FRACKING MYTH-BUSTERS New Brunswick Anti-Shale Gas Alliance / NoShaleGasNB.ca

We hear these statements all the time from industry and other proponents of fracking. Beyond the utter falseness of the claims, we think the message is getting pretty old and stale. But you decide:

Myth#1: Fracking has been done safely for 60 years.

What we know as modern "fracking" has only existed for roughly 15 years. Multiple wells are drilled from clusters of pads. The horizontal length of wells can now exceed several kilometres, and average water usage is now 30 times greater than 15 years ago. Extraordinarily high pressures must be used to inject many millions of litres of water and tens of thousands of litres of toxic chemicals, along with tons of sand, to fracture the shale. This also creates many millions of litres of toxic wastewater for which there is no safe means of disposal. As Andrew Nikifourk reports in his book, *Slickwater: Fracking and One Insiders Stand Against the World's Most Powerful Industry*, it most definitely has not been done safely, and industry has known for decades that the process creates underground pathways for migration of gases into water.

Myth#2: For every study that says it's not safe, another claims it is.

There are now more than 1,300 peer-reviewed studies and investigations on the impacts of fracking, the vast majority of which either confirm the damage done by fracking, or raise threatening new issues. If there were a similar number of studies showing that fracking did not threaten public health, contaminate water, pollute the air, or worsen climate change, we would know about them, since the gas industry would have touted them far and wide. Reviewers of all the known public health studies stated they could see no way that fracking could be done safely, and that it's especially hazardous to infants and children.

Myth#3: Canada has the toughest regulations.

There is no place in the world where regulations have succeeded in controlling the harm or costs of fracking, and Canada is no exception. Regulators are often seen as collaborators with industry, and often staffed with industry personnel. In Alberta, the regulatory body is entirely funded by the industry and headed by an ex-Encana executive, who founded the Canadian Association of Oil Producers. British Columbia and Saskatchewan regulators have kept violations, including life-threatening issues, secret from the public and even from the

government. Enforcement often depends on industry self-reporting.

Regulations lag well behind the science, particularly in public health. Gas wells are allowed within a few hundred meters of homes, schools and hospitals, despite studies showing harmful health effects up to 3 km away. Instances of water contamination, spills, leaking wells and earthquakes are the same here as everywhere else. Canada has not forced the industry to set aside nearly enough money – by far – to properly and safely close tens of thousands of abandoned oil and gas wells.

Myth#4: New Brunswick needs the jobs that come with shale gas.

The number of jobs and the economic benefits of shale gas are always greatly overstated. As the entire industry is mired in debt, it has continually cut costs by automating more tasks and laying off workers. This, plus the fact that the high paying skilled jobs on the drilling rigs are almost always staffed by experienced hands from elsewhere, means that, generally, only the lower level and temporary jobs are offered to local workers.

Currently, many NB employers cannot find people to fill jobs and are seeking temporary foreign workers. Meanwhile, young people leave the province for "better" jobs. Are temporary and highly dangerous shale gas jobs the kind that will keep our young people here?

In contrast, the renewable energy field is exploding with employment opportunities. In the US, the number of in producing solar electricity alone exceeds the number of jobs in coal, oil and gas. The clean energy industry in Vermont, a state which is smaller than NB in size and population, has grown 29% since 2013. It now employs over 19,000 workers.

Myth#5: Not pursuing shale gas is a missed opportunity for our economy

The last thing that the NB economy needs is another short-lived industry that rips out our natural resources, adds no value and sends them elsewhere for stockholders to make a profit, while the province is left with a devastated landscape. Shale gas drillers have

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produced a lot of product, but they have never made a profit. Shale gas is expensive to produce, and prices are low. Over time, expenses increase as the easy-to-get gas is extracted first. In contrast, renewable energy becomes more inexpensive as the technology improves. Shale gas extraction will become a dead-end industry.

We're nearing the end of the age of fossil fuels; investment in them is decreasing around the world. The threat of climate change means that the industry will continue to shrink, and long-term investments – like starting a new shale gas project – run a huge risk of ending up worthless. NB must look to the businesses of the future.

Myth#6: If you drive a car, you shouldn't complain about oil and gas.

If this were true, we'd also have no right to advocate for better healthcare while using hospitals, or lobby for better forest management policies while living in a wooden house. We live in the world that has been shaped by fossil fuels and, as yet, have few alternatives. However, that doesn't stop us from trying to change our world for the better, particularly for our children. As things change - renewable energy, electric cars, battery-driven machinery, etc. - we can move away from fossil fuels. Our individual political pressure and choices can affect the government decisions and market forces that will bring change.

There's no hypocrisy in having to use fossil fuels while working to end them. The force that does bring harm to the world and our children is the attitude of continuing to do destructive things just because, "that's the way we've always done them."

Myth#7: Shale gas is a transition or bridge fuel to battle climate change

This myth is based on the simple and incorrect assumption that the only way to measure the effect of shale gas on climate change is to see how much carbon dioxide is produced when you burn it. It is true that gas produces only half as much CO2 as coal. However, shale gas is primarily composed of methane, which is also a greenhouse gas – meaning that it traps heat in

our atmosphere. But it is 86 times more effective than CO2 in trapping heat, when measured over a 20-year period. It doesn't stay in the atmosphere as long as CO2, but even measured over a hundred years it is 35 times as effective.

This means that if more than 3 percent of the methane extracted escapes into the atmosphere unburned, the warming effect will be the same as if you had burned coal. Studies from around the world have shown that leaking methane from gas infrastructure – wells, pipelines, storage tanks, flaring gas wells – all leak at levels above – often well-above - the minimum safe level. Therefore, methane is now considered to be one of the main contributors to climate change, and the fastest growing.

Myth#8: NB is wrong to say 'No' to shale gas development while taking equalization payments from other provinces.

'Equalization' simply means that citizens, no matter where they live, are entitled to comparable public services at comparable rates of taxation. For example, people in a poor rural area should legitimately expect to have access to similar government services as those in a wealthy city. The provision of this principal of equality is enshrined in our Constitution.

Equalization is a national program funded by everyone's federal tax money, largely collected from 'have not' provinces (which include Ontario and Quebec), containing the bulk of the population and the national tax base. People in "have-not" provinces are also contributors to equalization. The "have provinces" do not write an "equalization cheque" every year to "have not" provinces.

Equalization payments are also independent of the policy choices of the provinces. They are not charity nor do they come with a moral obligation to mimic the decisions of other provinces. For example, British Columbia imposed a permanent ban on uranium mining, yet Saskatchewan supports the industry. These are both 'have' provinces. Which province's decision should be the moral guide for New Brunswick's choice on shale gas? This argument is simply an attempt to sway people by making them feel inadequate or guilty, and is without merit.

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