Cambridge Pre-U

Cambridge International Examinations
Cambridge Pre-U Certificate

GLOBAL PERSPECTIVES **9777/01**

Paper 1 Written paper **May/June 2016**

INSERT (Resource Booklet)

1 hour 30 minutes

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READ THESE INSTRUCTIONS FIRST

This Resource Booklet contains Documents 1 and 2 which you should use to answer the questions.

You should spend approximately 10 minutes reading the documents before attempting to answer the questions. This is allowed for within the time set for the examination.

The syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 3 Pre-U Certificate.

This document consists of **3** printed pages and **1** blank page.

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CAMBRIDGE International Examinations

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The documents below consider the issue of 'fracking'. Read them **both** in order to answer **all** the questions on the question paper.

Document 1: adapted from *Friends of the Earth: the case against fracking* by James Orr. The author is Director of Friends of the Earth. The article was published online in 2013.

Hydraulic fracturing (fracking) is a process used to remove shale gas and oil by injecting water, sand and chemicals into rocks at high pressure to create small fractures and allow the removal of the gas and oil. Fracking for shale gas in Northern Ireland is both unnecessary and unwanted. The evidence against fracking is so strong it will never become a viable industry in Northern Ireland.

I say this not because of the overwhelming environmental arguments. I shall get them out of the way quickly. I am by now used to those in authority making a career out of ignoring the environmental arguments.

Northern Ireland is not an arid, featureless desert. It's a wet and busy place where you are never far away from a farm or housing development. The region of Fermanagh would need to be industrialised and contaminated with thousands of frack-pads to make the industry viable; there isn't the room without squeezing out people, jobs and habitats.

The most compelling environmental argument against fracking is that we must move away from generating most of our electricity from fossil fuels to renewable sources of energy by 2030. Fossil fuels have to be phased out if we are to deal with the climate crisis. Finding new sources of fossil fuels is at best a distraction from developing alternative energy sources and sets us in the wrong direction. We just need to listen to the absurd statements of the fracking industry. The chronic lack of evidence behind their claims of bringing us to a promised land will, in the end, be their downfall.

It has been stated that those against fracking are 'anti-jobs'. This is a common tactic used to demonise the opposition but quite stupid when it is fracking which will take away jobs in farming and tourism, and affect house prices. Claims that fracking will create 600 jobs in Fermanagh are not reliable. Most employment is in the drilling phase that lasts about a year and many are for specialised temporary workers. Another claim is that fracking will not affect biodiversity and 'will probably help'. This is a ridiculous assertion as water contamination is highly likely in an area full of wetlands and water catchments. Some claim there has never been a proven record of contamination. Again, not true. There is growing evidence emerging from the United States and Australia of the health and pollution effects.

Another claim is that we have one of the best regulators in the world: 'They are impartial, expert and will allow only the best.' Excuse me? Try telling that to the people who live beside numerous unregulated quarries or explain the chronic pollution of Lough Neagh from which most of the city of Belfast gets its drinking water. We have allowed such a poor record of environmental governance to develop that managing risks above the ground has been neglected to the point where we have strong evidence of institutional failure. If we cannot regulate conventional risks then could we manage such a potentially dangerous activity as fracking? We may be able to make fracking safer but we could never make it safe.

Friends of the Earth and the fracking companies cannot both be right. My contention is that we have the evidence on our side.

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Document 2: adapted from *Fracking is one of the best things to happen to onshore gas exploration for a century* by Nick Grealy. The author is director of an energy consultancy company specialising in shale energy worldwide. The article was published online in 2013.

Recent advances in technology such as 'fracking' have meant that access to shale gas is now viable. Onshore oil and gas exploration is the best energy story since the transition from coal to oil. This is because it is a far cleaner and more economic source of energy than its predecessors or competitors. Even though gas is a fossil fuel it means that with the help of fracking we can reduce CO_2 emissions by more than 50 per cent.

The two main objections to this technology are its impact on the environment and that it is a short-term fix with a sell-by date. What we are hearing about the environmental impact stems from the media's unfamiliarity with the reality of onshore gas and oil exploration. Issues raised from the use of this technology in the US are exaggerated and overstated, and because it has been very well publicised, there is this distortion in perception. But the effect on the environment in the US has been minimal. In the UK, environmental pressure groups, which tend to be quite loud, have misunderstood the argument. The blame for this has to rest with the media, which has done a poor job of informing people.

Environmental groups are ignoring that fracking provides a feasible and realistic way for the next phase of energy generation: the renewable phase. I confidently predict that there will be engineering and scientific advances in solar power and energy storage. But they are not here today and won't be for some time. Fracking is not a short-term solution. The global prevalence of natural gas shows us that there is at least 200 years' worth of supply and is therefore a huge resource.

There are opponents to fracking. The active ones tend to be from the environmental lobby and they tend to exaggerate the environmental impact of shale gas. The passive opponents are every other energy company. We mustn't forget that the nuclear industry has been effectively killed in the US by the emergence of shale gas and the nuclear industry in the UK is under the same threat. However, most of what happens in fracking happens underground. We're talking of a temporary building site that would last six to eight months, with sites at maybe one per ten miles. People have visions of the Texas oilfields of 100 years ago, but it won't be anything like that.

Onshore oil and gas exploration is a global revolution. A proper understanding of the true impact of such exploration and production would reveal this to most people. This is the greatest news for the economy and the environment that we have had for many years. And maybe the reason that we are not more aware of the upside is that good news doesn't sell.

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