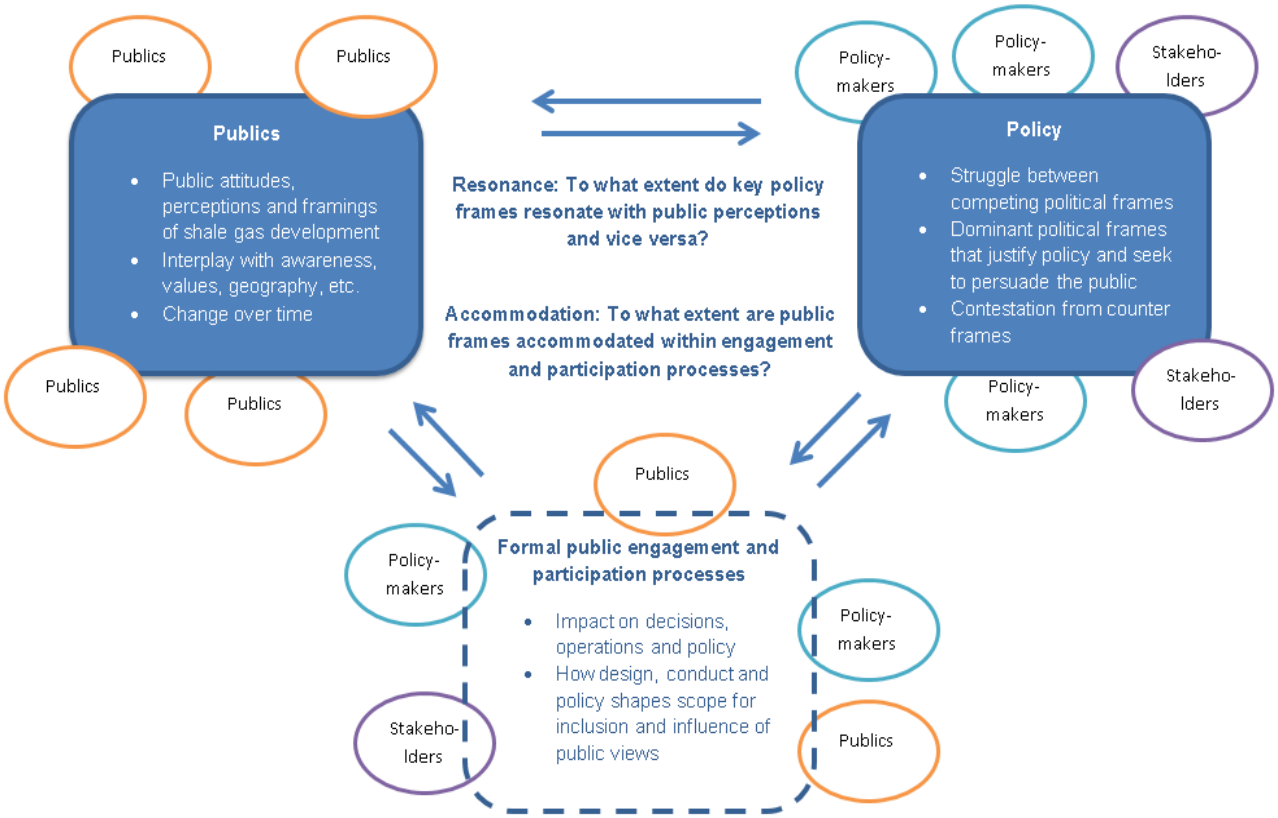
UK perceptions and frames - pro

Frame	Elements	Frequency
Shale development as an economic opportunity	National economic opportunities – global competitiveness, economic growth, energy prices (for consumers and industry), rebalance economy and boost manufacturing, employment and supply chains, tax revenues, balance of payments, investors require certainty / will lose patience	7
	Local economic opportunities – employment, community benefits packages, local business rates	4
Domestic shale gas as providing greater energy security	Reliability of domestic, indigenous supply, self-sufficiency, concerns over Russia	8
Shale gas as a bridge	Cleaner than coal, needed for years to come, renewables not ready yet, win-win of continued reliance on fossil fuels (and maintaining lifestyles) whilst reducing GHG emissions	9
Risks of fracking safely manageable	Robust regulation, UKs proud track record, existing and familiar technology widely used in the industry for many years, victim of 'scare stories', myths and inaccurate reports, poor practice in US can't be repeated in UK, solution to controversy is to communicate authoritative scientific reassurances to sceptical publics	7

