



planning advisory service



# Planning for Shale Developments

Base Training Module



[www.pas.gov.uk](http://www.pas.gov.uk)

# Purpose of the training module

- The story so far; planning & shale developments in England
  - Legislation, regulation, policy, guidance, probity issues that affect decision making
  - Supported by a series of topic training modules
-

# What is Planning Advisory Service for?

- Funded to support English planning authorities

*“[PAS] exists to support local planning authorities in providing effective and efficient planning services, to drive improvement in those services and to support the implementation of changes in the planning system”*



- Also work directly with councils
  - Part of the Local Government family (LGA)
-



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# Shale gas and oil in the UK – the story so far



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# Contents

- Hydrocarbon development in the UK
  - Conventional &unconventional hydrocarbons
  - Where resources of gas and oil exist
  - Shale development applications since 2013
  - Government view of shale development
  - Uses of shale gas and oil
  - Stages of development
-

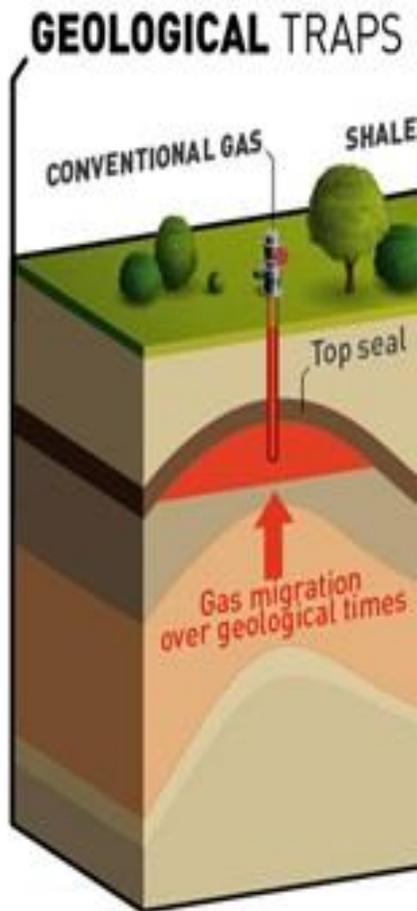
# Hydrocarbon development in the UK

- Oil and gas extracted in UK for over 100 years
  - 2,100 wells drilled and over 120 sites active today
  - Shale oil and gas resources – gas mainly in North and Central England, oil mainly in Southern England
-

# What is Shale Gas/Oil?

- Shale is formed from muddy sediments rich in organic matter deposited in seas millions of years ago
  - As these sediments were buried, they were heated and turned into rock and the organic matter was converted into oil and gas
  - These rocks are often source rocks for conventional oil and gas fields but have low permeability so it is difficult to extract oil or gas from them directly
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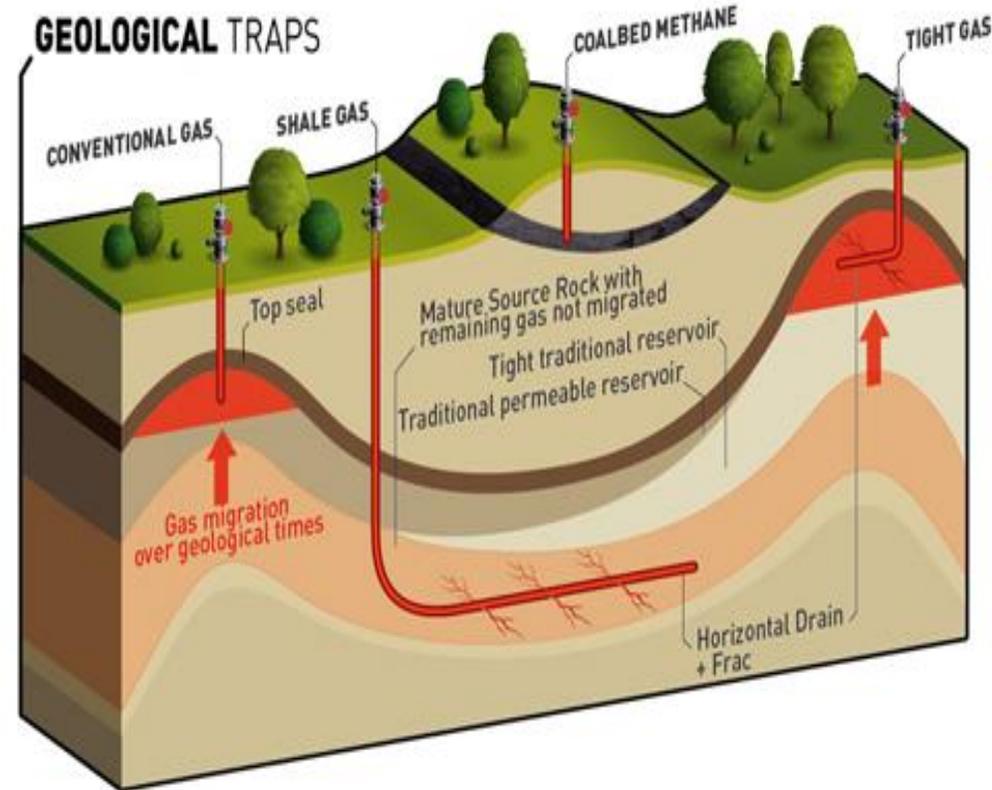
# Conventional oil and gas in the UK



- Free oil and gas trapped in porous reservoirs (usually sandstone or limestone)
- Relatively easy to extract
- Extracted in UK for over 100 years
- Around 2100 wells have been drilled, some hydraulically fractured
- Current production is 20,000 barrels of oil per day from 120 sites throughout the UK

