

# Ontario's Gas Problems:

## The Issues With Fracked Gas

BACKGROUNDER

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environmental  
defence

Ontario is increasing the use of “natural” gas for electricity generation and connecting more communities and new homes to gas for heating and cooking. As a result, greenhouse gas emissions in Ontario are set to rise after over a decade of declining.

Gas is a fossil fuel, and when it’s burned, it emits carbon dioxide (CO<sub>2</sub>), the most prominent greenhouse gas and main driver of climate change. But worse still, gas is mainly composed of methane - a very potent greenhouse gas itself, that is over 80 times more potent than carbon dioxide when it leaks into the atmosphere during its extraction, transportation and storage.

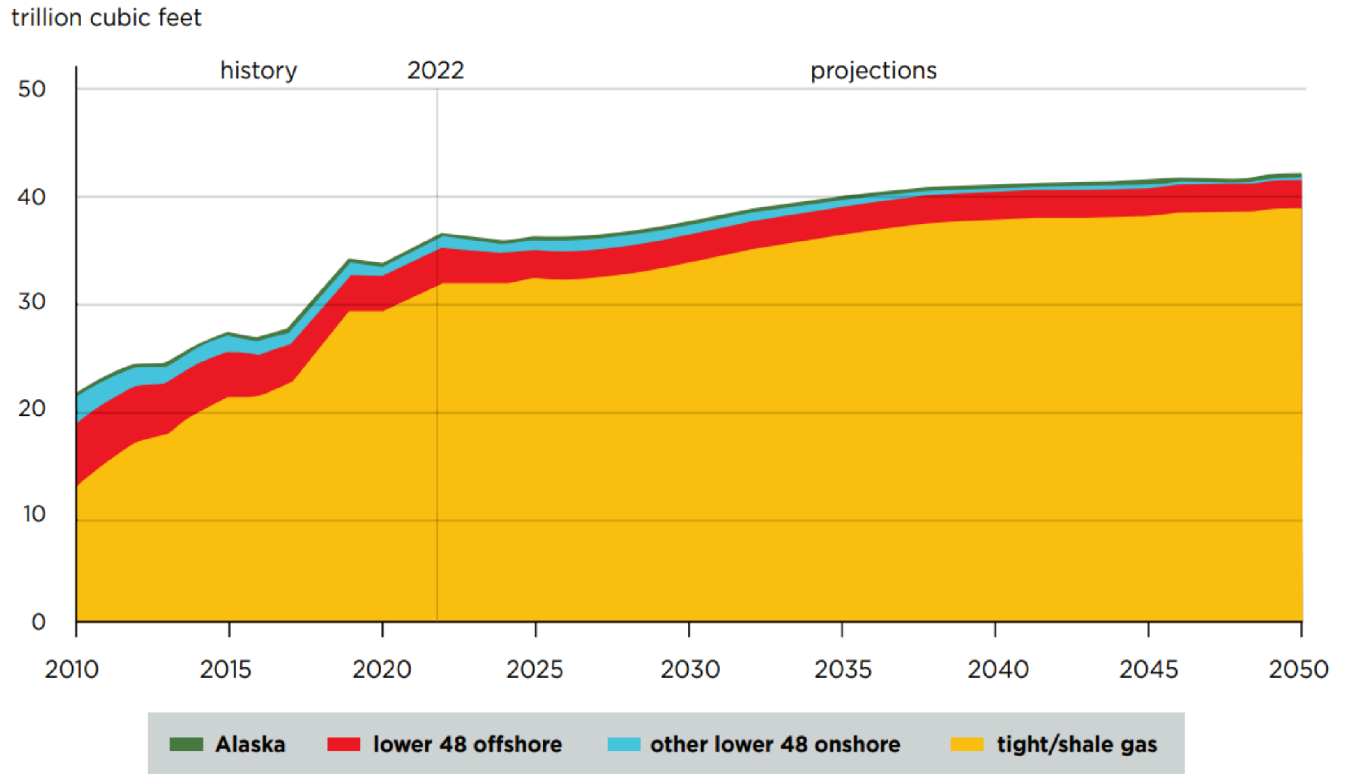
When methane escapes into the atmosphere, these emissions are known as “fugitive emissions.” In recent years, it’s come to light that the fugitive emissions from gas extraction and use are chronically underreported and that they have had a massive impact on our climate, responsible for about 30 per cent of warming to date.<sup>1</sup>

### Mostly Fracked!

There is very little fossil gas produced in this province, meaning most of it is imported. At one time, most of the fossil gas burned in Ontario came from Western Canada, but today the majority comes from the U.S.<sup>2</sup> Regardless, almost all of it is extracted via hydraulic fracturing - or “fracking.”

