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June 27, 2019

Re: British Columbia Utilities Commission: An Inquiry into Gasoline and Diesel Prices in British Columbia ~ Project No. 1599007

Dear Mr. Wruck,

Please find attached a report prepared for the Commission's Inquiry into Gasoline and Diesel Prices written by the interveners Robyn Allan and Marc Eliesen (C1) titled "The Case for Regulatory Oversight to Address Market Failure".

Sincerely,

Robyn Allan and Marc Eliesen

BC Utilities Commission Inquiry into
Gasoline and Diesel Prices in British Columbia

The Case for Regulatory Oversight to Address Market Failure

Robyn Allan and Marc Eliesen

June 27, 2019

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1. Overview

The price for refined petroleum products, particularly gasoline and diesel, has a profound impact on the budgets of British Columbian consumers and businesses. In 2018, vehicles in British Columbia consumed almost 5 billion litres of gasoline and more than 3.5 billion litres of diesel, representing in excess of \$8 billion in sales, net of tax.¹ Spending on gasoline and diesel (net of tax) represents a cost of more than \$4,000 annually per BC household.²

In recent years consumers and businesses have been faced with volatile, and high, gasoline and diesel prices. Volatile and high prices have a negative impact on households and businesses: volatile prices make it difficult to manage budgets, while price increases make it difficult to balance them.

Price spikes for gasoline and diesel were experienced throughout British Columbia beginning in early 2015 despite a significant reduction in the price of crude oil feedstock to refineries. Price spikes have become a common occurrence since. Rapid and high increases in retail prices were particularly notable during the second quarter of 2018 and 2019, especially in Vancouver and on Vancouver Island.

When gasoline and diesel prices rise, they rise quickly, but when they decline it's a much slower process. If pump prices for gasoline and diesel react faster when prices are increasing than when they are decreasing, this can be described as an 'asymmetric price adjustment' or an 'asymmetric pass-through'. Asymmetry is a sign of a market that is not functioning in a competitive manner.

Skyrocketing prices that resist downward adjustments are not only unfair, they portend dire economic consequences. Volatile and rapid prices that do not reflect the cost structure realities of refiners and marketers exacerbates income inequality and acts as a drag on the performance of BC's economy.

Fifty percent of BC survey respondents stated in April 2019, that they were having difficulty affording necessities because of these higher gasoline prices.³ This is not surprising since the number of Canadian families that are \$200 or less away from financial insolvency at month end, jumped to 46 percent at the beginning of the year.⁴

¹Ministry of Energy and Mines and Petroleum Resources, Renewable and Low Carbon Fuel Requirements Regulation, January 2019, [Table 1](#), Affidavit of Michael Rensing, Sworn April 11, 2019, Court of Queen's Bench Alberta, Government of BC v. Government of Alberta, File 1901-06115, filed May 1, 2019 and Statistics Canada, [Table 23-10-0066-01 Sales of fuel used for road motor vehicles, annual \(x 1,000\)](#)

² BC Stats, [Households](#), 2017, 1,983,936 households.

³ Angus Reid Institute, [Gas Pain: Four-in-ten say rising prices at the pump are making it harder to afford necessities](#), May 17, 2019,

⁴Canadian Press, [The number of Canadians finding it tough to make ends meet is going up](#), Financial Post, January 21, 2019.

The burden of volatile and high prices needs to be addressed, and many BC's residents have called upon the provincial government to take action to protect our interests.

In an effort to address the issue in a reasoned and considered manner, the British Columbia Utilities Commission (BCUC) has been requested by the Government of BC to examine the factors that influence gasoline and diesel prices. The Commission has also been requested to recommend mechanisms the Province might use to moderate price fluctuations and increases.

In particular, the Commission has been asked to inquire into whether the factors that affect gasoline and diesel prices in BC are related to conditions that reflect a well-functioning competitive market structure or conditions that reflect a competitive market structure that has failed.

Put more directly, BCUC has been asked to determine if the BC retail gasoline and diesel market is workably competitive. If the market is not workably competitive, then the price determined in the market is being manipulated. If this is the case, then free market conditions of supply and demand are not driving retail prices, but rather, inappropriate pricing practices of suppliers with market power, are determining them.

The purpose of this report is to:

1. assist the Commission in identifying the market conditions that determine gasoline and diesel prices in the BC economy; and
2. recommend an appropriate policy response to protect the public interest.

This report examines the refined product market structure in BC, identifies domestic, inter-provincial and international refined product supply, assesses whether BC's refined product demand is adequately supplied, examines the conditions under which gasoline and diesel prices are determined and the factors that affect such price determinations. Based on the findings of the research undertaken and the analysis conducted, recommendations for regulatory oversight are provided.

