



FRACKING IN UK (ENGLAND AND WALES)



Study by Cédric Stanghellini, EVS Erasmus+ Volunteer
This document was updated in May 2016
Email enquiries regarding the re-use of this information to:
cedric1.geai@gmail.com or goodenergiesalliance@gmail.com

Description of United Kingdom

United Kingdom



Capital: London
Language: English

Area: 242,500 km², the 9th in Europe

Maritime area: 7,048,000 km², 5th largest in the world

Population: 64,000,000, 2nd in Europe

GDP: 5th country in the World and 2nd in Europe

GDP growth: +1,7% (Q4 2015)

Unemployment rate: 5.4% (Q4 2015)- but Zero-hour contract recorded

Government: Unitary parliamentary constitutional monarchy

Legislature: House of Commons (650 MPs) and House of Lords (813 Lords)



Link:
Current economic
indicators of UK

Fracking in United Kingdom

2011:

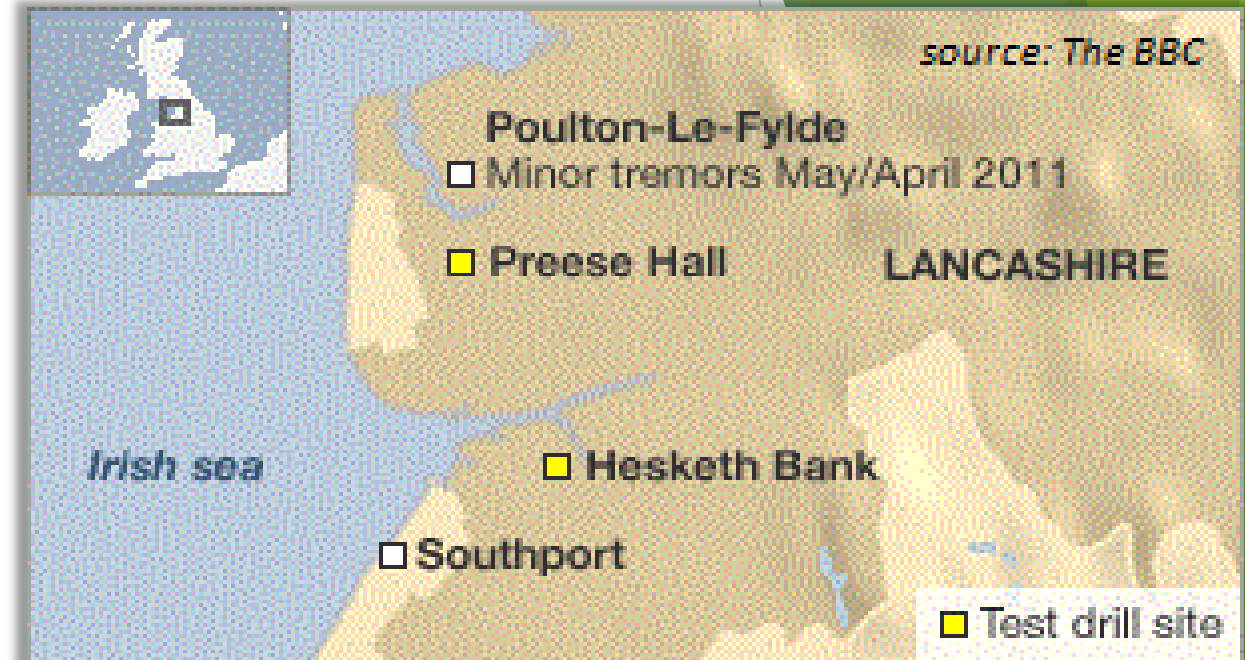
First on-shore fracking in Lancashire by Cuadrilla => Seismic activity!

June 2011 and April 2012:

Fracking stopped after it caused two earthquakes, magnitude 2.3 and 1.5 on the Richter scale, causing deformation of well bore.

But a report into the incidents concluded that earthquake risk was minimal, and recommended the process be given nationwide clearance.

Link: International Energy Agency
Current indicators of energy in UK



The well responsible for earthquakes

Fracking regulation in United Kingdom

Several Studies

June 2012: The Royal Society and Royal Academy of Engineering
“Health, safety and environmental risks can be managed effectively in the UK, by implementing and enforcing best operational practice”.

December 2013: Department of Environment and Climate Change
 ⇒ Strategic Environmental Assessment for Further Onshore Oil and Gas Licensing.

Queen’s speech 2014 (written by the Prime Minister):
 => *Includes measures to make it easier for companies to drill for shale gas.*

Main reforms announced:

- Introduce **tax incentives for shale gas exploration**,
- local community financial benefits;
- Allow license holders to have **an automatic access rights to drill under landowners’ property** ;
- Fast track for planning, decisions taken from local councils, centralised

David
Cameron,
Conservative
Prime Minister
since 2010,
re-elected in
2015



The Infrastructure Act, 2015

The reform adopted at the end of 2015 introduces “Onshore hydraulic fracturing: safeguards”

Where an application is made, the **Secretary of State** may issue a hydraulic fracturing consent if he is satisfied that it is appropriate to issue the consent.