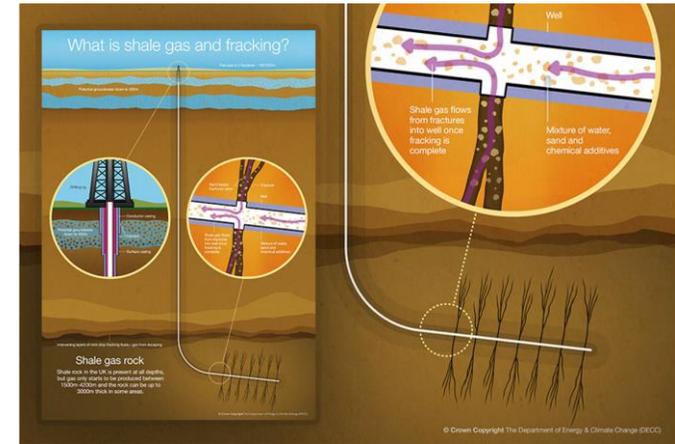
# Unconventional Gas and Oil

- 2.5m+ wells 'fracked' worldwide in last 60 years
- 'Fracking' (hydraulic fracturing) - injecting a mixture of 99% water/sand at high pressure into shale rock
- Accounts for 25% of natural gas production in USA
- Can now be extracted economically in UK with improved drilling technology – horizontal drilling

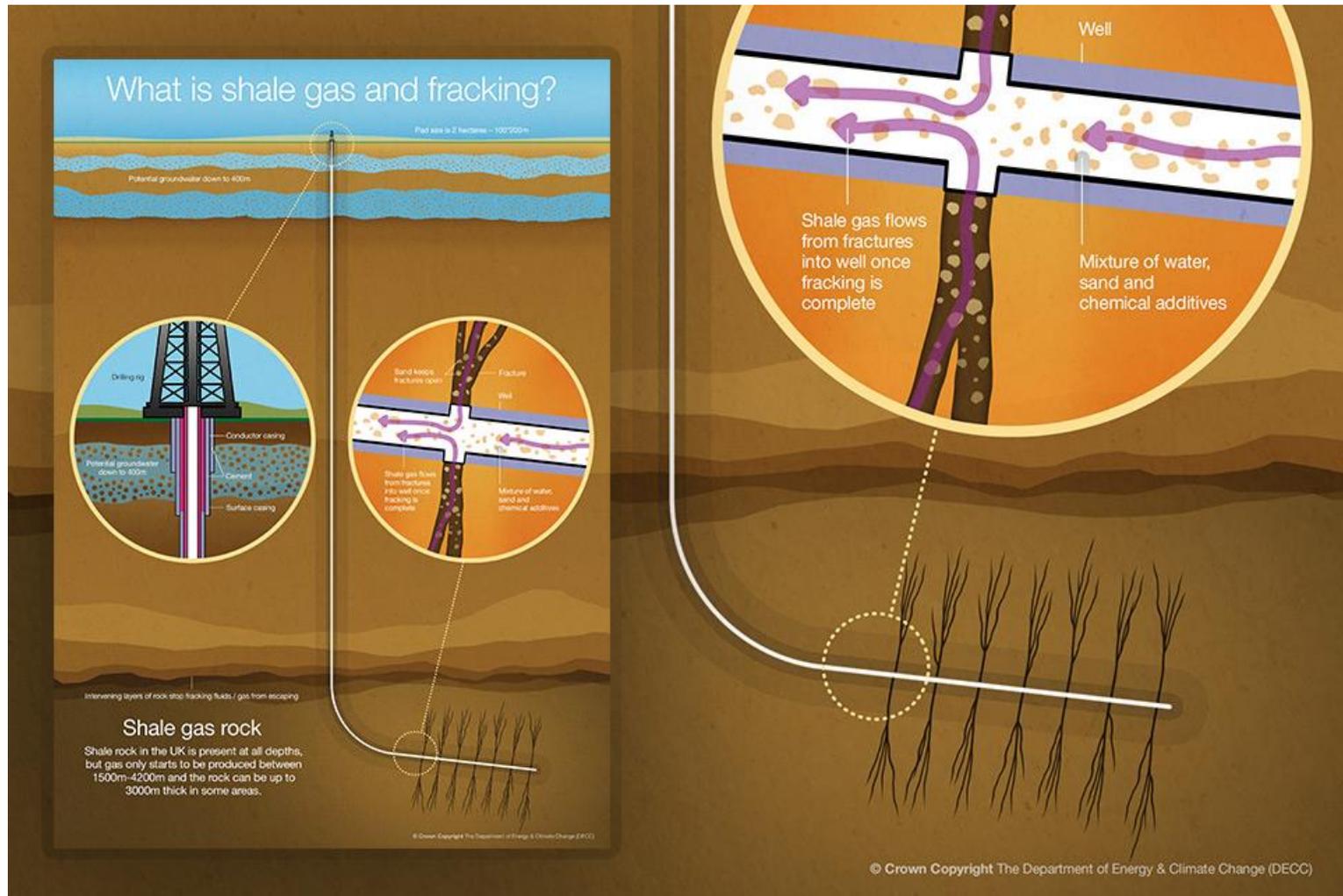


# What is hydraulic fracturing (fracking)?

- Water, sand and additives pumped into shale rock
- Opens up hairline fractures
- Chemical additives require prior EA approval
- Gas flows from the well together with some fracking fluid known as **flow-back** fluid
- Gas flared during exploration, flared or piped off site during appraisal and piped off site during production
- Aim of fracking - maximise amount of gas extracted