This report finds that an absence of competition among refined product suppliers has caused the market to fail. Regulatory oversight is needed. Price is not a function of cost plus a reasonable return on investment as should exist in a functioning market. Price is a function of what the market can bear. This is price gouging.

Consumer tolerance for unfair pricing—as reflected in extreme and persistent refinery and marketing margins since 2015—has been conditioned, in part, by inaccurate narratives advanced by parties who are not employed by refined product suppliers or marketers. These commentators provide narratives that are consistently misleading. This is unacceptable, particularly since the

false narrative served up by commentators insulates refiners and marketers from transparency and accountability for their inappropriate pricing behaviour. Transparency and accountability are a necessary precondition to a well-functioning market.

Consumers and businesses throughout BC have been taken advantage of at the pumps since 2015. It is time to level the playing field and provide to BC consumers and businesses a refined product market they can trust.

2. Executive Summary and Conclusions

1. BC is an important market for Alberta's refined product and crude oil. Alberta's refiners rely on the BC market to consume approximately 90,000 barrels a day of Alberta's excess supply of gasoline and diesel and approximately 55,000 barrels a day of Alberta's light oil. Without BC as a market, Alberta's economy would be much worse off. The infrastructure does not exist for Alberta to deliver its excess supply of refined product to alternative markets.
2. The BC public has been poorly served by erroneous and misleading commentary in the media that there is a 'chronic' lack of supply in the BC market. This supply shortage narrative is relied on to justifying volatile and high prices for gasoline and diesel products. Often, short term factors, such as planned refinery maintenance or refinery outages in foreign markets are added to this false claim of 'chronic' shortage to suggest exacerbated lack of supply when none exists. There is no lack of refined product supply to BC, chronic or otherwise.
3. Planned refinery maintenance does not cause a lack of refined product supply. Refiners plan carefully to ensure their customers are not faced with shortages, and care is taken to schedule the maintenance during periods of relatively low demand and lower profitability.
4. Unplanned outages in foreign markets do not affect the cost structure of refiners that serve the BC market. The refinery problems of others is a convenient excuse to jack up prices.
5. Suncor, Imperial and Shell—refiners and crude oil producers who supply product from their refineries in Alberta—are also BC marketers with retail outlets they own or are required to supply under contract. Parkland and Husky are BC refiners who also own or are required to supply to retail outlets under contract. These companies have strong business incentives that ensure supply is not interrupted, and that all retail demand can be met. None of the suppliers to the BC retail market have reported any ongoing difficulty delivering adequate supply over the time period under review by the Commission.
6. Trans Mountain has had capacity to deliver refined product to the BC market—particularly in the first quarter of 2019—but it was not used.
7. BC is both an exporter and importer of gasoline and diesel to international markets. Since 2015, BC has been a net exporter of diesel, while the province was a net exporter of gasoline in 2016 and 2017, and a net importer of gasoline in 2015 and 2018. During the first quarter of 2019, BC continued to be a net exporter of diesel and a modest importer of

gasoline. BC does not *depend* on the US market for its refined product, and periods of net export contradicts the notion of supply shortage.

8. There is no evidence of lack of gasoline or diesel supply to British Columbia during the period January 2015 to June 2019. The BC market has not, and does not, suffer from a supply shortage, chronic or intermittent.
9. Historically, crude oil prices have been the primary driver of gasoline and diesel prices because crude oil is the most significant factor input into the production of refined products. Beginning in 2015, the expected relationship between crude oil feedstock cost and pump prices, decoupled. If crude oil prices drove pump prices as they did in the past, prices would have been be less volatile and much lower from 2015 to the present.
10. Refinery and marketing cost pressures have not increased in any material or meaningful way in the past number of years. If anything, lower crude feedstock costs have reduced refinery operating costs since energy is an important variable cost in refining operations.
11. The primary reason gasoline and diesel prices are volatile and high in BC—particularly in Vancouver and on Vancouver Island—is due to market failure brought on by a lack of competition.
12. The BC refined product market is severely concentrated as measured by the Four Firm Test and the Herfindahl-Hirschman Index. A concentrated market is not necessarily indicative of a market that suffers from unfair pricing. However, deeper examination reveals that the lack of ease of entry into the BC market and cost characteristics faced by the firms currently operating in it, make the market ripe for price gouging. This practice is confirmed empirically by supplier refinery and marketing margins.
13. A review of the evidence clearly indicates that refinery and marketing margins escalated significantly after crude oil prices plummeted beginning in 2014, and have continued to do so since. Refinery and marketing margins in BC have broken records in absolute and proportional terms. The relatively few suppliers in the market have wielded their power and engaged in unfair pricing practices.
14. Given the failure in the market to function competitively—where suppliers charge prices that reflect costs they incur, plus a reasonable return on investment—the remedy recommended is for BCUC to conduct ongoing gasoline and diesel price regulation that results in prices reflective of a competitive outcome.

