

Dear Sir/Madam,

I am writing in relation to this article

<http://www.independent.ie/business/irish/shale-oil-and-gas-must-play-a-part-in-recovery-29418234.html>

a piece by Oisín Fanning on Shale Oil and Gas in the Irish Independent.

The first thing I would like to point out is that while Mr Fanning was identified as executive chairman of San Leon Energy, the direct financial interests of San Leon were not identified in the article.

San Leon still has a direct financial interest in the Barryroe oil field.

<http://www.sanleonenergy.com/media-centre/news-releases/2012/june/22/barryroe-technical-update.aspx>

San Leon also has a direct financial interest in 'fracking' and shale gas through its Polish Operations.

From Press Ombudsman guidelines.

2.3 Readers are entitled to expect that the content of a publication reflects the best judgment of editors and writers and has not been inappropriately influenced by undisclosed interests.

Wherever relevant, any significant financial interest of an organisation should be disclosed. Writers should disclose significant potential conflicts of interest to their editors

There is also a question about suitability of allowing Mr Fanning to comment given that San Leon Energy is operating in Western Sahara and has not secured agreement of the Saharawai people.

<http://www.wsrw.org/a105x2089> By allowing Mr Fanning a public platform the Independent may be construed as endorsing this position.

The accuracy and indeed some of the equivalence statements in the article leave much to be desired and fall foul in my view of Principle 2 in the Ombudsman guidance. Notwithstanding the provisions in principle 2.1, Principle 2.2 “Comment, conjecture, rumour and unconfirmed reports shall not be reported as if they were fact.” is infringed in many cases throughout the article.

There is a confusion and equivalence of unconventional resources (shale Gas) with conventional oil (Barryroe) in the article. My understanding is that Barryroe is a conventional oil field. There have been no shale oil deposits identified in Ireland and so the heading of the article is misleading.

There is also a misrepresentation of the facts and thus exaggeration of the Shale resources in Leitrim. The article says that "Tamboran says it has enough gas for 40 years of energy security". In fact this is not true : http://www.tamboran.com/wp-content/uploads/2011/09/20120201_Tamboran-RoI-update-Jan-2012-Final.pdf Tamboran says it "**could have**". Given Tamboran have not drilled a well yet, and given from FOI that Minister Rabbitte could see “**no scientific basis**” for their figures, <http://thegasmancometh.files.wordpress.com/2013/06/noscientificbasis.pdf> then there is a huge difference between a possible resource, and Mr Fanning's assertion that Tamboran 'has' the gas.

This assertion that these resources are proven is false.(they are resources not reserves) and the PAD admitted in a Joint Oireachtas hearing Oct 2012

[<http://goodenergiesalliance.com/2012/10/25/discussion-at-the-joint-oireachtas-committee-the-complete-video-online/>] . that they would require 'many' exploration and appraisal wells be drilled before proving the resource was viable is also confounded in the manner in which its expressed.

While Tamboran do state the gas could provide 40 years of energy security, their article above states they have 12 years supply of gas. This would then imply that the total value of the gas in balance of payments would be at most 3billion Euros over 40 years.

(1billion of gas /year * .25 tax rate from Mr Fannings own figures). which compares with Mr Fannings 1billion saving per year (cumulative for Oil and Gas.) Also Mr Fanning misrepresents (double counts) Tamboran's figures as that 3billion in taxes is already included in the 7billion investment figures. "Our projections of the economic gains for Ireland from

this proposed €7 billion investment includes up to #4.9 billion in tax revenues over the lifetime of the project," while further up the document the breakdown of the 4.9billion is given "Tax revenues of up to #4.9 billion (including corporation tax, Vat, employment taxes and exploration tax);"

The 25% referenced by Mr Fanning is the corporation tax rate for oil and gas companies in Ireland. There are no Royalties on oil and gas in the Republic of Ireland, so Mr Fanning is incorrect to call this a royalty rate. It is a corporation tax rate.

Mr Fanning talks about "Junk science gleaned off the Internet". The report is from the IEA. The International Energy Agency is oft quoted by the supporters of Shale Gas, indeed Mr Fanning summarises parts of the same Agency's report in relation to CO2 emissions reduction in the US.

Its 2012 - World Energy Outlook states

"No more than one-third of proven reserves of fossil fuels can be consumed prior to 2050 if the world is to achieve the 2 °C goal"

https://www.iea.org/newsroomandevents/pressreleases/2012/november/name_33015_en.html

The article then goes on to declare those opposed to shale gas as

"mis-informed scare mongerers". He says 'No one is proposing to industrialise the landscape'.

Compare this with Mr Moorman's comments in this youtube video "**The biggest issue was raised, industrialisation of the area, as I see it**". <http://www.youtube.com/watch?v=GUBf8WBnBic> from 7:50 onwards. So Mr Fanning's assertion that we are scaremongers is unfounded, especially when our view point about industrialisation of the countryside is actually aired by Tamboran themselves. I object to his use of the word scare mongerer given he has no evidence to back up his claim. As to the issue of mis-informed, I believe it is Mr Fanning who is ill informed in this instance.

I also take issue with the view that "Shale gas will certainly have a lower footprint than the thousands of windmills proposed to export electricity to the UK for example". For a start we only know about proposed Shale projects in Co. Clare, N. Leitrim and SW. Fermanagh. However those two basins stretch way further than that (affecting 13 counties). Similarly Shale is common across all of Ireland while other unconventional gas may be present in old coal mining areas (eg Kilkenny/Laois). Given that no SEA (Strategic Environmental Assessment) has been produced for either project, giving the scope of areas involved, then this statement cannot be substantiated in any way, and is opinion masquerading as fact.