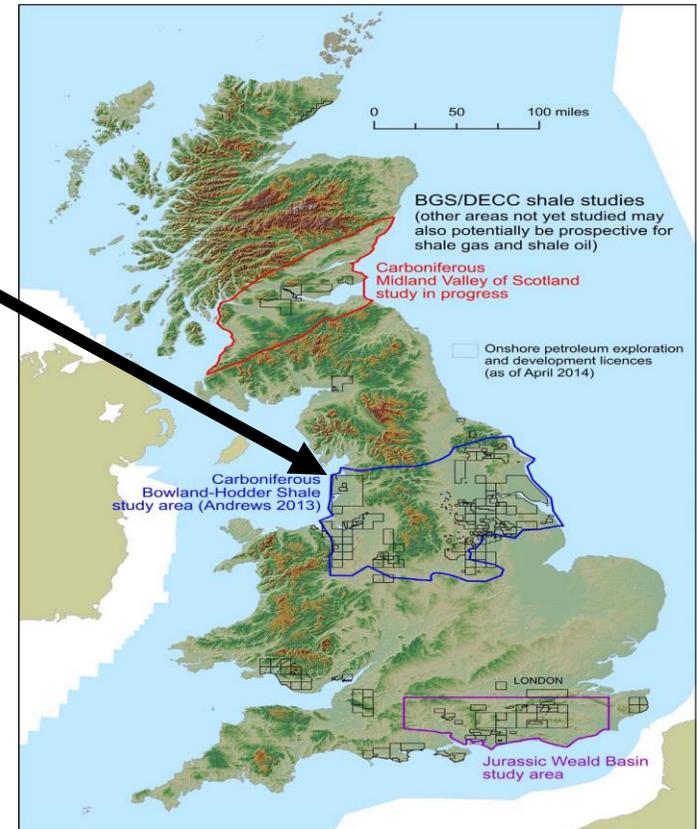


# Hydraulic Fracturing



# Shale Gas and Oil in the UK

- Exists principally in North, Central England, Southern England, Central Scotland
- BGS estimate gas volume in the Bowland Hodder shale is some trillion cubic feet
- No wells in production in UK
- Process starts with award of Petroleum Exploration & Development License (PEDL) issued by OGA.



# Applications / Appeals in the UK since 2013



- 11 applications for exploration and/or appraisal on 9 sites by 4 developers in 6 MPA areas
  - 3 applications granted by MPAs, 6 either refused or resolution to refuse by MPA
  - 3 appeals allowed, 1 appeal dismissed and 2 appeal decisions awaited
  - 3 legal challenges dismissed
  - Local decision times between 13 - 83 weeks (55 weeks to date of Committee)
  - Appeal decision times between 28 and 178 weeks (latter includes second Roseacre Inquiry)
-

# The Government's View (1)

- Ministerial Written Statement **17 May 2018**
- Material consideration in deciding applications
- Potential substantial benefits
- Key part to play in UK having safe, secure, affordable supplies of energy consistent with Climate Change Act and international obligations



[www.parliament.uk](http://www.parliament.uk)

Energy Policy: Written statement - HCWS690

WS Department for Business, Energy and Industrial Strategy

Made by: [Greg Clark](#) ( Secretary of State for Business, Energy and Industrial Strategy)

# The Government's View (2)

- UK gas imports - will increase from 52% to 72% by 2030
  - On-shore gas development can create thousands of new jobs, directly and indirectly
  - 'UK model' - world's most environmentally robust onshore shale gas sector – export opportunities from this model
  - Commitment to cease unabated coal use for power generation by 2025
  - Delays with new new nuclear generation
  - Applications take too long to determine - measures proposed to facilitate timely decisions
-

# Uses of gas and oil in the UK

- 80% of heating and 30% of electricity generation comes from gas
  - Oil and natural gas provide the energy source of raw materials to make a wide range of products and plastics – e.g. shampoo, toothpaste, washing powder, clothes
  - Natural gas is a key component in the manufacture of fertilisers
-

# Stages of shale gas development

- **Stage 1 – Exploration**

Drill well to gather geological data and supply potential. Less often involves fracking. Typically 2-6 months.

- **Stage 2 – Appraisal**

Testing the well, often involves fracking, assess commercial viability. Typically 6-24 months

