

## **East Kent Against Fracking**

### **The impacts of unconventional gas extraction on the local economy and jobs**

I am sure that those of you who are in favour of approving these applications take that position because you believe that they will lead to cheaper energy and more jobs. These are the key arguments of the industry and of our government and are seen to outweigh the risk to our water and the quality of life issues raised by industrialising our countryside.

First of all, I should like to outline the true picture of the position today in the USA, which is not quite the rosy picture painted by the industry.

#### **Cheap Energy – the American Experience**

In January 2012, the price of natural gas plunged to below \$2 per thousand cubic feet (mcf) due to overproduction by shale operators. Unfortunately, as with most aspects of unconventional shale production, this proved short-lived and was oversold. Electricity generation from natural gas began to fade only months after it had gained ground in much the same way that shale gas wells fade only months after initial production. As gas prices moved up to trade between \$3.50 and \$4 per mcf, utilities promptly began switching back to using coal for generation.

During the first half of 2013 the price of natural gas delivered to electricity generators averaged \$4.46 per mcf, 44% higher than in the same period last year.

Industry and its proponents, including such entities as the *Wall Street Journal*, have made extravagant comments about natural gas providing “benefits to the poor”, particularly with respect to lower electricity costs for the consumer well into the future. Such benefits are already evaporating.

Secondly, but most importantly, we can now safely assume that natural gas is priced out of the market for electricity generation; it is somewhere between \$3.50 and \$4 per mcf. This produces an enormous difficulty for natural gas producers in that the break-even costs of unconventional shale wells are considerably higher, with the average amounting to around \$6/mcf. Exportation of shale gas will drive these prices higher still, creating an unfavourable climate for natural gas as a primary source of electricity generation.

The financial analyst Rogers<sup>1</sup> warns that the interplay of geological constraints and financial exuberance are creating an unsustainable bubble. Her report shows that shale oil and gas reserves have been “overestimated by a minimum of 100% and by as

---

<sup>1</sup> <http://energypolicyforum.org/portfolio/deborah-rogers-in-londons-guardian/>

much as 400-500% by operators according to actual well production data filed in various states... Deliberate overproduction drove gas prices down so that Wall Street could maximise profits “from mergers & acquisitions and other transactional fees”, as well as from share prices. Meanwhile, the industry must still service high levels of debt due to excessive borrowing justified by overinflated projections.

With the addition of our proximity to EU markets, plus the higher cost of production here if regulation is to make it safe, do you really still believe the myth of cheap energy?

### **Job Creation – the American Experience**

Much has been claimed by the oil and gas industry with regard to job creation from shale development. In the USA it has been stated repeatedly that as many as 600,000 jobs will be generated by shale production. But these numbers are based on economic models which, when assessed, were found to include jobs such as strippers and prostitutes in the mix. Arguably this is job creation, just not the sort that most Americans would prefer to acknowledge.

Unemployment is growing in Pennsylvania in spite of its self-proclaimed “booming” Marcellus shale production. The oil and gas industry has shouted from the roof tops for quite some time about the “shale revolution” and its supposed long-term economic benefits. But those benefits seem to be confined to the few, such as one of the biggest players in the business who boasts: “I can assure you that buying leases for x and selling them for 5x or 10x is a lot more profitable than trying to produce gas at \$5 or \$6 per thousand cubic feet.”

Meanwhile, small business owners are the ones who have been impoverished. They are the ones whose businesses have failed and faltered and struggled. They are also the largest provider of net new jobs in the USA, in spite of all the oil and gas industry’s rhetoric. Independent analyses of shale plays throughout the country confirm that wells are short-lived and reserves not as great as industry promises. In addition, communities where drilling has occurred are now dealing with the expensive aftermath. The drilling companies have offloaded that significant burden onto the taxpayers and local businesses. This is true of the oil and gas industry as a whole. In fact, economists estimate that if all the external costs of oil and gas were included, gasoline would cost in excess of \$12 per gallon.

What are these costs? Firstly, water must be provided for communities where it has been contaminated. Secondly, there are rising health care costs to pay for those suffering from the effects of fracking, everything from skin rashes to respiratory problems and cancer. And last but not least for district councillors are the costs of repairing roads damaged by the constant stream of heavy goods vehicles to and from fracking sites. Some roads require annual maintenance at \$70,000-80,000 per mile. However, other roads need basic reconstruction at a cost of up to \$920,000 per mile.

### **The Scenario Locally**

So let's look at the issues in our local context. First of all, jobs. The extraction of unconventional gas is not a labour-intensive industry. You will note on the planning applications that they require only 2-3 cars per shift. The normal practice in this industry is to bring in existing staff or experienced contractors for skilled posts such as engineers; companies will not recruit locally for these positions. There may be some work available on and between sites, but this will be unskilled, insecure and potentially hazardous (operatives are not given details of the toxic substances which they handle).

