

## Fracking Matters Newsletter (19) – 7 November 2011



Information letter for those to whom fracking matters and (some) updates on the website [www.frackingfreeireland.org](http://www.frackingfreeireland.org), with links to other (Irish) fracking websites

### Reminder Upcoming events

#### Fracking Free Fringe Festival 11th & 12th November.

(full details: newsletter 17 and web FFI upcoming events)

#### Ballinamore/West Cavan

with comedians, musicians and guest speakers 12 Nov from 2 pm

**José Bouvé, MEP**, (FR) and  
Prof. **'Tony' Ingraffea**, (US)

Organiser: Tracy Murray:

[freefringefest@gmail.com](mailto:freefringefest@gmail.com)

#### Information presentation meeting:

(full details: newsletter 17 and web FFI upcoming events)

- **Monday 14 November 2011**

**Cliffoney Hall, 8 pm**

With guest speaker Dr. Aedin Mc Loughlin B.Sc. Ph.D. will present "Shale Gas Extraction, Boom or Bust?" informing you of the benefits and also the risks of Hydraulic Fracturing. contact: Meg [youthmardingo@gmail.com/0863840245](mailto:youthmardingo@gmail.com/0863840245)

#### Ireland Fracking Awareness Week 14- 17 November 2011

(sole) Organizer Brian Rooney  
[brianroon@eircom.net](mailto:brianroon@eircom.net)

Program not confirmed yet

#### Local News

Carrick-Against Fracking

Contact: John Cronogue

[icronogue@gmail.com](mailto:icronogue@gmail.com)

Our weekly meetings every Thurs in Carrick on Shannon continue with more new people attending.

**This Thurs .10th** we will be in the usual venue, Burkes Bar, Bridge St. at 7pm. All welcome

**On Friday night 11th of Nov**, we will hold a presentation evening in Club F (The Swan Lake Inn) Efrinagh, near Drumsna. This event will start after the Ireland V Estonia match at about 10pm.

A short presentation and film will be shown. Guest speakers from the farming and tourism sector will be in attendance as well as representatives from Leitrim Council.

Some money still remains from the first Carrick on Shannon public meeting in the Bush hotel. Anyone who needs money for leaflets or other Fracking related matters should contact John on 087 909 3 909.

**Letter and answer** - Michael Cairns  
[nautical\\_9@hotmail.com](mailto:nautical_9@hotmail.com)

Here is a letter I received from Arlene Foster (Dept Enterprise & Trade Investment DETI) at Stormont.

I asked her to meet with me to discuss the licences handed out in NI to big business.

It seems she does not want to meet with me to help me understand and discuss the Fracking Industrys pro's and cons.

Seems she is too busy....

I will continue to send her letters asking for a meeting.

Answer:

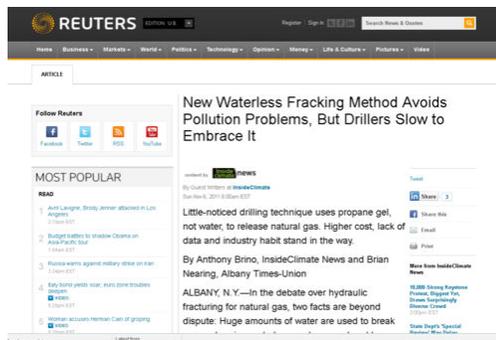
<http://frackingfreeireland.org/wp-content/uploads/2011/09/ARletter-1-.jpg> (web FFI: contacts/letters politicians)



## Updates on Web FFI

### Fracking and water

New Waterless Fracking Method Avoids Pollution Problems, But Drillers Slow to Embrace It



<http://www.reuters.com/article/2011/11/06/idUS375448304420111106>

(Web FFI Irish Press/Global press and Web FFI Official reports/research – shale gas and environment)

## Call for European Moratorium on Shale Gas - Info sent by Natalie Descheres

Descheres

[n.descheres@socratconsulting.com](mailto:n.descheres@socratconsulting.com)

<http://www.slate.fr/tribune/44641/moratoire-europe-gaz-de-schiste>

(Web FFI Political issues/France)

The article refers to the European report:

<http://frackingfreeireland.org/wp-content/uploads/2011/08/impacts-of-shale-gas-etc-on-human-health1.pdf> please scroll down for a synopsis.