- **Stage 3 – Production**

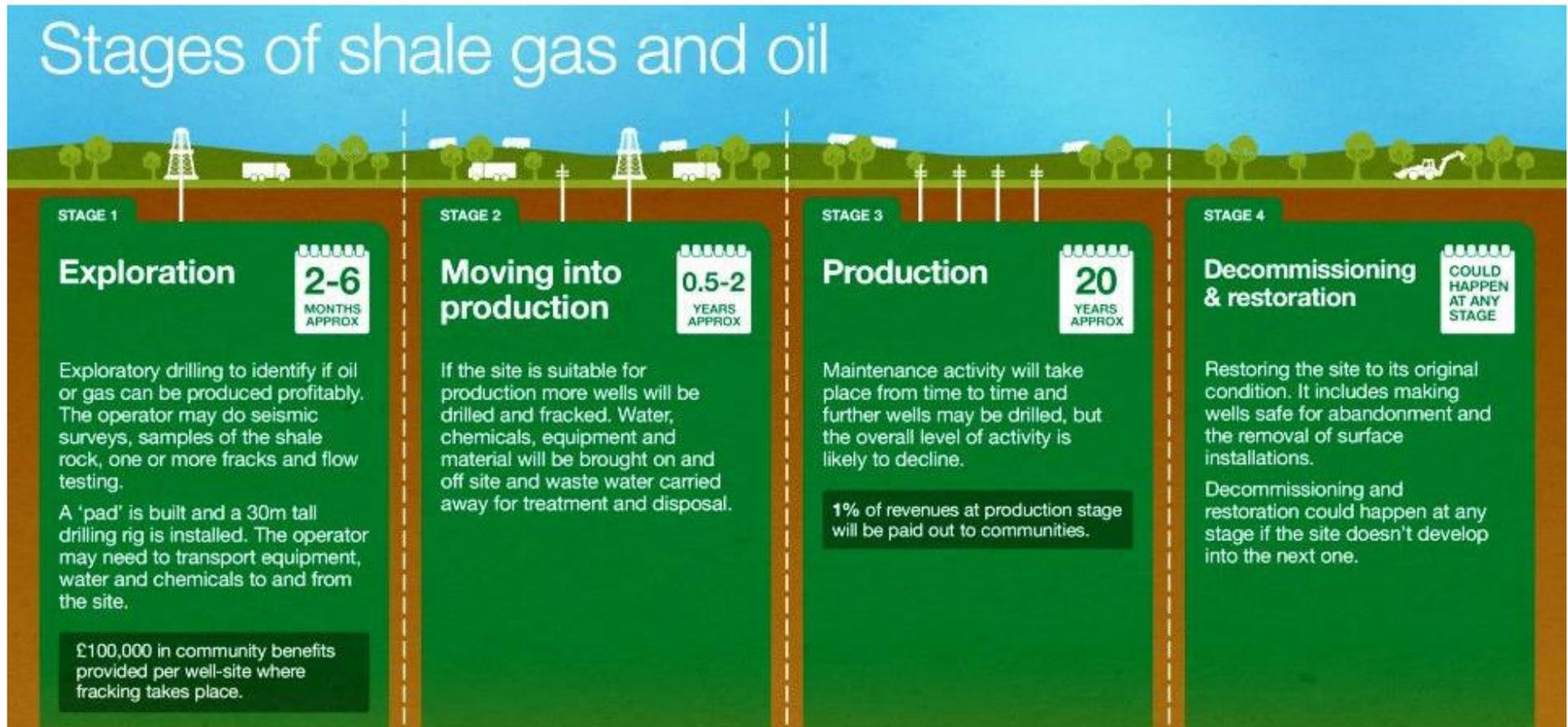
Extract gas by pipeline to national grid. Lower level of intensity at the site than stages 1 and 2. Up to 20 years.

- **Stage 4 – Decommissioning and restoration**

Well decommissioned, site restored to original condition.

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# Stages of shale gas and oil development



# Preston New Road Shale Gas Exploration and Appraisal Site



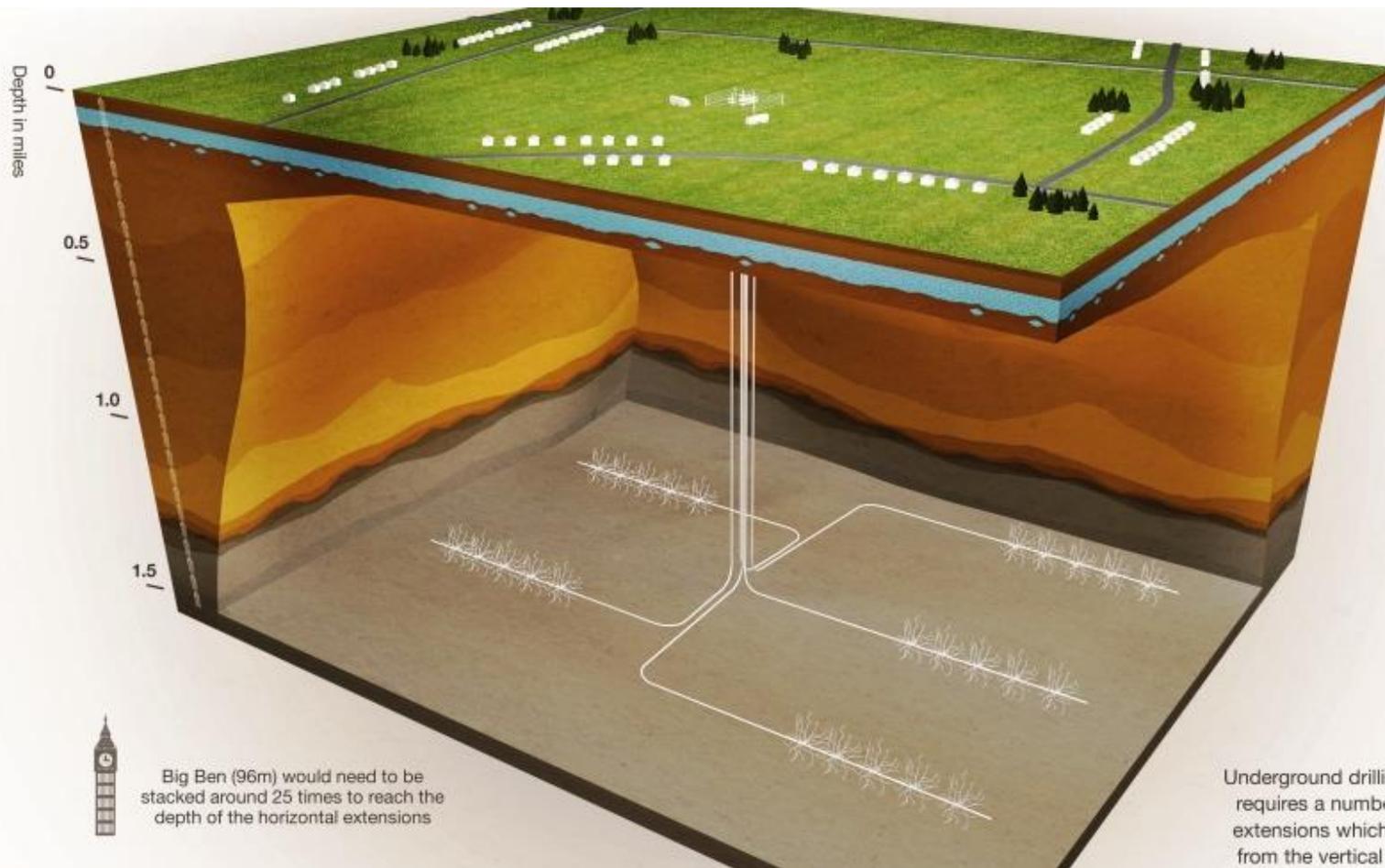
# Springs Road Shale Gas Exploration Site