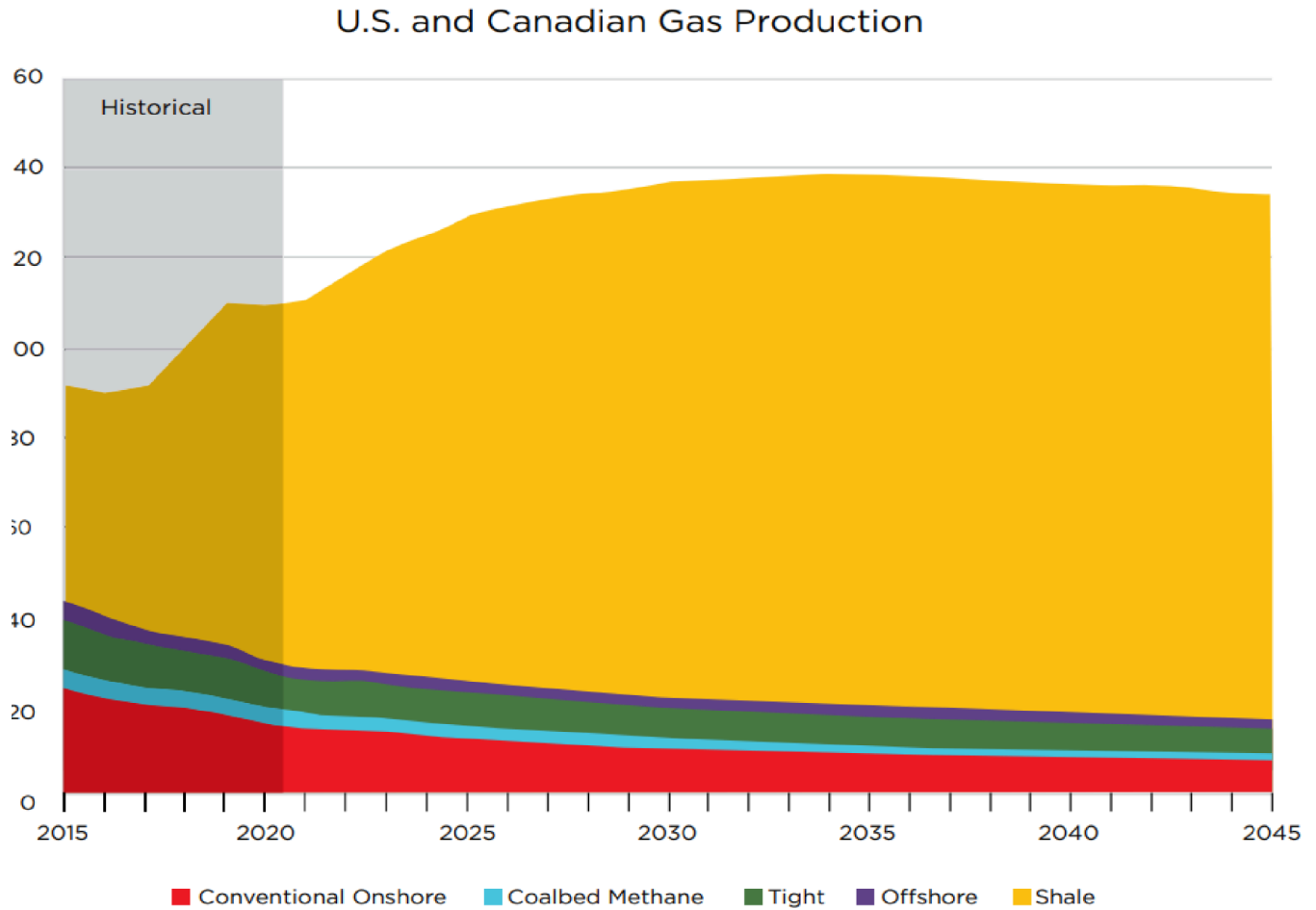
The graphs below show that, in 2024, about 89 per cent of American natural gas production is fracked (shown as “tight/shale gas”)<sup>3</sup>. Even if Ontario’s gas came from Western Canada, most of it would be fracked as well. Indeed, only 10 per cent of gas extracted in Canada comes from conventional sources such as a simple well (see Figure 2).<sup>4</sup>