## TRIBUNE

Mick Jaurès [crif/sovi à schor-y. réactions](#) [Text](#)

Pour un moratoire européen sur les gaz de schiste

Pour Sandrine Bélier, députée européenne Europe Ecologie, le bilan est sans appel: la balance entre les coûts et avantages est claire -les risques et inconvénients sont simplement inacceptables, les avantages énergétiques nuls.



Call for a European moratorium on Shale Gas. For Sandrine Belier, European Deputy of Europe Ecologie: the risks of shale gas are not acceptable and the advantage of energy is nil

Date: 07/10/2011

Author: Sandrine Belier MP, Europe Ecologie

Synopsis: Meeting in Brussels 4/10/2011 about the exploitation of Shale Gas

Sandrine describes a tense meeting between the pro and anti factions.

The pro seemed to be led by the polish mp particularly annoyed at a report on the impact of shale gas on health and the environment. The report in english

<http://www.europarl.europa.eu/document/activities/cont/201107/20110715ATT24183/20110715ATT24183EN.pdf>

is the first official document from Europe, which over 90 pages, details the extent and gravity of shale gas exploitation.

Polish arguments can be summarised as: nuclear is dangerous, Fukushima happened but it not a reason to stop. It seems this report was published on the 8th of July but smothered as Europe was under Polish presidency, France had just suspended 3 licenses and a host of events were happening at the same time. Meanwhile the rapport covers:

“This study discusses the possible impacts of hydraulic fracturing on the environment and on human health. Quantitative data and qualitative impacts are taken from US experience since shale gas extraction in Europe still is in its infancy, while the USA have more than 40 years of experience already having drilled more than 50,000 wells. Greenhouse gas emissions are also assessed based on a critical review of existing literature and own calculations. European legislation is reviewed with respect to hydraulic fracturing activities and recommendations for further work are given. The potential gas resources and future availability of shale gas is discussed in face of the present conventional gas supply and its probable future development.”

Its conclusion is damning: it is not worth it.

Meanwhile Sandrine belier is committing herself to defend a European moratorium on shale gas extraction and push for regulation banning the technology. She can be contacted on: [sandrine.belier@europarl.europa.eu](mailto:sandrine.belier@europarl.europa.eu)

European report executive summary:

#### “RECOMMENDATIONS

- There is no comprehensive directive providing for a European mining law. A publicly available, comprehensive and detailed analysis of the European regulatory framework concerning shale gas and tight oil extraction is not available and should be developed.
- The current EU regulatory framework concerning hydraulic fracturing, which is the core element in shale gas and tight oil extraction, has a number of gaps. Most importantly, the threshold for Environmental Impact Assessments to be carried out on hydraulic fracturing activities in hydrocarbon extraction is set far above any potential industrial activities of this kind, and thus should be lowered substantially.
- The coverage of the water framework Directive should be re-assessed with special focus on fracturing activities and their possible impacts on surface water.
- In the framework of a Life Cycle Analysis (LCA), a thorough cost/benefit analysis could be a tool to assess the overall benefits for society and its citizens. A harmonized approach to be applied throughout EU27 should be developed, based on which responsible authorities can perform their LCA assessments and discuss them with the public.
- It should be assessed whether the use of toxic chemicals for injection should be banned in general. At least, all chemicals to be used should be disclosed publicly, the number of allowed chemicals should be restricted and its use should be monitored. Statistics about the injected quantities and number of projects should be collected at European level.
- Regional authorities should be strengthened to take decisions on the permission of projects which involve hydraulic fracturing. Public participation and LCA assessments should be mandatory in finding these decisions.
- Where project permits are granted, the monitoring of surface water flows and air emissions should be mandatory.

- Statistics on accidents and complaints should be collected and analysed at European level. Where projects are permitted, an independent authority should collect and review complaints.
- Because of the complex nature of possible impacts and risks to the environment and to human health of hydraulic fracturing consideration should be given to developing a new directive at European level regulating all issues in this area comprehensively.

