

Update # 4 – Health, Moratoria, Economics, Climate & more

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NOTE: Because some of the studies cited here lie behind pay walls or require large downloads, we often cite a media article covering the study. However, those articles contain links to the actual study for those who want more depth.

There have been so many current events and new studies surrounding shale gas that it is hard to know what to put in an update. Obviously, the declaration of a moratorium by Premier Gallant would have to top our list. But almost equally important are the moratoria announced by Quebec and New York.

Both concluded that the health and environmental costs of shale development exceeded any financial gains.

<http://montrealgazette.com/news/quebec/fracking-provides-few-benefits-to-quebec-environmental-review-says>

The chief medical officer for New York stated that he would not want his family to live in a shale area.

Concurrently, the Concerned Health Professionals of NY updated their '**Compendium Of Scientific, Medical, And Media Findings Demonstrating Risks And Harms Of Fracking (Unconventional Gas And Oil Extraction)**', a review of all the science.

The topic of this Update was to be Science, and the Compendium is a place to see all of the latest research (up to the end of 2014) on every aspect of shale gas. While lengthy, it has an executive summary, table of contents by topic, (with research listed in date order), is easy to read and, of course, has links to the studies themselves if you are inclined to delve into the science.

You can read or download the document from our website.

<http://www.noshalegasnb.ca/our-resources/citizens-guide/> Choose the English version of the guide then look for the entry: "Compendium Health Profs of NY – update."

The University of Missouri compiled a similar readable collection of peer-reviewed science that is focused on a single topic; the '**Developmental and reproductive effects of chemicals associated with unconventional oil and natural gas operations.**

<http://www.degruyter.com/view/j/reveh.2014.29.issue-4/reveh-2014-0057/reveh-2014-0057.xml?format=INT>

Click on each topic listing for a summary of the research in that area

These compilations illustrate that, as the number of studies increase, concern for public health also increases. All conclude that more research is necessary before going any further with this industry.

In New Brunswick, this means that we can dismiss those voices claiming that industry can meet conditions for lifting a moratorium. It will take many years and many studies before any objective judgment can be made on whether shale development is safe for humans and the environment.

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It is possible that the shale industry itself may have an abbreviated lifespan. The recent crash of oil prices illustrates the dangers of basing ones economic fortunes on the fossil fuel industry. Provinces and countries that have done so are experiencing huge problems with revenue shortfalls that are changing surpluses into deficits and busting budgets. Job layoffs are increasing and reduced private investment is shutting down new projects.

While oil is the news of the day, the finances of shale gas have been and will continue to be volatile. Prior to the oil price crash, shale oil at least was making a profit. In contrast, shale gas has not sold at a profit since 2008. The industry has existed only by being able to borrow money at almost zero percent interest, by luring in naïve investors with promises that soon the price will go up (largely due to plans for exports), and by receiving government subsidies. All of these conditions are now changing.

A case in point is what is happening in British Columbia whose fortunes are tied to shale gas. See **‘Tax Breaks for BC Frackers Reach over \$1 Billion.**

<http://thetyee.ca/News/2014/11/04/Tax-Breaks-for-BC-Frackers/>

According to the B.C. auditor general's 2014 summary, subsidies provided by the government to the shale industry since 2008 have reduced government gas revenues by two-thirds. *Current public and industry records show that the government now extends more credits to the shale gas industry than it earns in revenue.*

Due to falling demand and the pricing mechanisms for international sales of liquid natural gas (LNG), often linked to the price of oil, dreams of an export market for LNG from shale are also quietly fading.

As 2014 is now in the books as the hottest year on record, it becomes more obvious that decreased usage of all fossil fuels will have to be a part of any serious response to climate change. Here is one of several new studies that have confirmed what older studies concluded - that at least two thirds of known fossil fuels must remain ‘unburned.’

<http://www.theguardian.com/environment/2015/jan/07/much-worlds-fossil-fuel-reserve-must-stay-buried-prevent-climate-change-study-says>

In virtually all the scenarios, new sources and, in particular, new unconventional sources like New Brunswick’s shale gas must remain in the ground.

This realization is reflected in the recent warning from Mark Carney, former head of the Bank of Canada and now governor of the Bank of England, that investments in fossil fuels are at high risk of being lost, as the fuels must remain ‘unburned.’

<http://www.theguardian.com/environment/2014/oct/13/mark-carney-fossil-fuel-reserves-burned-carbon-bubble>

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Besides climate scientists, The World Bank, International Energy Agency, dozens of governments and international financial institutions, and hundreds of businesses share his view.

Evidence continues to accumulate that the climate change threat is growing and that we are falling further behind in our attempts to mitigate it.

<http://www.commondreams.org/news/2014/12/03/west-antarctica-melting-ice-rates-have-tripled-last-decade>

<http://www.commondreams.org/news/2014/10/06/rate-ocean-warming-vastly-underestimated-study>

<http://www.commondreams.org/news/2015/01/13/losing-climate-fight-has-400-ppm-become-planets-new-normal>

Even such conservative institutions, such as the US Department of Defense, are citing climate change as the major threat to peace and stability.

<http://climateandsecurity.org/tag/department-of-defense/>

So, it would appear that New Brunswick's decision to enact a moratorium on shale gas was a wise one indeed. It will stop an industry, which appears to pose serious threats to our health, which is a huge financial risk, and which may never be able to be developed in a world facing climate change.

Sadly, by continually beating the drum for fossil fuels, Canada may be limiting its future.

<http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/canada-risks-being-left-behind-as-green-energy-takes-off/article20714118/>

You can see the future that NB avoided, if you have a few minutes to watch a YouTube video (the whole video is 20 minutes, but you can watch just a part). **This is a must-see video.**

<https://www.youtube.com/watch?v=7jN6TSSPZwU>

And finally, we close with an update on a topic that has been controversial for several years, but new studies are drawing conclusions – does fracking cause earthquakes?

http://thetyee.ca/News/2015/01/10/Fracking_Industry_Shakes_Up_Northern_BC/?utm_source=daily&utm_medium=email&utm_campaign=100115

http://ecowatch.com/2015/01/06/fracking-cause-ohio-earthquake/?utm_source=EcoWatch+List&utm_campaign=2b12cfb273-Top_News_1_6_2015&utm_medium=email&utm_term=0_49c7d43dc9-2b12cfb273-85328537