UK perceptions and frames - anti

Frame	Elements	Freq.
Fracking as a threat to the local environment and public health	Dirty, toxic and polluting, extreme energy, moratoria in other jurisdictions, particularly unsuited to densely populated areas, untested and experimental in UK, under-researched and novel, uncertainty over impacts, additional risks compared to conventional oil and gas development, long-lasting and irreversible impacts, potential to affect habitability of place, apparent rush to frack at odds with cautious approach to regulation, threats beyond direct perception for lay people, experts as remote and complacent and risks being under estimated by public bodies	**11**
Shale gas as antithetical to adequately responding to climate change	Fugitive emissions, methane worse than CO2, diversion or road block, crowd-out investment in renewables, lock-in fossil fuel dependency, slow transition, non-transition, keep it in the ground, strictly time-limited duration of 'bridge' vs. slow progress in establishing industry, short-termist quick fix, fossil fuels as archaic and finite, deferring rather than resolving issues, extending reliance on fossil fuels contrary to public expectations, at odds with sensed urgency of need to transition, too little too late or a step backwards, maintaining energy status quo	**14**
The governance of shale gas development as democratically suspect	Lack of social license to operate, 'deliberative speak', national need vs. localism, lack of scope for citizen input, need for greater influence for local councils and communities, assumption that exploration will go ahead regardless of public opposition, lack of scope for meaningful participation or reflection on public values, support for national public consultation, failure to secure social license justifies 'uninvited' participation	**10**
Government, regulators, experts and industry as untrustworthy	Lack of transparency, local community benefit packages as bribes, lack of impartiality, enablers not regulators, independence of regulators questioned , suppression of information, biased reports, 'frackademia', planning system not a fair arbiter , lobbying, Government too closely tied to industry, scepticism to price cuts being passed onto consumers, industry can't be trusted to self-monitor and –regulate , lack of trust in those that provide information , institutional downplaying of uncertainty, Government adopted premature position of partisan advocacy	**10**

FFEfP Overview: 3 objects of analysis and 2 key concepts



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Accommodation of anti-fracking frames in regulatory decision-making

Hilson (2015) asks “which [fracking] frames are heard in English planning?”

Planning policy, EIA regs. and draft permitting decisions

Identifies two anti-fracking frames – local risk and global climate

Ambiguity over inclusion of ‘end-use’ of fuel as an indirect impact for EIA purposes; separation of oversight into phases; PPGM para. 124

Other specialist regulatory regimes


Ministry of Housing, Communities & Local Government

National Planning Policy Framework

Planning for hydrocarbon extraction

This section is comprised of

- The phases of onshore hydrocarbon extraction
- How mineral planning authorities plan for hydrocarbon extraction
- The planning application process
- Development management procedures
- Environmental Impact Assessment
- Determining the planning application
- Aftercare and restoration
- Annex A: Shale gas and coalbed methane/coal seam gas
- Annex B: Outline of process for drilling an exploratory well
- Annex C: Model planning conditions for surface area

The phases of onshore hydrocarbon extraction

July 2018
Ministry of Housing, Communities and Local Government

What are conventional and unconventional hydrocarbons?

Hydrocarbon extraction covers both conventional and unconventional hydrocarbons.

Conventional hydrocarbons are oil and gas where the reservoir is sandstone or limestone.

Unconventional hydrocarbons refers to oil and gas which comes from sources such as shale or coal seams which act as the reservoirs.