---

#### ENVIRONEMNTAL IMPACTS

- An unavoidable impact of shale gas and tight oil extraction is a high land occupation due to drilling pads, parking and manouvering areas for trucks, equipment, gas processing and transporting facilities as well as access roads. Major possible impacts are air emissions of pollutants, groundwater contamination due to uncontrolled gas or fluid flows due to blowouts or spills, leaking fracturing fluid, and uncontrolled waste water discharge.
- Fracturing fluids contain hazardous substances, and flow-back in addition contains heavy metals and radioactive materials from the deposit. Experience from the USA shows that many accidents happen, which can be harmful to the environment and to human health.
- The recorded violations of legal requirements amount to about 1-2 percent of all drilling permits. Many of these accidents are due to improper handling or leaking equipment.
- Furthermore, groundwater contamination by methane, in extreme cases leading to explosion of residential buildings, and potassium chloride leading to salinization of drinking water is reported in the vicinity of gas wells. The impacts add up as shale formations are developed with a high well density of up to six well pads per km<sup>2</sup>.
- Fugitive Methane emissions from hydraulic fracturing processes can have a huge impact on the greenhouse gas balance. Existing assessments give a range of 18 to 23 g CO<sub>2</sub>- equivalent per MJ from the development and production of unconventional natural gas. The emissions due to methane intrusion of aquifers are not yet assessed. However, project specific emissions might vary up to a factor of ten, depending on the methane production of the well.
- Depending on several factors, greenhouse gas emissions of shale gas relative to its energy content are as low as those of conventional gas transported over long distances or as high as those of hard coal over the entire life cycle from extraction to combustion.
- EU Regulatory Framework
- The purpose of a mining law is to provide a legal framework for mining activities in general.
- The aim is to facilitate a prosperous industry sector, a secure energy supply and to secure
- sufficient protection for health, safety and the environment. At EU level, there is no comprehensive mining framework.
- However, four Directives specifically designed for mining do exist. Additionally, there is a plenitude of non-mining-specific Directives and Regulations affecting the extractive industry. Focussing on regulatory acts concerning the environment and human health, the 36 most relevant Directives from the following fields of legislation were identified: water, protection of environment, safety at work, radiation protection, waste, chemicals and associated accidents.
- Due to the multitude of relevant legislation from various fields, the specific risks of hydraulic fracturing are not sufficiently covered. Nine major gaps were identified: 1. lack of a mining framework Directive, 2. insufficient

threshold in the Environmental Impact Assessment (EIA) Directive for natural gas extraction, 3. declaration of hazardous materials not mandatory, 4. approval of chemicals remaining in the ground not required, 5. no Best Available Technique Reference (BREF) on hydraulic fracturing, 6. The waste water treatment requirements are insufficiently defined, and the capacities of water processing facilities are probably insufficient if underground injection and disposal is to be banned, 7. insufficient public participation in decision-making at regional level, 8. effectiveness of water framework directive insufficient, and 9. LCA not mandatory.

#### Availability of shale gas resources and role in a low-carbon economy

- The potential of unconventional gas availability must be seen in the context of conventional gas production:
  - European gas production has been in steep decline for several years and is expected to decline by another 30 per cent or more until 2035;
  - European demand is expected to rise further until 2035;
  - Imports of natural gas will unavoidably rise further if these trends become reality;
  - It is by no means guaranteed that required additional imports in the order of 100 billion m<sup>3</sup> per year or more can be realised.
  - The resources for unconventional gas in Europe are too small to have any substantial influence on these trends. This holds even more as the typical production profiles will allow extracting only a certain share of these resources. In addition, greenhouse gas emissions from unconventional gas supply are significantly higher than from conventional gas supply.
  - Environmental obligations will also increase project costs and delay their development. This will reduce the potential impact further.
  - It is very likely that investments in shale gas projects – if at all – might have a short-living impact on gas supply which could be counterproductive, as it would provide the impression of an ensured gas supply at a time when the signal to consumers should be to reduce this dependency by savings, efficiency measures and substitution.

#### Conclusions

- At a time when sustainability is key to future operations it can be questioned whether the injection of toxic chemicals in the underground should be allowed, or whether it should be banned as such a practice would restrict or exclude any later use of the contaminated layer (e.g. for geothermal purposes) and as long-term effects are not investigated. In an active shale gas extraction area, about 0.1-0.5 litres of chemicals are injected per square metre.
- This holds even more as the potential shale gas plays are too small to have a substantial impact on the European gas supply situation. The present privileges of oil and gas exploration and extraction should be reassessed in view of the fact that the environmental risks and burdens are not compensated for by a corresponding potential benefit as the specific gas production is very low.”