# Hypothetical Production Site



# Hypothetical Production Area (1)



## Hypothetical Production Area (2)

- Small surface well pads connected to national grid
  - Less intensive surface development than is required at exploration and appraisal stages
  - Extraction from large underground area through horizontal drilling extensions extending out from the vertical well
  - Each well operational for possibly 20 years
-

# Summary

- Conventional on-shore oil and gas extraction is a long established industry in the UK
  - Potentially significant resource but shale is controversial, relatively few applications since 2013
  - Government considers there are potentially substantial benefits from the safe and sustainable exploration and development of our onshore shale gas resources
  - Four main stages of shale gas development
  - Nature of the development and its environmental implications will vary for the different stages
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# Regulation, legislation, policy and guidance

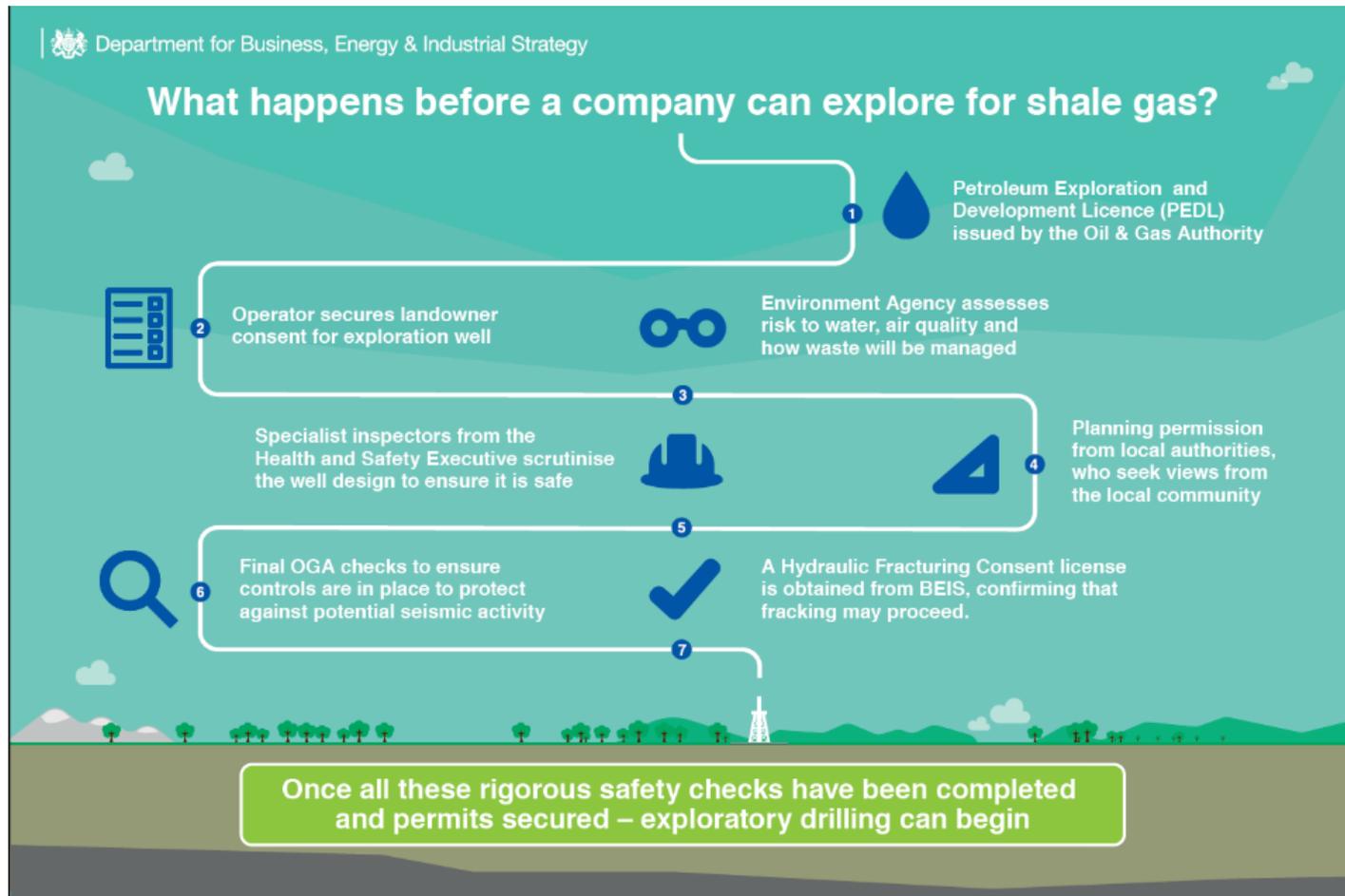


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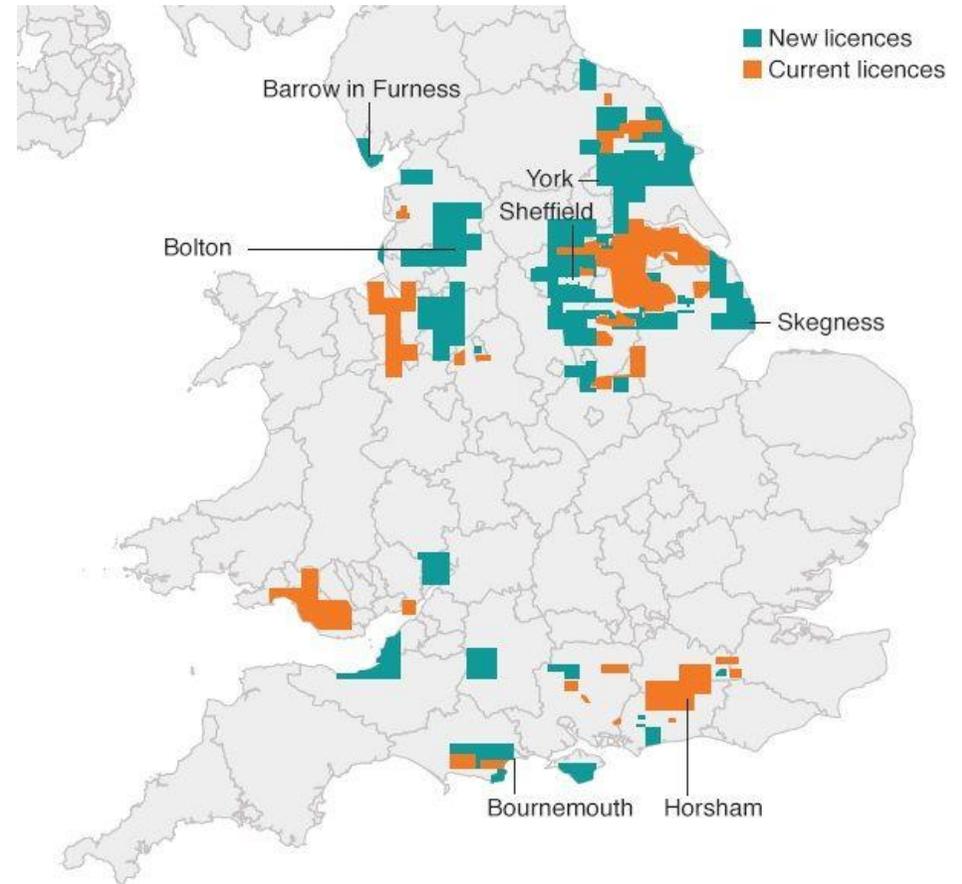
- Awards and consents process
  - Regulation
  - Infrastructure Act
  - National Planning Policy Framework
  - National Planning Guidance
  - Ministerial statements
  - Government consultation documents
  - The Development Plan
-

# Award and Consents Process



# 14<sup>th</sup> Onshore Oil and Gas Licensing Round

- Oil and Gas Authority (OGA) awarded 159 blocks to companies in December 2015
- 75% of the blocks relate to shale oil and gas
- PEDLs grant the licensee exclusive rights for exploration, appraisal and extraction (subject to necessary consents)
- Large parts of northern England covered by licenses. Also Southern England and South Wales.



Source: Oil and Gas Authority

# Regulators

- Oil and Gas Authority (OGA)
- Environment Agency (EA)
- Health and Safety Executive (HSE)



## Other interested organisations / consultees

- Coal Authority (CA)
  - British Geological Survey (BGS)
  - Public Health England (PHE)
  - Natural England
  - Historic England
  - PINS
-

# Mineral Planning Authority

- Prepares Development Plan
  - Screens for and scopes Environmental Impact Assessment (EIA)