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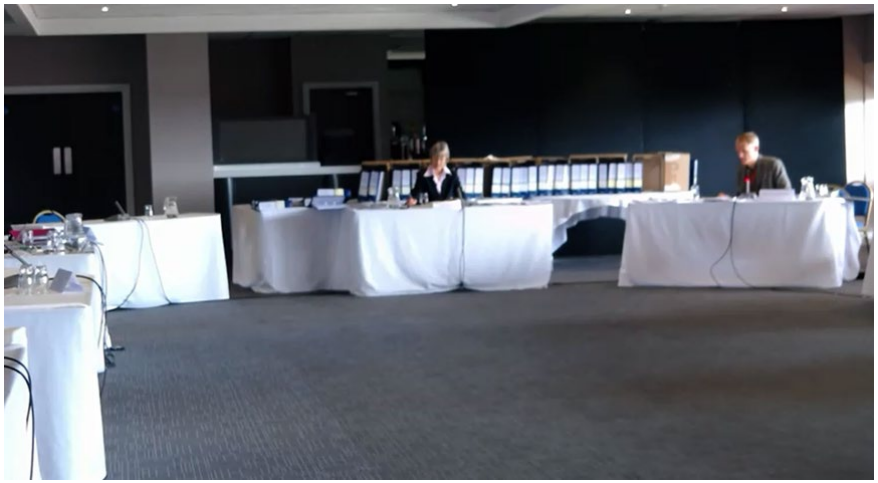
Preston New Road

- Cuadrilla initially applied for planning permission in February 2014
- EA granted two sites environmental permits in early 2015
- LCC planning officer recommended both sites be refused permission (PNR – noise; RW – noise and traffic)
- Cuadrilla put forward new measure to mitigate noise; planning officer changed recommendation on PNR (traffic issue remained at RW)
- Late June 2015 LCC refused both sites permission going against officer's recommendation on PNR (refused on noise and visual impact grounds)

PNR site, August 2018 – drillordop.com

PNR Planning Inquiry

- September 16 2015 WMS
- Cuadrilla announce appeal; Greg Clark (then SoS for Communities and LG) recovers appeals
- Public inquiry February and March 2016
- Inspector recommends PNR be granted permission, RW be refused (still traffic)
- On PNR, SoS (now Sajid Javid) accepts recommendation and reasoning of Inspector, grants planning permission (reopens inquiry on RW)
- Cuadrilla have completed drilling two wells, the first of which will be fracked immanently



Kevin Anderson, FoEs expert witness on climate change, is cross-examined (Feb 26 2018)

- FoE, a rule 6 party at the inquiry, opposed the sites on the grounds of climate change, public health, and waste management

The issue of climate change at the inquiry

- Three key disputes over climate change at the inquiry
  1. Reconcilability of the development of a shale gas industry and UKs climate change commitments
  2. Acceptability of the projects' GHG emissions impact in and of themselves
  3. Credibility of the GHG emissions estimate, particularly the estimated level of methane emissions

- FoE argued
  1. Shale gas industry irreconcilable with climate change commitments, especially post-Paris and in the light of CCS competition cancellation
  2. Two sites' emissions are in and of themselves an unacceptable use of constrained carbon budgets
  3. The GHG emissions estimate inevitable an underestimation

- Cuadrilla argued
  1. 16 September 2015 sets out the policy view that shale development helps achieve climate change targets ('bridging fuel' argument), this view can't be questioned through this inquiry, and response to Paris/CCS matter for national policy development
  2. GHG impact of projects themselves negligible and insignificant ('drop in the ocean' argument)
  3. Estimates are reliable and in any event have already been found acceptable by the EA

SHALE GAS AND OIL POLICY :Written statement - HCWS202

WS Department for Energy and Climate Change Made on: 16 September 2015

Made by: Amber Rudd (Secretary of State for Energy and Climate Change) © HCWS202

SHALE GAS AND OIL POLICY

My Rt Hon Friend Greg Clark (Secretary of State for Communities and Local Government) and I wish to set out the Government's view that there is a national need to explore and develop our shale gas and oil resources in a safe, and sustainable and timely way, and the steps it is taking to support this. In laying this statement before Parliament, it formally replaces the Shale Gas and Oil Policy Statement issued by DECC and DCLG on 13 August 2015. This statement to Parliament should be taken into account in planning decisions and plan-making.

The national need to explore our shale gas and oil resources

Exploring and developing our shale gas and oil resources could potentially bring substantial benefits and help meet our objectives for secure energy supplies, economic growth and lower carbon emissions.