⇒ This is included in **11 special notices listed in the *Infrastructure Act, 2015*.**

Regulation of Fracking in UK

Main relevant texts

UK Petroleum exploration and development licences (PEDLs)

Allows a company to pursue a range of activities, including exploration and development of unconventional gas, subject to necessary drilling/development consents and planning permission.

The Petroleum Act 1998

“Each of these confers such rights over a limited area and for a limited period”.

The Infrastructure Act, 2015

A wide-ranging piece of planning and infrastructure legislation which targets "transport, energy provision, housing development and nationally significant infrastructure projects" **with introduction of more flexible rules for hydraulic fracturing.**

Many permissions and notices are required before fracking can start

=> **Planning permission**

=> **Environmental permits**, including for mining waste, from the Environment Agencies

=> **Health and safety regulations** and permits from the **The Health and Safety Executive (HSE**, the national independent watchdog for work-related health, safety and illness)

=> **Consent to drill and frack**, from DECC.

=> **Special permits**: drill cuttings, flowback fluids, waste gases and wastes left underground.

=> **Special permit: groundwater activities**, depending on the local hydrology.

The 14th Round - Oil and Gas Licensing Round

The 14th Round, a major licensing operation

8 July to 28 October 2014

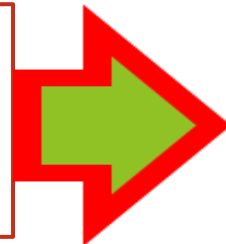
95 applications were received from 47 companies covering 295 Ordnance Survey Blocks.

- Decision not to award licences in **Scotland and Wales: only in England**
- **159 blocks** were taken forward for further consideration

17th December 2015:

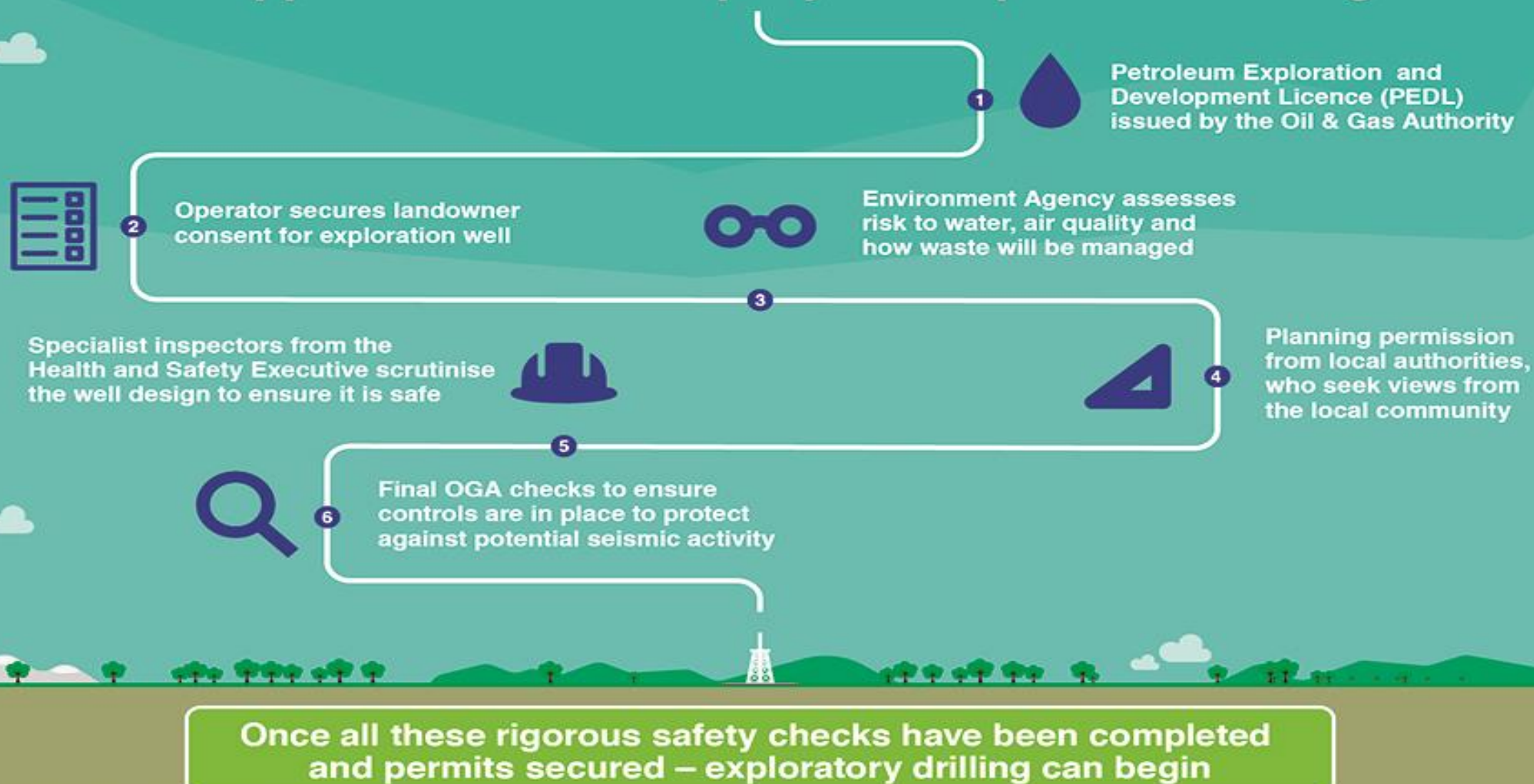
=> **Licences for a total of 159 blocks** were formally offered to successful applicants.