Mr Fanning also states that "there has been not one single case of proven pollution out of hundreds

of thousands of shale wells in the US"

Can Mr Fanning please provide evidence as to "hundreds of thousands of Shale Gas Wells". There are many gas wells in the US, but those targeting shale and hydraulically fracked number less than 70000.(some say less than 35000 if one considers horizontal drilling which is what is proposed in Leitrim/Fermanagh and less again when Multi-well pads are in use.)

Secondly there have been many cases of pollution which have been documented against shale gas wells. eg. http://cbf.typepad.com/bay_daily/2013/06/records-show-161-cases-of-well-contamination-by-drilling-in-pa.html Generally the industry claim is that these contamination events are not caused by the hydraulic fracturing process but by other events such as surface spills, well casing failures. Mr Fanning's statement is incorrect as it makes no such distinction.

Regardless, I tend to use this definition of Hydraulic Fracturing.

"Hydraulic Fracturing has to be looked at, as a system, that involves several different features above ground, not just the actual sub-surface fracturing itself." Glenn Paulson, PhD, Scd(Ho), Scientific Advisor to the Administrator, US Environmental Protection Agency, so even if he had made that distinction, it would be incorrect to do so.

"The famous American lawyers would have picked up on that – but they haven't because they need proof." Mr Fanning neglects to mention that the oil and gas companies are using financial clout to take documents out of the public domain through the use of non-disclosure agreements. Lawyers have been involved on both sides of these cases. I'm unsure whether they were famous or not. Secondly they are narrowing the terms under which one can make a claim (eg in PA one must notice a contamination event within 3 months of commencement of drilling), while thirdly they are seeking to redefine the word 'proof' through making baseline tests which show water clear before drilling inadmissible as evidence in court. Finally, there are many reasons not to take a court case, eg lack of funding, not just because of lack of evidence.

Mr Fanning states "The impact on the green and pleasant land will be far less than some fear it will be, with only a handful of drill sites going at once, rarely within sight of each other." There is no proof for this statement. In fact Shale gas development in the US is the exact opposite of this with a huge ramping up of drilling very quickly.

The reason is that Shale Gas suppliers will be bound by volumetric agreements (eg. having to produce a certain amount of gas/month). The decline rates on Shale wells are large (Berman 2011, Hughes 2013, University of Texas 2013) and the wells are often uneconomical after 7 years (eg. Barnett Shale : Berman 2011) necessitating huge drilling programs to maintain production (Hughes 2013, UT 2013) [Its worth noting the University of Texas Report 2013 on the Barnett Shale play was industry funded but even it concluded a large drilling program was needed to offset the decline in that shale field.]

Secondly Mr Fanning hasn't been to N Leitrim/W Fermanagh where there are many hills and valleys so offering a larger view of the area, and also necessitating greater ground disturbance as finding 7 acres (Tamboran's projected pad size) of flat land would be a problem. Indeed the USGS suggest that each pad could cause up to 30 acres of ground disturbance.

<http://pubs.usgs.gov/of/2012/1154/of2012-1154.pdf>

Tamboran's own figures call for between 150-300 drills per annum for 11 years, between years 6 and 16 (inclusive) of their 3000 gas well project in N Leitrim/W Fermanagh. Mr Moorman indicated that they could possibly look at drilling 9000 gas wells.

Mr Fanning's comments take no notice of the cumulative effect of all the drilling. Also pads need to be maintained over their lifetime, with waste effluent having to be emptied periodically.

Mr Fanning's comments also refer only to the drilling. Pads, Roads, Pipelines, compressor stations,

and gas refineries will also need to be constructed. On a recent visit to Arkansas other facilities like truck washes, storage depots (vast and numerous), waste disposal plants, water treatment facilities, water storage facilities and chemical mixing facilities also permeated the landscape.

With regards to "The good burgers of Bremen or the Meinheers of Maastricht will continue to come to Ireland for their holidays – but all winter long, the hotels and B&Bs could also be full with gas industry workers from Calgary and Houston." Again Tamboran have publicly stated that they wish to have full control over these services (eg. catering and hotels) for the gas field. Mr Fanning would also seem to suggest that Oil and Gas is only a winter activity, when it is 24/7 365 days a year as he well knows.

"Indirect employment is going to come obviously from subsidiary services in the community. and that leads me to talk to you about restaraunts and hotels and so on. but the reality is also we'll be building many of those services. If we don't build them, then the Schlumbergers of this world will come here and they'll build them. We would rather we had control over that to ensure that the services are in our standards. Its pretty hard to wag the dog if you're the little tail, when its Schlumberger so it'll be a lot better for us to have full control over those services and work with local entrepreneurs to fund those projects and get them off the ground".

Mr Richard Moorman - Engineer's Ireland Presentation. April 2012

Given Mr Fannings unstated Financial interests, the amount of non evidenced based information in the article, and especially given the accusation that those opposed to this shale gas project in Leitrim are unscientific and scaremongering, I believe the Independent must make amends through a prominent article indicating where there are errors in the Mr Fanning's article.

I also believe that given the platform given by the Independent to those extolling the benefits of Shale Gas, in the interests of balance a similar article must be published which looks at the negatives of this industry. (There are many people within the groups here who can articulate their viewpoint with supported peer reviewed science, and testimony from esteemed Economists and financial investors alike.)

Regards
Tom White