SHALE GAS WILL MAKE US LESS DEPENDENT ON IMPORTED GAS FROM EUROPE AND THE MIDDLE EAST.

69% OF GAS WILL BE IMPORTED BY 2018/19

80% OF PEOPLE USE GAS TO HEAT THEIR HOME

WHAT IS SHALE GAS?
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WHAT IS FRACKING?
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WHY DOES THE UK NEED SHALE GAS?
To replace North Sea gas which is running out – the UK now imports half of its gas.

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To generate electricity and heat our homes.

Raw materials: UK manufacturing needs gas to produce everything from plastics to the chemicals used to clean our drinking water.

Jobs: E&Y and IoD estimates the industry will create over 64,000 jobs directly, and protect 500,000 jobs in industry.

Revenues: Oil and Gas Producers can pay between 30% and 60% tax to the UK Treasury.

Security of supply: Shale gas will make us less dependent on volatile regions.

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64,000 JOBS

Both E&Y and the IoD estimate that at its peak shale gas could create more than 64,000 jobs.

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WHAT IS FRACKING?
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 Hydraulic fracturing has been carried out more than a million times in the United States.

The process involves drilling a narrow well between 1 and 5 kilometres deep. Fluid is injected into the rock many thousands of feet down. This creates tiny fractures between 1–5 mm wide. Gas that was trapped in the rock can flow through these fractures, into the steel-lined well and up to the surface.

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SAFETY & THE ENVIRONMENT

The UK has one of the tightest regulatory regimes with much higher standards than in the US.

WATER SAFETY:
There has never been a recorded case of fracking itself causing water contamination.

There are thousands of feet of solid rock between any frack site and drinking water supplies.

Some problems in the US have occurred due to poorly designed wells or reusing old wells. All INEOS wells will be brand new drilled to modern standards. They will have multiple layers of steel and concrete to ensure gas cannot leak.

All waste fluid will be treated and cleaned under approval from the Environment Agency.

More than 2000 onshore oil and gas wells have already been drilled in the UK.

AIR QUALITY:

FRACKING HAS BEEN USED IN THE OIL AND GAS INDUSTRY FOR OVER 50 YEARS

There has been more than 50 years of onshore oil and gas production in the UK with 2000 wells drilled. Shale production is expected to be subject to the same robust safety and environmental regime.

Air quality is monitored in order to ensure staff and local communities are safe.

Dr John Harrison, director of Public Health England’s Centre for Radiation, Chemical and Environmental Hazards, has found that as long as hydraulic fracturing is carried out properly, the potential risks to public health are low.

EARTHQUAKES:
The minor tremors at Blackpool in 2011 occurred because drilling took place too close to a fault.

These were smaller than naturally occurring tremors in the UK every week.

INEOS will use state-of-the-art 3D underground mapping to highlight faults and ensure we do not drill too close.

The Royal Society and The Royal Academy of Engineering both recognise that shale wells in the UK have a lower risk of seismic activity than mining.

Environment Agency standards now ensure that seismic activity cannot go above a level that is equivalent to that caused by vehicles.

CHEMICALS:

98% of fracking fluid is water. 1.5% is sand. 0.5% is additives including some dilute chemicals. These are used to help the fluid into fractures and to prevent bacteria and scale build-up.

The chemicals used are commonly found in households in food and cleaning products.

Around 12 additives will be used per well. These will be approved by the Environment Agency and made public.

The Environment Agency confirms that the chemicals used in fracking fluid are non-hazardous in the proportions used.

TIMESCALE AND DISRUPTION

A well takes 3-5 months to construct. It then produces gas near-silently for around 20 years.

During construction there is some short-term disruption lasting 3–5 months.

Drilling takes 4–6 weeks. Noise is mitigated by distance – minimum 400 metres to nearest dwelling.

Fracking takes around a week and is undetectable on the surface.
WHY INEOS?

INEOS is committed to being an excellent partner with local communities.

INEOS will consult with communities before any production goes ahead.

INEOS will share the benefits of shale, giving 6% of revenues to local homeowners, landowners and communities. This is estimated to be worth £2.5 billion.

INEOS is an experienced manufacturing company with sites around the UK and globally.

INEOS has an outstanding track record for safely managing onshore complex hydrocarbon/chemical processing facilities.

INEOS knows how to safely handle chemicals – it is what we do all day every day.

The INEOS team includes some of the world’s leading shale gas experts who have drilled thousands of wells without problems arising.

INEOS will meet or exceed all Environment Agency regulatory standards.

FURTHER FACTS:

- SEPA: www.sepa.org.uk/customer_information/energy_industry/unconventional_gas/frequently_asked_questions.aspx
- UKOOG: www.ukoog.org.uk
- Frackland Blog: www.frackland.blogspot.co.uk
- No Hot Air: www.nohotair.co.uk/index.php/library
- ReFINE: www.refine.org.uk
- Frac Focus: www.fracfocus.org
- The Boom: www.russellgold.net/books/the-boom
- US EPA: www2.epa.gov/hydraulicfracturing
- PENN State University: http://stateimpact.npr.org/pennsylvania/tag/fracking/
- Range Resources: www.rangeresources.com
- CONSOL Energy: www.consolenergy.com

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