This round was proposed
at the same time as
onshore licences reform.

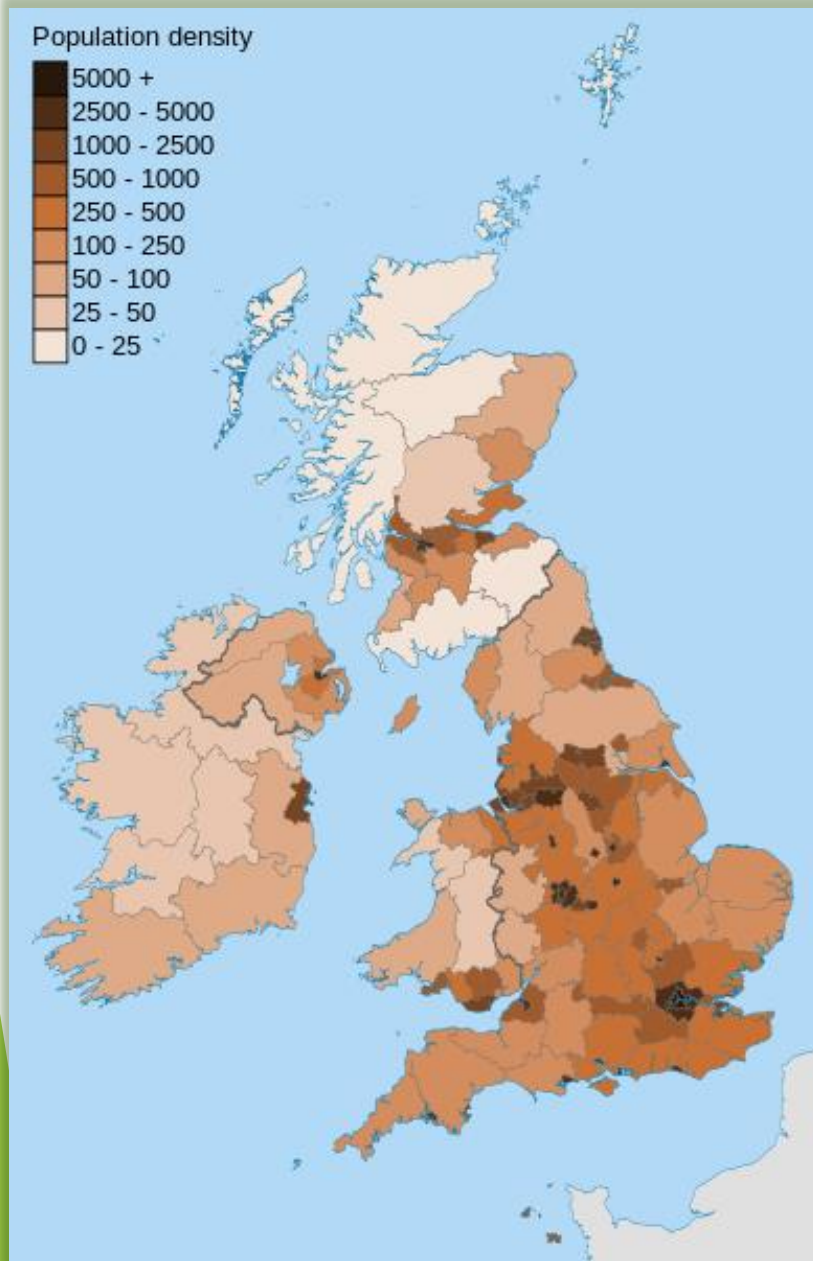


The Government
wished things to
move quickly.

What happens before a company can explore for shale gas?



Context in United Kingdom



Conflict between fracking licences and dense population

A very dense population:
246 people/km² in UK, 4th country in Europe

By comparison:
112/km² in EU, 111/km² in France, 60/km² in Ireland.