  - Carries out consultation with statutory and non-statutory bodies and the public
  - Determines planning applications
  - Monitors site operations
  - Oversees restoration
  - Key body for interface with public
-

# Oil and Gas Authority



Oil & Gas Authority

- Created in April 2015 and from 1 October 2016 is a Government Company with SoS for Business, Energy and Industrial Strategy the sole shareholder
  - Statutory objective is to maximise the recovery of the UK's oil and gas resources
  - Issues Petroleum Exploration and Development Licences (PEDL)
  - Requires Environmental Risk Assessment
  - Assesses operator competency and financial viability
  - Grants consent to drill, to fracture and for extended well test
-

# Environment Agency



- Key environmental regulator
  - Issues permits and consents
  - Permit for extractive wastes including drill cuttings and fluids, returning fracturing fluids, waste gases etc
  - Requires a waste management plan – characterises waste, describes risks, sets out mitigations etc
  - Deals with availability and protection of groundwater including evaluating risks and mitigation measures
  - Requires a notice of intention to drill
  - Regulates waste gas flaring, naturally occurring radioactive substances and flood risk considerations
-

# Health & Safety Executive



- No involvement in UK energy policy or planning / environmental decisions
  - Operators responsible for managing sites – HSE regulates and holds them to account
  - HSE approves well design and appoints independent well examiner
  - Requires advance notice of intention to drill
  - Lifecycle approach to design, construction and decommissioning of the well
-

# Other Regulators & Organisations

- **Coal Authority (CA)** – requires permit if drilling encroaches on coal seams
  - **British Geological Survey (BGS)** – informed of intention to drill
  - **Public Health England** – advises on the public health impacts of shale gas extraction
  - **Planning Inspectorate or SoS** – planning appeals
  - **UKOOG** – represent the onshore oil and gas industry
  - **Other statutory consultees** – e.g. Natural England, Historic England etc
-

# Infrastructure Act 2015

- Most provisions came into force on 12 April 2015. Section 50 (safeguards) 6 April 2016.