**Figure 1: U.S. Natural Gas Production by Type<sup>5</sup>**



Data source: U.S. Energy Information Administration, Annual Energy Outlook 2023 Reference case, March 2023  
Note: Lower 48 states offshore includes federal and state waters. Other lower 48 onshore includes coalbed methane and excludes shale/tight gas.

**Figure 2: Canada and U.S. Natural Gas Production by Type<sup>6</sup>**



### Fracking is Harmful to Human Health

Fracking fluids often contain a complex mixture of proprietary chemicals that are not disclosed to the adjacent communities, workers or municipalities whose water and health are put at risk by these operations. Many of these impacted communities are low-income and/or racialized.<sup>7</sup>

Children's health and development has been found to be particularly impacted by fracking, from cancers to congenital heart defects.<sup>8, 9</sup>

These hazardous chemical mixtures can contain PFAS, "forever chemicals," that don't break down and can contaminate the groundwater and drinking water wells

in proximity to fracking sites. Soils, crops and livestock are also at risk where fracking fluids are dispersed or leach into surrounding properties and farms.<sup>10</sup>

Many communities that are now home to fracking sites are reporting a litany of health impacts ranging from respiratory disease and endocrine disruption to leukemia and other cancers due to air pollution.<sup>11</sup>

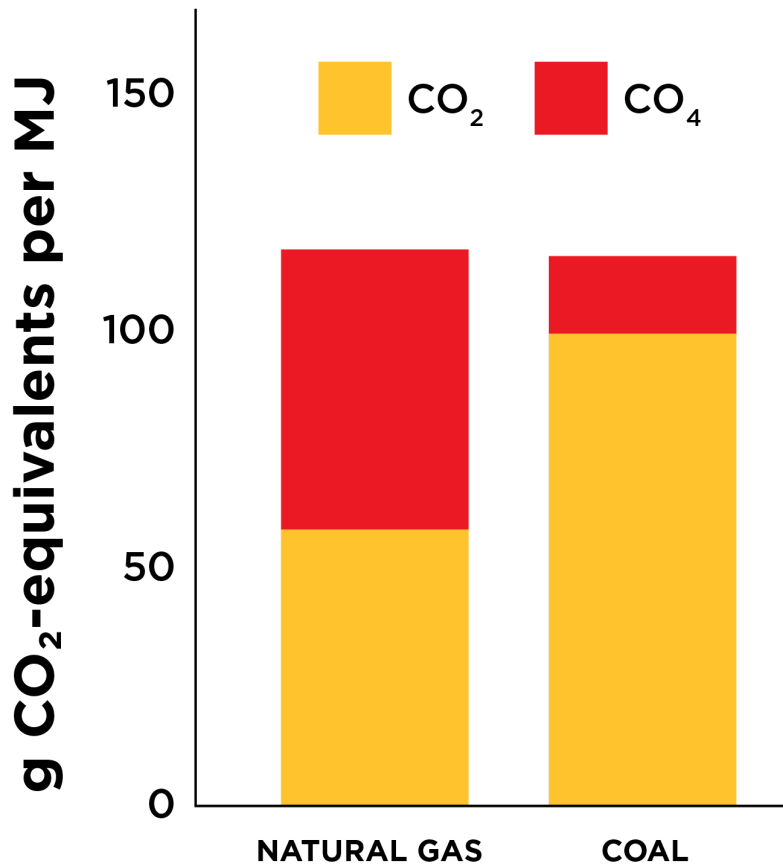
Fracking also uses a large amount of water. In B.C., for example, the average frack uses between 5-100 Million litres of water<sup>12</sup> and has been linked to contamination of drinking water. The “recycled remnants of the extraction processes” and tailing ponds have been found to permanently contaminate local water systems.<sup>13</sup> There has also been a rapid increase of earthquakes as a result of fracking that damage homes, local infrastructure and water systems.<sup>14</sup>