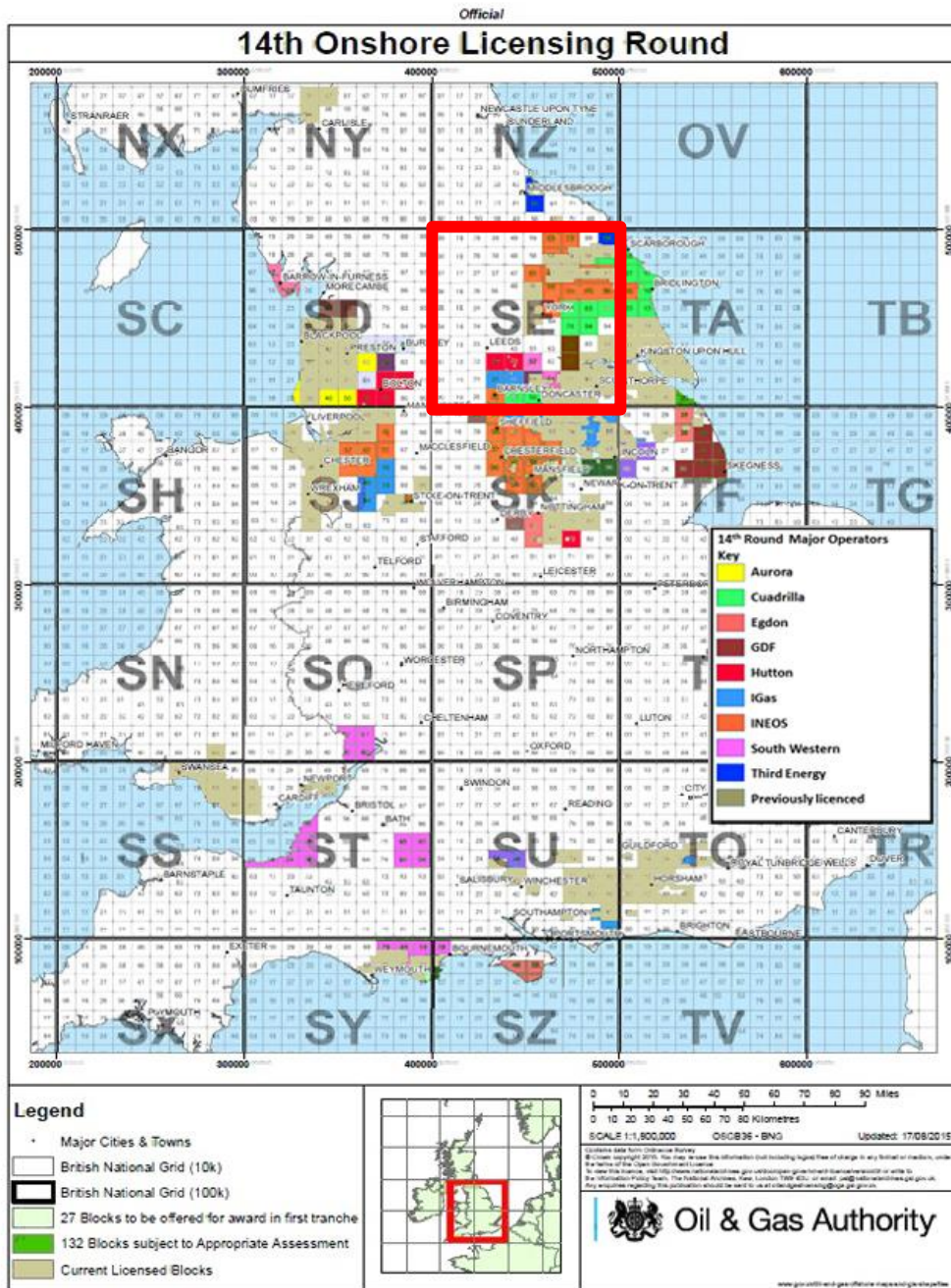
In UK, large areas granted shale gas licenses.