Infrastructure Act  
2015

- Simplified procedures
  - Placed environmental safeguards on a statutory footing (EIA, protected areas, monitoring etc.)
  - Approved protected areas: including National Parks, the Broads, AONBs, World Heritage Sites etc.
-

# National Planning Policy Framework (1)

- Revised National Planning Policy Framework issued July 2018 and again in February 2019
- Para 11 presumption in favour of sustainable development
- Para 17 – Plan must include strategic policies
- Para 20 – they should set out pattern, scale and quality of development and make sufficient provision for...minerals and energy (including heat)
- Para 22 – look ahead over a minimum 15 years
- Para 23 – bring sufficient land forward to address objectively assessed needs in line with the presumption in favour of sustainable development

# National Planning Policy Framework (2)

- Para 205 When determining planning applications, great weight should be given to the benefits of mineral extraction, including to the economy
  - Para 209 Mineral planning authorities should:
    - a) recognise the benefits of on-shore oil and gas development, including unconventional hydrocarbons, for the security of energy supplies and supporting the transition to a low-carbon economy; and put in place policies to facilitate their exploration and extraction;
    - b) when planning for on-shore oil and gas development, clearly distinguish between, and plan positively for, the three phases of development (exploration, appraisal and production), whilst ensuring appropriate monitoring and site restoration is provided for.
-

# National Planning Policy Framework (3)

- Policies relating to on-shore oil and gas development more favourable and positive than 2012 NPPF
  - Planning Practice Guidance on onshore hydrocarbon development dates from 2014
  - Updated guidance to take into account the revised NPPF is awaited
-

# Written Ministerial Statements

- The Government has often set out Government policy on shale developments in Written Ministerial Statements
  - The Written Statements on Shale Gas and Oil issued by Amber Rudd and Greg Clark on 16<sup>th</sup> September 2015 were such policy statements
  - More recently was the Statement of 17<sup>th</sup> May 2018 on Energy Policy by Claire Perry and James Brokenshire
  - Such statements are accepted as material considerations in plan making and planning decisions
-

# Shale Environmental Regulatory Group (SERG)

- Virtual group announced by Government on 5 October 2018 to act as a single entry point for information related to environmental regulation
  - Each regulator retains its own regulatory duties, functions and enforcement powers
  - **Workstream 1** – to share knowledge and information on environmental regulation processes with MPAs
  - **Workstream 2** – to coordinate regulation by OGA, EA and HSE of shale sites, liaise with operators, facilitate progress and resolve issues
-

# Commissioner for Shale Gas

Independent role announced by Government on 5 October 2018 to:

- listen to the concerns of local residents
  - work with local residents and councilors to ensure that legitimate concerns are heard and addressed
  - help improve understanding of shale gas
  - report back to Government on what changes could be made to address the concerns of local residents
  - work closely with SERG and the Planning Brokerage Service to ensure accurate and timely information is available to residents
-

# Planning Brokerage Service

- Support for those involved in decision making announced in Ministerial Statement in May 2018
  - Provides guidance to developers and local authorities on the planning process to help facilitate timely decision making
  - No role in the consideration or determination of planning applications or in the appeal process
  - Will not comment on the merits of a case or seek to influence decisions
  - £1.6m support fund (2017-20) for LAs dealing with shale applications to build capacity and capability
-

# Government Consultations 2018

- **Permitted development** for shale gas exploration – 19 July 2018, Closed on 25 October 2018.
  - Inclusion of shale gas production projects in the **Nationally Significant Infrastructure Project** regime – July 2018 – Closed on 25 October 2018.
  - **Community involvement** in shale gas proposals – 31 October 2018 – Closed on 7 January 2019.
-

# Development Plan

- Planning law requires applications for planning permission to be determined in accordance with the Development Plan unless material considerations indicate otherwise
  - Include information on the relevant Development Plan documents in the local area
-

# Summary

- The OGA has issued licenses giving exclusivity rights for a defined period to develop shale sites
  - Various regulators but planning has a key role in the awards and consent process
  - The Infrastructure Act 2015
  - 2018 NPPF - national planning policy
  - Recent consultations relating to planning for shale
  - Commissioner and the Shale Brokerage Scheme
  - The Development Plan sets out local planning policy for hydrocarbon developments
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# Probity – making a planning decision on its merits



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- Making planning decisions
  - Shale developments are controversial
  - Predetermination and predisposition
  - Decisions contrary to officer advice
  - The appeal process
  - Appeals for shale gas developments
  - Legal challenge
  - Judicial review
-

# Making planning decisions

- Planning decisions involve balancing many competing interests. In doing this decision makers need an ethos of decision-making in the wider public interest on what can be controversial proposals.
  - The risk of controversy and conflict are heightened by the openness of a system which invites public opinion before taking a decision.
-

# Shale gas/Fracking is controversial



# Predetermination or predisposition

- Decision makers are entitled to be ***predisposed*** to particular views – provided they remain open to listening to all the arguments and changing their mind in the light of all the information presented at the Committee meeting
  - ***Predetermination*** is when a decision maker has a closed mind to any other possibility beyond their predisposition such that they are unable to properly assess an issue
  - Committee members must take great care when making statements in advance of the determination of planning applications as there is a risk that they can be misinterpreted or taken out of context
-