## **Worse Than Coal**

Unlike carbon dioxide, methane only lasts in the atmosphere for about 10 years, over which it has a very powerful impact on the climate.<sup>15</sup> Although standard practice in official greenhouse gas inventories (including Canada’s) is to report methane’s impact over a 100 year time period, it’s more appropriate to look at its impact over a 20 year period, during which time it is 86 times more potent than carbon dioxide.<sup>16</sup>

When the fugitive emissions from gas extraction and transport are accounted for, and methane’s global warming potential is measured over a 20 year period, it turns out that using gas for electricity is as bad or worse than coal. The graph below shows the combined impact of the CO<sub>2</sub> from combustion and the methane from fugitive emissions for both gas and coal (see Figure 3).

**Figure 3: Greenhouse Gas emissions from Gas vs Coal for electricity generation<sup>17</sup>**



### **Chronically Underreported**

This may even be an underestimate because fugitive emissions are chronically underreported.

- Here in Ontario, The Atmospheric Fund has estimated that local fugitive emissions are between 40-90 per cent higher than currently reported by the industry.<sup>18</sup>
- Researchers found that oil and gas facilities in B.C. were producing 1.6 to 2.2 times more methane pollution than reported.<sup>19</sup>
- There is a gap of more than 90 per cent between observed and reported oil and gas methane emissions in Saskatchewan and Alberta, according to an updated methane reduction strategy released by Environment and Climate Change Canada.<sup>20</sup>

- Research completed at Carleton University found that heavy oil facilities in Saskatchewan were releasing almost four times more methane than they report to the government.<sup>21</sup>
- A study of oil and gas infrastructure near Red Deer, Alta., found that measured emissions were 15 times higher than reported emissions.<sup>22</sup>
- According to the International Energy Agency, global methane emissions from the energy sector are about 70 per cent higher than officially reported data.<sup>23</sup>
- A 2023 study found that oil and gas companies in Alberta are underreporting methane emissions by nearly 50 per cent.<sup>24</sup>
- Research in the U.S. reveals a similar trend.<sup>25</sup>

## Let it Leak

Enbridge has a virtual monopoly on gas distribution in the province of Ontario.<sup>26</sup> And given that Enbridge Gas is in the business of selling gas, one might think that they have an interest in stopping pipeline leaks. But apparently, that's not the case.

Unifor workers testified at Queen's Park that in many cases, Enbridge leaves leaks unaddressed for weeks.

"When I started here, we maintained that pipeline; a leak was a leak. Someone called in that they smelled gas, we dug it out, we fixed it, and we had hundreds of employees. Now we have very few employees and leaks are monitored. They're monitored in a system of As, Bs and Cs. **An "A" leak is something that would have to be worked on right away. A "B" and a "C" leak can be left for weeks, months on end while we monitor, allowing natural gas to escape into the atmosphere.**" - Doug Carter, appearing before the Standing Committee on the Interior, on Ontario Bill 165.

Unifor has recently sent a letter to federal and provincial ministers, complaining that Enbridge has announced plans internally to stop compliance testing of their valves, connections, piping, and other infrastructure. Unifor is concerned that would allow "methane leaks to go unaddressed for increased lengths of time."<sup>27</sup>

## **In Conclusion**

Enbridge is aggressively marketing gas to Ontarians, claiming it's low-carbon, clean, and the cheapest way to heat a home.<sup>28</sup> None of this is true.

As documented in this report, gas is not low carbon and is worse than coal in many cases. Gas is not clean and is violently extracted from the earth, causing a number of health and environmental impacts. And it's not even the cheapest way to heat a home because cold-climate heat pumps have improved by leaps and bounds while their costs have declined.<sup>29</sup>

The Ontario provincial government is also pushing gas as a preferred home heating option, even legislating against the Ontario Energy Board (OEB) to essentially ensure that new homes are connected to gas. The province is also subsidizing the expansion of the gas pipeline network to new communities like Cherry Valley, Selwyn, and Bobcaygeon. And the Ontario government is planning on ramping up gas for electricity, undoing much of the progress this province made in phasing out coal.

The province is said to be in the process of drafting a Natural Gas policy - but the only justifiable policy would be to stop methane leaks and phase out the use and import of fossil gas.

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