The 14th Round - Oil and Gas Licensing Round

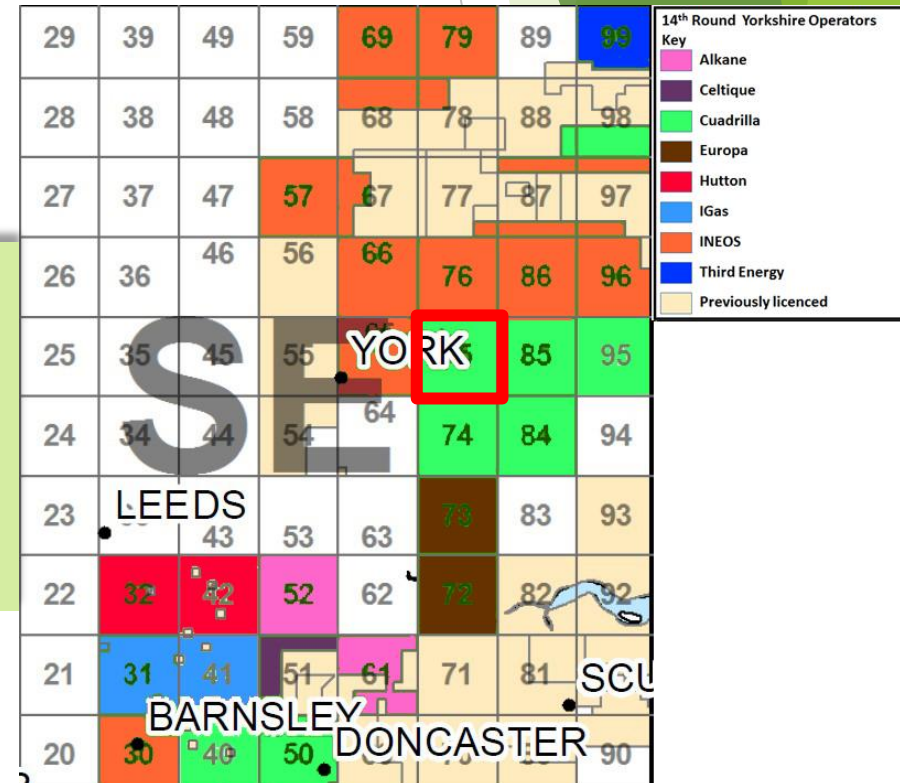
The 14th Round - Oil and Gas Licensing Round

All the Britain territory has been divided in square blocks and proposed for licencing.

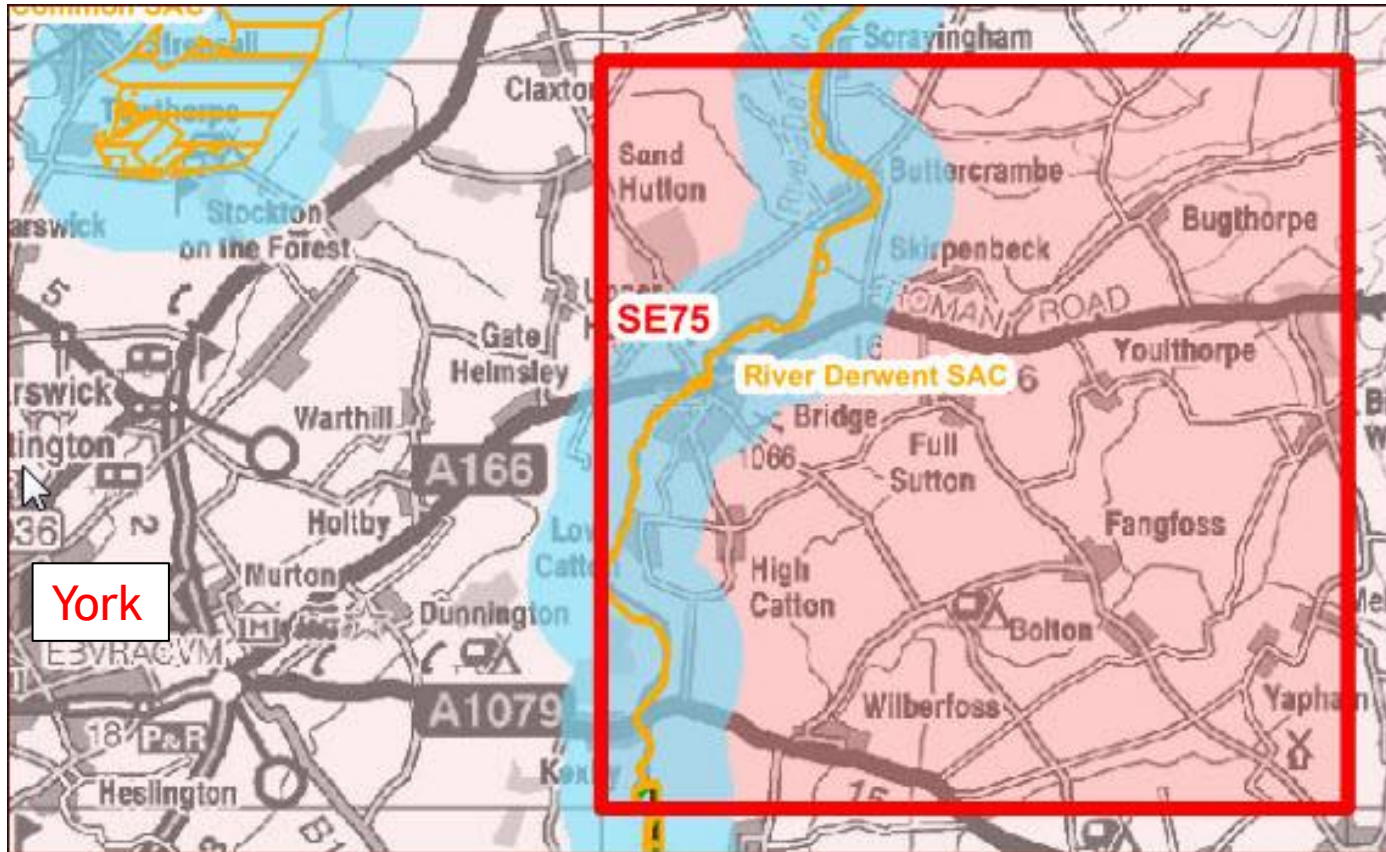


Exemple of one zone (SE)

Each colour corresponds to a company who obtained a license.