Having access to clean, safe and secure supplies of natural gas for years to come is a key requirement if the UK is to successfully transition in the longer term to a low-carbon economy. The Government remains fully committed to the development and deployment of renewable technologies for heat and electricity generation and to driving up energy efficiency, but we need gas - the cleanest of all fossil fuels - to support our climate change target by providing flexibility while we do that and help us to reduce the use of high-carbon coal.

Natural gas is absolutely vital to the economy. It provides around one third of our energy supply.

· About one third of gas supply is used for industry and services, not just for power or heating but also as feedstock, e.g. for chemicals;

· one quarter is used for electricity generation; and

· the remainder is used in domestic households for heating and cooking[1].

Since 2004, the UK has been a net importer of gas due to the rapid decline of production from the UK Continental Shelf.

· Last year around 45% of UK gas supply was made up of net imports … . Our projections suggest that domestic production will continue to decline and, without any contribution from shale gas, net imports could increase to 75% of the gas we consume by 2030[3].

· Domestic oil production has also declined since reaching a peak in 1999. Currently net imports comprise around 40% of the oil we use and DECC projections suggest net imports could increase to 73% by 2030[4].

Meanwhile events around the world show us how dangerous it can be to assume that we will always be able to rely on existing sources of supply. Developing home-grown shale resources could reduce our (and wider European) dependency on imports and improve our energy resilience.

There are also potential economic benefits in building a new industry for the country and for communities.

· Nationally, we will benefit from development of a new industrial sector, building on the experience and skills developed here in 50 years of on- and offshore oil and gas development.

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Recommendation and Decision

- The Planning Inspector recommends
  1. WMS remains Government position and subsequent issues of CCS and Paris are matters for national policy development; consideration should be limited to the impact of the emissions of the sites themselves (e.g. merits of Government policy not to be questioned here)
  2. Project emissions represent very small fraction of carbon budgets whether compared nationally or regionally; in the light of policy support those emissions are entirely reasonable and fully justified
  3. Assumptions and methods used in the GHG emissions estimate can be safely relied upon, there has been no material error in the estimate of methane emissions

- SoS accepts Inspector's reasoning on issue of climate change in full

Department for Communities and Local Government

Mrs Charlotte Dyer
Herbert Smith Freehills LLP
Exchange House
Primrose Street
London
EC2A ECG

Our Ref: APP/Q2371/W/15/3134386
APP/Q2371/W/15/3130923
APP/Q2371/W/15/3134385
APP/Q2371/W/15/3130924

6 October 2016

Dear Mrs Dyer

TOWN AND COUNTRY PLANNING ACT 1990 – SECTION 78

APPEAL A: APPEAL MADE BY CUADRILLA BOWLAND LIMITE
EXPLORATION SITE ON LAND THAT FORMS PART OF PLUMP
WEST OF THE FARM BULIDINGS, NORTH OF PRESTON NEW R
NEW ROAD, PRESTON, LANCASHIRE
APPLICATION REF: LCC/2014/0096

APPEAL B: APPEAL MADE BY CUADRILLA BOWLAND LIMITE
MONITORING SITE LOCATIONS IN A 4KM RADIUS OF THE PRO
NEW ROAD EXPLORATION SITE, NEAR LITTLE PLUMPTION, P
LANCASHIRE
APPLICATION REF: LCC/2014/0097

APPEAL C: APPEAL MADE BY CUADRILLA ELSWICK LIMITED
EXPLORATION SITE ON AGRICULTURAL LAND THAT FORMS
HALL, TO THE WEST, NORTH AND EAST OF ROSEACRE WOO
FORMS PART OF THE DEFENCE HIGH FREQUENCY COMMUNI
(DHFCS) SITE BETWEEN ROSEACRE ROAD AND INSKIP ROAD
ROAD AND INSKIP ROAD, ROSEACRE AND WHARLES, PREST
APPLICATION REF: LCC/2014/0101

Department for Communities and Local Government
Maria Stasiak, Decision Officer
Planning Casework
3rd Floor Fry Building
2 Marsham Street
London SW1P 4DF