However, the real worry is the likely impact on existing jobs. How will these proposed developments affect the various sectors that at present provide jobs in Dover District? First of all, *The Economic Impact of Tourism in 2011*, commissioned by Dover District Council and Visit Kent, found that tourism was worth £243,590,000 to the district in 2011 – up 16% on 2009 – and employment supported by tourism was up by 3%. So local tourism is an existing, growing industry. What impact could be made on these positive figures by even a year's worth of unsightly, traffic-heavy drilling, with the associated reputational cost to Kent's natural beauty? The world-famous Church of St Nicholas at Barfreston is not two miles from the proposed drilling site at Tilmanstone. Then consider the effects of the hundreds of wells that would have to be drilled to make the project economically viable. How much of our lovely countryside would be left? And who would want to visit our district any more?

While the three exploratory sites under consideration and the one already approved might not represent a large take of agricultural land, should these tests prove successful and Coastal Oil and Gas Ltd proceed to production, then there would be a considerable loss of agricultural land and the jobs attached to it. And the damage would not stop there: all adjacent land and what it produces could also be blighted by public perception that the food produced might be contaminated. Consider a business like Tilmanstone Salads, which supplies fresh, locally grown produce to Marks & Spencers: how would their trade be affected? Not only would they be worried about consumer perception of their product, but also about the speedy delivery essential to them. With the huge increase in HGV traffic in the area and the congestion caused by regular demonstrations, their delivery trucks would face unacceptable delays. In their position I would already be considering relocation . . . and they employ over 800 people.

Of course the other major employer is Dover Harbour with its associated freight trade, as well as private passengers and the cruise liners. How will the big increase in traffic impact on them? With the very narrow lanes which will have to be negotiated to reach Guston and the possibility of HGVs causing gridlock on those roads, with traffic backed up to the routes out of Dover, who would not consider another route for their journeys to the continent?

Our local economy is also boosted by the large number of second home owners and retirement households. But who would choose to come and live inside an industrial

complex? I am sure there are many other businesses whose prospects will not be improved by the coming of this industry to the district. The realistic prospects are for an enormous net loss of jobs.

At the same time, we need to consider all the other costs to our local economy that such an industry will bring with it.

I have already referred to the damage to roads, and possible health care costs. Other costs to the taxpayer could include the costs of processing such controversial applications to local government, the costs of policing such unpopular developments which will inevitably draw demonstrations, the cost of implementing the regulation and ongoing monitoring of what is a potentially dangerous operation, and finally the costs of any clean-up in the event of a catastrophe, and/or the probable bankruptcy of the firm involved. You may not be aware that the total assets of Coastal Oil and Gas declared in October 2012 amounted to only £1,000. So potentially enormous costs will devolve onto the taxpayer. We should also consider the costs to residents of increased insurance payments and the loss of value to their property.

Many people I know are saying: "Let them get on and test, because we don't think they will find economically viable methane." But we must be aware that companies will want to test the shale below the coal bed. Having expended so much, they will not want to give up. There is also the fact that once those applications are passed, it will be much more difficult to refuse later ones. If the company receives permission for three more exploratory boreholes on top of the one it already has, drilling will be going on within the District for more than a year. The whole area will be blighted, incoming business will falter, and heaven help you if you need to sell your house or business during that year.

Furthermore, should these trials lead on to production, any employment created by the industry would be vastly outweighed by the likely number of existing and future jobs and small business livelihoods which would be lost in the tourism and agriculture sectors. Even if no accidents, leaks or other problems occurred (statistically almost impossible, given the number of wells contemplated) the effect upon our unspoilt countryside, which can sustain world-class tourism and high-quality food production would be disastrous. As an industrial zone, with ravaged landscapes, thousands of daily HGV vehicle journeys and the diversion of millions of gallons of water, both the perception and the reality of the area would be drastically and irrevocably changed.

Sources

Osborn et al. (2011) *Methane Contamination of drinking water accompanying gas--well drilling and hydraulic fracturing.*

Bamberger, M. & Oswald, R. E. (2012) *Impacts of Gas Drilling on Human and Animal Health.*

Brundage. et al. (2011). *Pennsylvania Marcellus Shale Workforce Needs Assessment*

Barth (2011) *Hydrofracking offers short--term boom, long--term bust*

Deutsche Bank (2011) *European Gas: A First Look At EU Shale--Gas Prospects*

Goldenberg (11 August 2013) *A Texan tragedy: ample oil, no water*

Food & Water Watch (2012) *Fracking and the food system*

Osborn et al. (2011) *Methane Contamination of drinking water accompanying gas--well drilling and hydraulic fracturing.*

Tom Brown, Senior Credit Executive, Norddeutsche Landesbank, London EC2 UK (quoted in *Financial Times*)

*The Economic Impacts of Developing CSG in North West NSW* The Australian Institute

Deborah Rogers Energy Policy Forum