The 14th Round - Oil and Gas Licensing Round



An example of a block concession

Block n°SE75

Licence Operator: Cuadrilla

Partner: Cuadrilla Resources Ltd, GDF Suez E&P UK Ltd

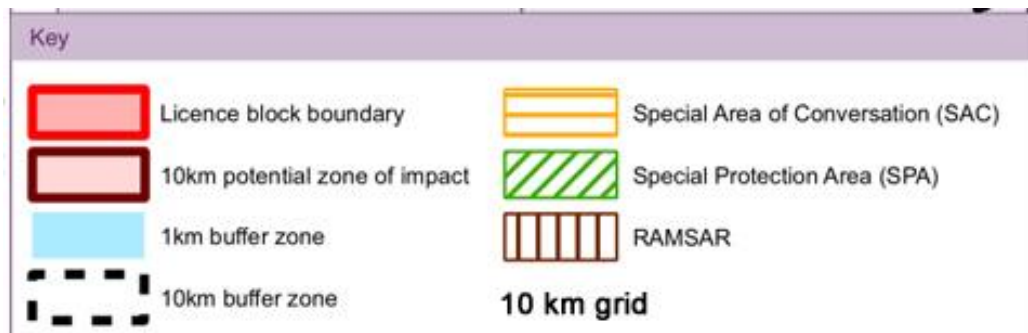
Licence type: Shale

Drill Or Drop clause: One well

Sensitivity concerns: Birds, Rivers, Otters, Vibration effects from nearby drilling