Email: PCC@communities.gsi.gov

The Planning Inspectorate

Report to the Secretary of State for Communities and Local Government

by Wendy McKay LLB Solicitor (Non-practising)

an Inspector appointed by the Secretary of State for Communities and Local Government

Date: 4 July 2016

Appeals under section 78 of the Town and Country Planning Act 1990 as amended by the Planning and Compensation Act 1991 made by

Cuadrilla Bowland Limited and Cuadrilla Elswick Limited

Inquiry held on 9, 10, 11, 12, 16, 17, 18, 19, 23, 25 and 26 February and 2, 3, 4, 8, 9, 10, 11 and 16 March 2016
Accompanied site inspections were carried out on 24 February and 17 March 2016

Agricultural land that forms part of Plumpton Hall Farm, west of the farm buildings, north of Preston New Road, off Preston New Road, Preston, Lancashire and land to the west, north and east of Roseacre Wood and between Roseacre Road, Roseacre and Inskip Road, Wharles on agricultural land that forms part of Roseacre Hall to the west, north and east of Roseacre Wood, and land that forms part of the Defence High Frequency Communications Service (DHFCS) site between Roseacre Road and Inskip Road, off Roseacre Road and Inskip Road, Roseacre and Wharles, Preston together with monitoring sites in a 4km radius of the proposed Preston New Road exploration site and monitoring sites in a 4km radius of the proposed Roseacre Wood exploration site.

File Refs: APP/Q2371/W/15/3134386, APP/Q2371/W/15/3130923, APP/Q2371/W/15/3134385, APP/Q2371/W/15/3130924

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Analysis – Can publics influence shale development decision-making through the English planning system?

- 3 key procedural features of planning oversight of shale development that severely limit accommodation of key public arguments and concerns
  1. Vertical deference - deferential orientation to government policy and the reasoning underpinning it
  2. Horizontal deference – deferential orientation to other regulators and regulation in general
  3. Double compartmentalisation – application-by-application, phase-by-phase bounding and sequencing of oversight
- Confounded by an evident lack of willingness and/or capacity to scrutinise technical claims
  - Lack of scrutiny over Cuadrilla's methane emissions and flowback fluid volume estimates
- Revisiting Hilson (2015)
  - If anything a little optimistic about planning's capacity to accommodate the 'global climate frame'
  - The subsequent (to Hilson's work) WMS and the approach taken to it at this inquiry effectively make it impossible to find a shale development application unacceptable on climate grounds
  - On the 'local risks frame', fails to fully grasp in-practice restrictiveness of the assumption of effective regulation
- Scope for public influence differs on a case-by-case and issue-by-issue basis –
  - Given current planning and energy policy landscape, little scope for accommodation of arguments regarding climate change and energy policy; public health, regulatory efficacy and uncertainty over impacts
  - Depending on the site, scope for influence through arguments over more 'mundane' issues, perhaps especially traffic

Broader implications; points for discussion

- Does it matter?
  - Environmental justice, normative arguments…
  - Lack of scope for influence may backfire…
  - Increasing prominence of the 'bad governance' frame…
  - If not planning then where?

- Planning's role in securing GHG emissions reductions
  - Planning policy makes clear the role of planning in securing 'radical reductions in greenhouse gas emissions' (e.g. NPPF para. 93)
  - Hilson (2014) identifies the key statutory climate duties relevant to planning oversight of shale gas development in the UK (e.g. in England the Planning and Compulsory Purchase Act 2004 s.19(1A))
  - This statutory and policy background imposes a duty on planning authorities to contribute to climate change mitigation, but doesn't specify the types of development that might help or hinder this aim – the WMS works in this void

- CCC role
  - Amendment to Infrastructure Act gives the Committee on Climate Change the duty to report to the Government on the compatibility of exploiting domestic onshore petroleum (including shale gas) with UK carbon budgets

- NSIP reforms?
  - Government currently consulting on proposal to determine shale gas production application under the Nationally Significant Infrastructure Project regime

Thank you!

Any questions?

Contact: laurence.williams@sussex.ac.uk

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