# Guidance on predetermination

- As a councillor working in a political environment do not be afraid to express your views on an issue BUT
  - Avoid giving the impression that you have made up your mind before hearing the officer report and any representations at the Committee meeting
  - If you comment in advance use words that make it clear you have yet to make up your mind
  - Be particularly careful in any discussion with developers or objectors or meetings at which minutes are not recorded, as there is a risk that you will be misrepresented or your comments will taken out of context
-

# Decision contrary to officer recommendation

- Committee need not accept the officer recommendation to approve / refuse an application
  - But need to set out **clear planning reasons** for refusal base on evidence
  - MPA should have a protocol to follow for committee decisions contrary to officer recommendation
  - Important that committee identifies the material considerations leading to their decision to approve or the reasons for any decision to refuse
  - Risk of challenge greater with such cases
-

# Appeals

- Only the applicant can appeal
  - No 'third party' rights of appeal
  - Public inquiry likely to be held
  - Appellant can apply for costs if considers decision to have been unreasonable
  - A number of appeal decisions have been received and provide helpful guidance on material planning considerations
-

# Appeals for shale developments (as at March 2019)

- 6 appeals - 3 granted, 1 dismissed, 1 inquiry decision awaited and 1 inquiry to be arranged
  - Most recent decision Roseacre Wood dismissed following reopened inquiry
  - 3 legal challenges dismissed
-

# Legal challenge

- Anyone 'of sufficient standing' can challenge a planning decision in the courts
  - Cannot challenge whether a decision was right or not, only whether the regulations and procedures were properly followed
  - Two principal means of legal challenge – judicial review and statutory challenge (latter applies to decision by Secretary of State following an appeal or call in)
-

# Judicial Review

- Judicial Review is exercised by High Court judges
  - Court cannot disagree with the merits of the planning decision
  - Can either quash, prevent or require a decision or clarify the law
  - Application for judicial review must be made within 6 weeks of decision notice being issued
  - North Yorkshire decision for Kirby Misperton site was subject to judicial review but High Court ruled that the Council had given proper regard to the issues raised by the proposal
-

# Summary

- Shale gas applications are controversial
  - Decisions must balance competing interests and be based on national and local planning policies and other material considerations
  - You **can be predisposed** on a matter but you must have an open mind and **cannot predetermine**
  - Aggrieved parties may legally challenge a decision - experience is that such challenges may come from an applicant or an affected interested party
  - Risk of successful appeal - especially when officer recommends approval and reasons for refusal are not supported by clear evidence
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# Final Questions, concluding remarks and evaluation



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# PAS needs your feedback

- PAS need to know what you think. On reflection, was today actually useful ?
    - 10 minutes of feedback in return for £100s of support
    - We read all comments and use your ideas to change what we do and how we do it
  - Our board use this to decide what we do with our grant. If we don't get positive feedback we are unlikely to continue
  - Please complete the feedback/evaluation form
-

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@pas\_team

Knowledge Hub

The screenshot shows the PAS Knowledge Hub website. At the top is a navigation bar with 'Knowledge Hub' and 'Local Government' on the left, and 'Register', 'Sign In', and a search box on the right. Below this is a secondary navigation bar with links for 'Home', 'About', 'Leadership', 'Plan making', 'Decisions', 'Growth', 'Discussions', and 'Events'. The main content area features a large article titled 'New event series - Understanding the economic and financial impacts of planning' with a sub-image of gold coins and green building blocks. Below the article is a 'Play' button and a series of numbered tabs (1-6). To the right of the main article is a sidebar containing a 'Discussion Forum' announcement, a 'Sign-up Monthly newsletter' button, a 'Register PAS update service' button, and a 'Follow us on Twitter' section with two tweets from @pas\_team. At the bottom of the main content area, there are three smaller article thumbnails: 'Make the most of PAS', 'Councillors' area', and 'Improvement support'.

# Join us in the Knowledge Hub

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councillors and officers

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Knowledge sharing, updates  
and information

What's happening elsewhere?

Ask questions of your peers

Sign up: <https://khub.net>



The screenshot shows the Knowledge Hub interface. At the top, there is a purple navigation bar with the KHL logo, 'GROUPS', 'PEOPLE', 'NETWORKS', and 'HELP' links. On the right, a user profile for 'Martin' is visible along with notification and search icons. The main content area features a green card for the 'Effective Planning for Shale Gas' group, with 'Last activity - Today' below it. To the right of the card is a detailed description of the group's purpose and aim, enclosed in a light blue dashed box. Below the card, a 'You joined' section lists actions: 'Add to favourites', 'Subscribe', and 'Leave the group'. A red lock icon indicates 'This is a restricted group'.

Effective Planning for Shale Gas

Last activity - Today

You joined

- Add to favourites
- Subscribe
- Leave the group

This is a restricted group

## Effective Planning for Shale Gas - forum for planning authorities

This group's purpose is to equip planning authorities to deal quickly and effectively with all aspects of planning applications for shale gas.

Our aim as a group is help you to navigate and understand the latest national policy developments; plug you into help & advice from the regulators and signpost useful training, guidance and funding.

The group is moderated by the LGA & PAS and is for local government planning professionals and councillors. We are also extending membership to key people working for the regulatory authorities.



## **PAS contacts**

email **pas@local.gov.uk**

web **www.pas.gov.uk**

phone **020 7664 3000**