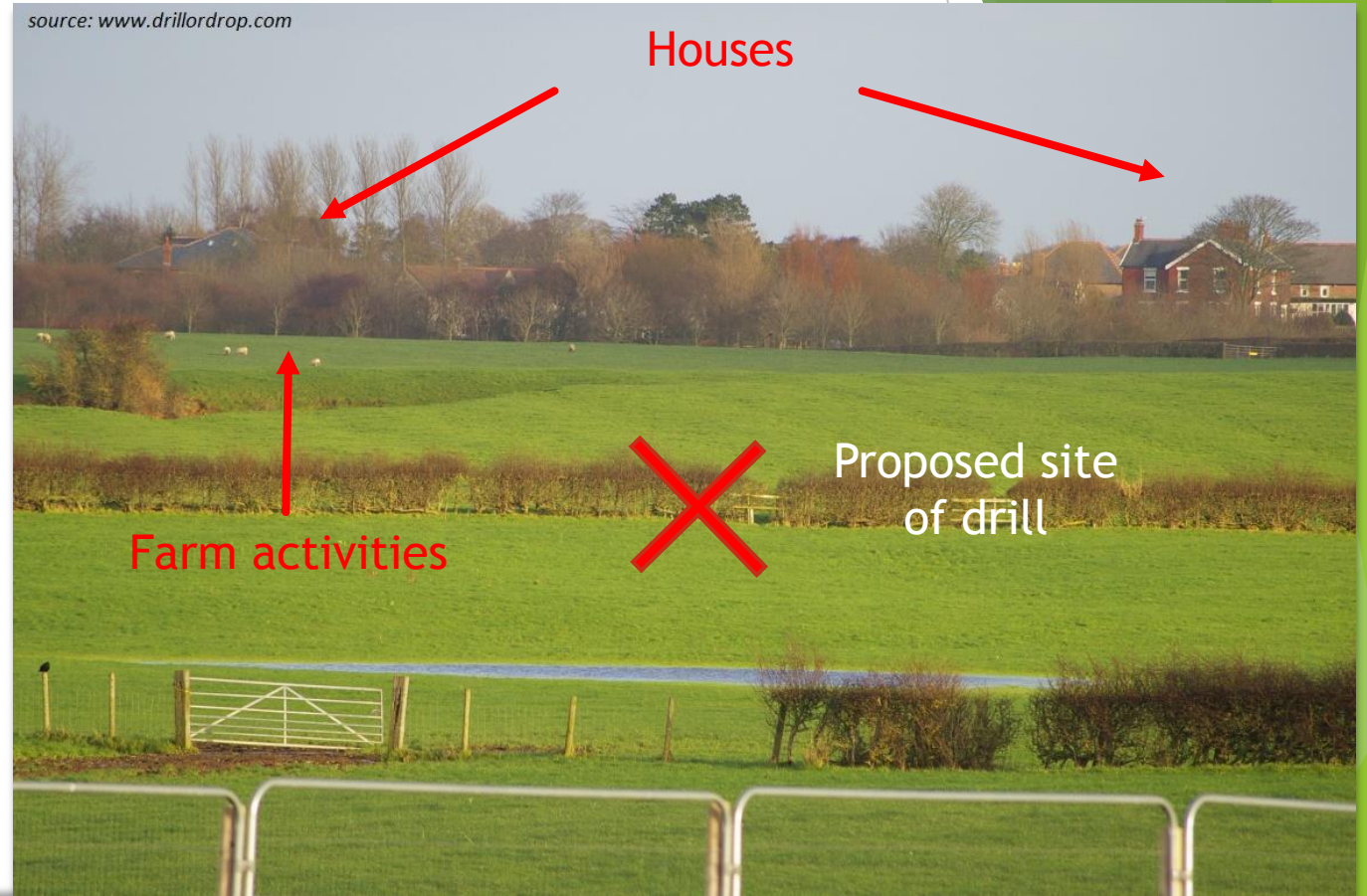


- crossed by a river;
- near to York city (204,439 inhabitants) Includes a dozen villages.



The 14th Round - Oil and Gas Licensing Round

The case of Lancashire



Left picture: Example of local road which will be used by trucks and drilling machinery.

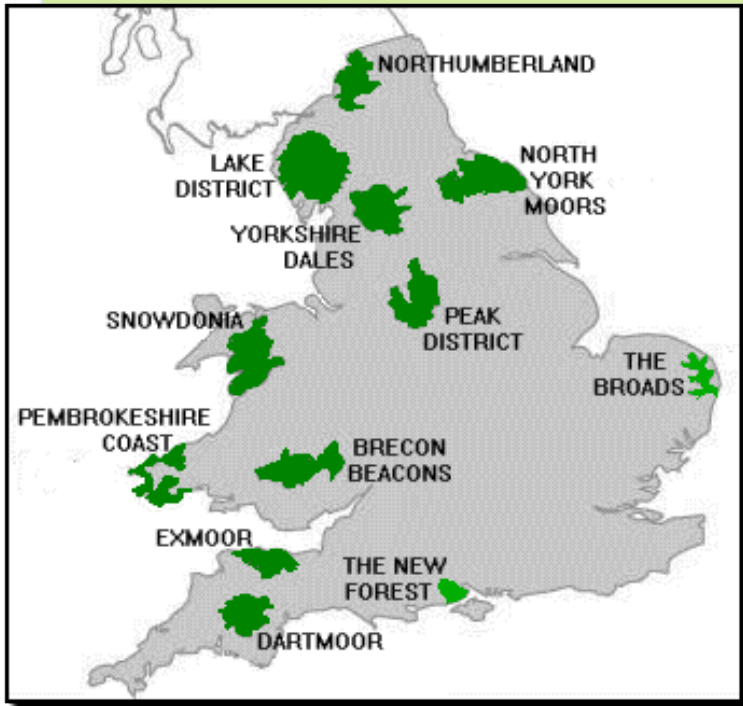
Right picture: Cuadrilla proposed this fracking site, in the middle of houses and sheep farming.

Fracking in UK: specific situations

Fracking possible in National Parks

December 2015:
MPs have voted to allow fracking under Britain's national parks.

⇒ Ministers used a statutory instrument to push through the new rules, which means legislation can pass into law without a debate in the House of Commons



The new rules allow fracking below national parks and sites of special scientific interest, as long as drilling takes place from outside protected areas.

Map of National Parks in England and Wales

Different rules in Scotland

The Scottish Government has the power to regulate fracking.

⇒ *The Infrastructure Act 2015 mentions only England and Wales.*

Fracking moratorium since January 2015

The **SEPA**, Scottish Environment Protection Agency has implemented its own study on impacts of fracking

In June 2016, the Scottish Parliament voted to bring in legislation to ban fracking.

