

# KAIROS Fact Sheet

## LNG and Fracked Gas in Canada

*“Future LNG export facilities could become today’s coal plants, where entrenched interests fight meaningful action to reduce climate emissions, with significant negative impacts on the global public”<sup>i</sup>*

### What is Liquefied Natural Gas?

Liquefied natural gas (LNG) is gas that has been cooled down to liquid form for ease and safety of non-pressurized storage or transport.

### What is Fracking?

Hydraulic fracturing (fracking) involves the injection of water, sand and chemicals deep underground at high pressure to fracture rocks containing gas or oil.

### How much gas is fracked in Canada?

As of 2017, there were more than 200,000 fracked gas wells in Canada (primarily in Western provinces) and it was estimated that 80 per cent of new oil and gas wells in Canada are fracked.<sup>ii</sup>

Quebec, Newfoundland and Labrador, Nova Scotia, and New Brunswick have instituted moratoria or outright bans on fracking. However, some of these provinces continue to import fracked gas from elsewhere in Canada or from the US.

### What are the impacts of fracking?

Fracking uses an enormous amount of freshwater. In BC, the average frack well uses between 5 million and 100 million liters of water.<sup>iii</sup> This has adverse impacts on water flow, wildlife, and drinking water sources. Frack wells also generate anywhere from 10 thousand to 25 thousand cubic meters of wastewater containing chemicals, heavy metals and carcinogens.<sup>iv</sup> Wastewater is reused where possible and then pumped deep underground for disposal – meaning once the fracking industry uses freshwater, it is lost to the hydrological cycle forever.<sup>v</sup>

Surface, below surface and groundwater (aquifers) all risk contamination related to the construction of frack wells, management of wastewater, and from abandoned and orphan wells.<sup>vi</sup>

According to the Canadian Association of Physicians for the Environment, oil and gas operations are sources of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs), which are precursors to ground-level ozone.<sup>vii</sup> Fracking wells are also a source of toxic chemicals, such as radon, hydrocarbons, benzene and heavy metals. Negative health outcomes have been recorded in communities living near fracking well operations, including birth defects, cancer, cardiovascular diseases, respiratory illnesses, and more.<sup>viii</sup>

### How do gas emissions compare to emissions from other fossil fuels? Is it a transition fuel?

A significant amount of methane can be released during the drilling, extraction, transportation and use of gas.

***Methane has a global warming potential that is 86 times that of CO<sub>2</sub> over a 20-year time frame.***

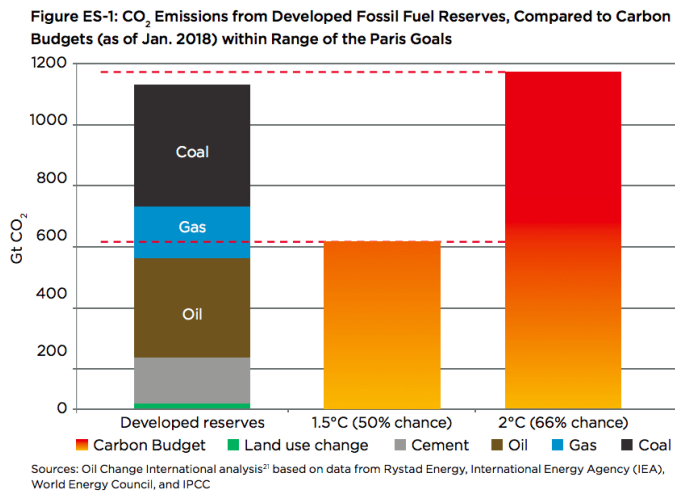
Gas is a fossil fuel and any new operations will lock us into additional emissions for decades to come; at a time when we should be investing in energy sources that will help Canada reach net-zero by 2050.

***Net Zero is achieved when carbon emissions are reduced significantly and any remaining carbon emissions are completely offset by actions that remove carbon from the atmosphere, such as planting trees.***

### Do new natural gas projects diminish Canada’s ability to meet its Paris Agreement targets?

Yes. On a global level, any additional fossil fuel development will cause us to exceed our Paris Agreement targets. There is only so much carbon that the world can consume while keeping global temperature rise under 1.5°C. If we consume all of the developed fossil fuel reserves (e.g.), mines that are already operating or under construction in the world, we will exceed warming of 2°C and bear the

consequences as outlined in the Intergovernmental Panel on Climate Change’s 2018 [Special Report: Global Warming of 1.5 °C](#). We cannot afford any new projects and we should be scaling down production and consumption of existing reserves. This graphic from Oil Change International illustrates this point.



Canada’s commitment is to reduce its GHG emissions by 30% from 2005 levels by 2030, but analysis of our [fair share](#) of preventing warming above 1.5°C shows that Canada should reduce emissions by 60% from 2005 levels by 2030 and contribute an additional 80% in global reduction through climate financing to low-income countries.

### Is there a good economic case for exporting LNG?

The case for exporting LNG assumes that it is the only affordable option to replace coal on a large scale in the short term. This is the argument used to support the development of LNG export terminals in Canada to supply Asian markets, especially China. However, a recent report by the Institute for Energy Economics and Financial Analysis reveals that a substantial increase in global export capacity of gas is outpacing demand.<sup>ix</sup>

The COVID-19 pandemic has caused a further decrease in global demand for gas due to lockdown measures and economic downturn. The glut of gas in the market and drop in demand has caused gas prices to plunge below the breakeven costs, making LNG operations less viable. The International Energy Agency expects that the

pandemic will have long-lasting impacts on the gas market.<sup>x</sup>

The demand for LNG globally will also be impacted by the increasing affordability of renewable sources of energy. Wind and solar are now some of the cheapest forms of bulk energy supply and are only set to improve with increasing economies of scale.<sup>xi</sup>

### How does fracking and LNG operations impact Indigenous rights in Canada?

Fracking projects have been initiated on the traditional territories of Indigenous peoples in New Brunswick, British Columbia and in other jurisdictions, often without their free, prior and informed consent as required by the UN Declaration on the Rights of Indigenous Peoples and Section 35 of the Canadian Constitution.

The impacts of fracking on the water and land also hinder First Nations’ treaty-protected rights to hunt, fish, and trap in their territories. These rights depend on healthy ecosystems where water flows and water quality are sufficiently high to support the web of life upon which First Nation communities have depended for thousands of years.<sup>xii</sup>

### What is KAIROS’ position on fracking and LNG?

Since 2009, KAIROS has called for no new fossil fuel projects, including exploration, development, pipelines, LNG export terminals, fracking wells, etc.

KAIROS also calls on the federal government to fully fund and implement a just transition strategy that would support fossil fuel workers, Indigenous communities, and related industries as we transition to a low-carbon economy.

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