

# Abqaiq and energy security in the Maritimes

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A year ago, concern was expressed that the diplomatic spat between Canada and Saudi Arabia would result in the Saudis stopping the flow of crude oil to the Irving refinery in Saint John. The recent drone attack on Saudi oil fields and desulphurization facility in Abqaiq has again raised the specter of a shortage of crude oil and increasing oil costs in the Maritime Provinces.

The United States and Saudi Arabia are blaming Iran for the attack. The United States will justify any action they take by claiming that Iran has violated the Carter Doctrine, which states that the United States will use military force against any country that attempts to gain control of the Persian Gulf region.

If the Straits of Hormuz are closed to tanker traffic because the United States or any of its allies in the region attack Iran, global oil supplies will tighten and prices will rise rapidly.

In 2018, an estimated 80% of the crude oil supplied to the Irving Oil refinery in Saint John came from international sources (with almost half of the imports coming from Saudi Arabia). Since the refinery has limited access to North American crude oil supplies, the Maritime Provinces would be at risk from supply shortages, primarily affecting home heating and transportation.

To many people, both at home and abroad, the fact that oil demand in the Maritime Provinces is met primarily from international suppliers makes little sense, given that Canada is the world's fourth largest oil producer.

Regardless of the outcome of the Abqaiq attack, there needs to be action taken to ensure that the Maritime Provinces are no longer at risk to conflict in the Persian Gulf.

So what, if anything, could be done?

## **Petroleum reserve**

Canada, like all members of the International Energy Agency (IEA), is expected to keep a 90-day supply of crude oil on hand, such as the Strategic Petroleum Reserve (SPR) in the United States, to meet demand should supply be unexpectedly curtailed. However, unlike all other members of the IEA, Canada is exempt from this requirement.

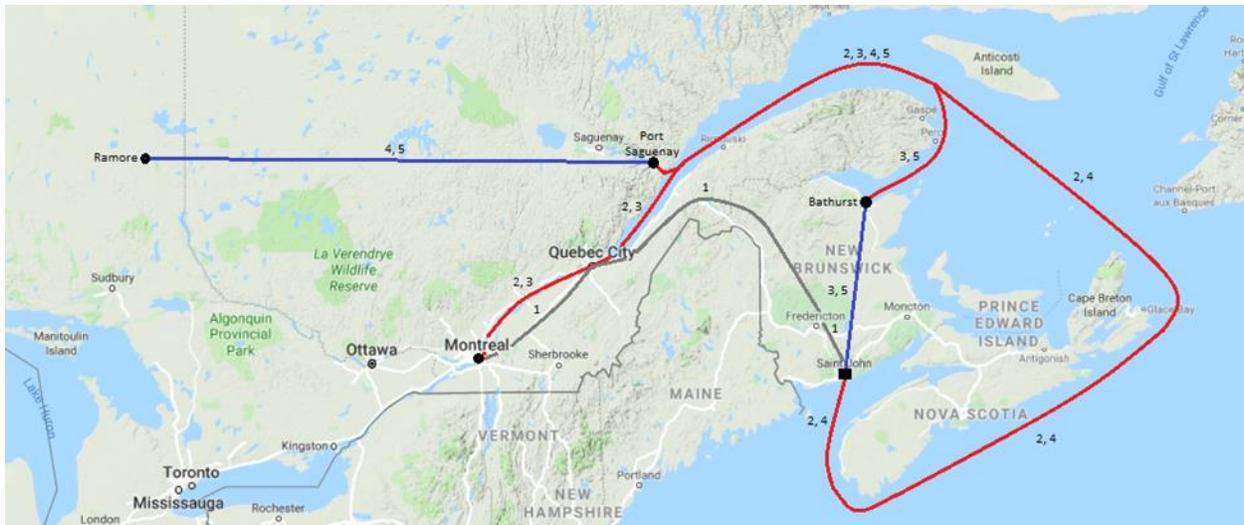
If a petroleum reserve was built to meet the Maritime Province's demand for 90-days supply, it would need to store about 11 million barrels of crude oil. (By way of comparison, Western Canada's total crude oil storage capacity is about 100 million barrels.) The size of the reserve could be reduced if, for example, more crude was shipped by rail during a crisis.

## **Moving Western Canada crude oil to Eastern Canada**

Western Canada is looking for new markets for its crude oil. The Maritime Provinces are seen as one of them. TransCanada's (now TC) \$15.7 billion Energy East project was to have brought 1.1 million barrels a day of Western Canadian crude to Quebec, the Maritime Provinces, and the Atlantic Basin. In late 2017, the company abandoned the project. (Although no definitive

reason was given by TC, theories abound, including rising costs, declining oil prices, delays caused by the Quebec environmental review process, and the likelihood of federal intervention.)

The tensions in the Persian Gulf have once again raised the call for moving Western Canadian crude east. The following map shows a number of possible routes: 1 (pipeline from Montreal to Saint John); 2 (tanker from Montreal to Saint John); 3 (tanker from Montreal to Bathurst and the pipeline to Saint John); 4 (pipeline from Ramore in Northern Ontario to Port Saguenay and then tanker to Saint John); and 5 (pipeline from Ramore to Port Saguenay, tanker to Bathurst, and pipeline to Saint John).



All these routes have their advantages and disadvantages, both economic and environmental. Regardless of the route, to meet Quebec’s objection to pipelines carrying bitumen and its diluent and to increase the value of crude oil, it would need to be upgraded, probably in Alberta, to a synthetic crude.

### Getting the region “off oil”

Neither of the above solutions can be implemented rapidly. Fortunately, there is a third solution to the region’s oil security risks: get “off oil” by reducing demand and adopting cleaner alternatives – something that will need to be done sooner rather than later. However, as the following table of the principal energy products used by each province shows, the region is still reliant on oil products for more than half of the energy consumed, with electricity a distant second.

	New Brunswick		Nova Scotia		Prince Edward Island	
	Petajoules	Percent	Petajoules	Percent	Petajoules	Percent
Total oil products	71.9	52.2%	95.9	66.6%	16.7	68.0%
<i>Gasoline</i>	38.6	28.0%	47.8	33.2%	8.3	33.6%
<i>Diesel</i>	21.0	15.2%	21.8	15.1%	4.7	19.2%
<i>Light fuel oil</i>	9.5	6.9%	18.4	12.8%	3.3	13.5%
<i>Heavy fuel oil</i>	1.2	0.8%	0.7	0.5%	0.1	0.3%
Natural gas	16.6	12.0%	8.0est	5.6%	0.0	0.0%
Electricity	46.9	34.1%	37.0	25.7%	7.7	31.2%
All sources	137.7		143.9		24.6	

In the short- to medium-term, an off-oil program will need to focus on products used for space heating (notably light fuel oil), since there are readily available replacements (such as heat pumps and possibly wood). Over the longer term, the focus will be on the transportation sector, where the rapid adoption of electric vehicles is presently hampered by cost and the lack of infrastructure.

For as important as it is to address the risk of relying on crude oil from possible conflict zones, there is another, more pressing reason to get off oil, notably the climate crisis.

The Maritime Provinces have the advantage of having met Canada's Nationally Determined Contribution of a 30% reduction emissions below 2005 levels. However, in the case of New Brunswick and Nova Scotia, this was in large part the result of having the weakest GDP growth rates in the country.

The current tensions in the Persian Gulf over the Abqaiq attack should be seen as an opportunity to continue reducing the region's greenhouse gas emissions. However, the transition to a net-zero carbon future must also maintain the region's energy security by ensuring the availability of affordable supplies of energy to everyone in the Maritime Provinces.

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