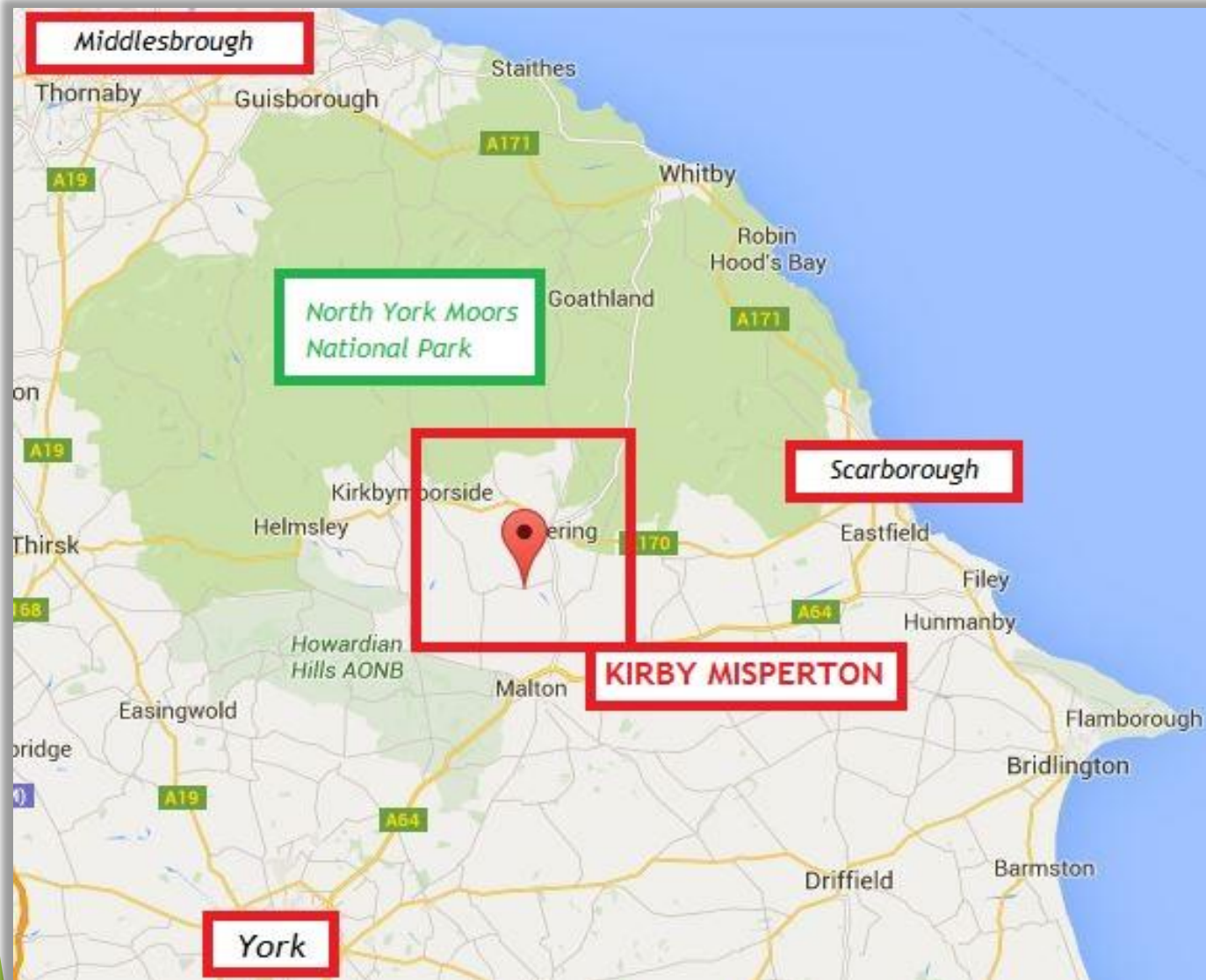


Link:
Fracking Moratorium
from Scottish
Government

Fracking in UK: Kirby Misperton

[Link: Read the Planning Application](#)

[Link: Understand this project and its consequences](#)



Map of North York. The drill will take place close a National Park.

Fracking now permitted in North Yorkshire

14th Licensing Round:

Kirby Misperton zone awarded to Third Energy company.

On 23rd May 2016 the North Yorkshire County Council Planning Committee voted to permit fracking off a well in Kirby Misperton, Yorkshire.

This decision is now being challenged legally on the basis of climate change impacts.



The North Yorkshire CC adopted seven for and four against the permit.

Understanding what's happening:

General information: www.frack-off.org.uk

Complete information about the 14th Licensing round: www.drillordrop.com

Studies/Reports:

June 2012 “[Shale gas extraction in the UK: a review of hydraulic fracturing](#)”; The Royal Society and The Royal Academy of Engineering

September 2013: “[Potential Greenhouse Gas Emissions Associated with Shale Gas Extraction and Use](#)”; DECC

December 2013: “[About shale gas and hydraulic fracturing \(fracking\)](#)”; DECC

Mai 2014: “[Consultation on Proposal for Underground Access for the Extraction of Gas, Oil or Geothermal Energy](#)”; DECC

July 2014: “[Independent Expert Scientific Panel - Report on Unconventional Oil And Gas](#)” issued by the Scottish Government

Official texts:

December 2015: “[Onshore oil and gas exploration in the UK: regulation and best practice](#)”; DECC

December 2015: The OGA announced [159 new onshore oil and gas licences](#) are being formally offered to successful applicants

December 2015: “[The Infrastructure Act - Onshore hydraulic fracturing: safeguards](#)”

Juanuary 2016: “[Briefing Paper - Shale gas and fracking](#)”; House of Commons Library

Fracking in UK: sources