3. Market Structure and Price Competition

The competitive market system upon which our economy is based is an effective and efficient method for allocating scarce resources. The market is where consumers signal their willingness to buy products and services and producers signal their willingness to supply products and services. Both parties rely on price to clear the market.

In a free, and well-functioning market, the forces of supply and demand operate without any form of economic privilege, artificial scarcities, oligopoly control, or the need for government intervention. In a competitive system it is believed that the free market forces of supply and demand will lead to the most efficient price for a commodity or service and in this way, scarce resources will be appropriately allocated.

Price is the most important market signal in our economic system. Price is supposed to signal shortages and surpluses which help consumers and producers to respond to changing conditions and to make informed choices. The fundamental premise of our market system is that no single vested interest controls price—rather it is the outcome of a fair and balanced market interaction.

In a competitive market, producer prices are determined by the costs of production and a reasonable return on capital (or profit). If the price for a commodity, such as gasoline, is determined in a competitive market and a supplier were to raise its price above the costs of production plus a reasonable rate of return (or profit), existing producers would supply more gasoline at a lower price, increasing their market share and/or new entrants would enter the market. Price would be driven back to a competitively determined level. In this way, the forces of competition on the supply side of the market are expected to protect consumers from attempts by individual producers to exert unfair pricing practices.

Similarly, on the demand side of a competitive market, it is assumed that consumers have choice—not only choice among numerous potential suppliers for the product they wish to purchase, but also choice to shift away from, or substitute to, other products when the relative price of the product they were consuming increases. In this way, consumer choice protects consumers from paying prices that may reflect unfair pricing practices. Choice among suppliers, or between products, provides consumers with a degree of market power that helps keep the pricing practices of suppliers efficient and reflective of the lowest cost option.

There are a number of ways the market can fail to deliver a competitively determined price. When market failure occurs, it is generally accepted that the appropriate response to fix the situation, and protect the public interest—is intervention by government.

BCUC has been charged with examining the factors that influence gasoline and diesel prices and identifying mechanisms the Province might use to moderate price fluctuations and increases. In

particular, the Commission has been asked to inquire into whether the factors that affect gasoline and diesel prices in BC are related to market conditions that are expected to exist in a well-functioning competitive structure or due to market conditions that are expected to exist when the competitive structure has failed, and suppliers use their market power.

This section of the report addresses whether the BC gasoline and diesel market is a well-functioning competitive market or a failed market. It does so initially, by examining the market power exerted by each of the players who operate within it in order to identify whether the market is competitive or concentrated. In a competitive market there are many players such that no single supplier can affect price whereas in a concentrated market a few firms capture market power and hence are able to charge non-competitively determined prices. Non-competitive prices return excess profits to suppliers and erode the important principles of allocative efficiency and fairness that underlie our market system.

3.1 Supply Sources – Reflective of Competitive or Non-Competitive Marketplace?

The process for assessing competitiveness within a market involves two steps:

1. defining the market served; and
2. assessing the competitiveness in the market to establish whether participants are able to assert market power.

Defining a market generally consists of (a) identifying the products sold; (b) identifying the geographic size of the market; and (c) identifying the specific companies competing in the market.

The Order in Council establishing the Commission's work has identified the products sold—gasoline and diesel—and the geographic size of the market—British Columbia. The intervenor list for the inquiry chosen by the Commission, identifies the companies competing in the market. At the wholesale level these include refiners: Parkland Fuels Corporation, Husky, Suncor Energy, Imperial Oil and Shell.

There is a paucity of publicly available information regarding the gasoline and diesel market in BC, including data on supply and demand by regional market and product, and the relative share of each of the suppliers to the regional and provincial market. It is hoped over the course of the inquiry that better data is forthcoming and greater insight into the relative contribution of supply from each Alberta refiner—Suncor, Imperial and Shell—becomes transparent. Greater transparency would also be welcomed from BC refiners Parkland and Husky, particularly Parkland's activity in importing and exporting refined product to international markets.

3.2 Gasoline and Diesel Supply Sources to the BC Market

There are potentially five suppliers to the BC market including Parkland, Husky, Suncor, Imperial and Shell. While Husky supplies northern BC and some central BC outlets, the remaining four suppliers deliver primarily to the lower mainland and Vancouver Island.

Refined product suppliers rely on domestic refinery output (Parkland and Husky), imported refinery output from Alberta (inter-provincial Suncor, Imperial and Shell) by way of the Trans Mountain pipeline, rail and truck, and to a lesser extent international refineries by way of barge and marine tanker (Parkland, Suncor, Imperial and Shell).

Evidence suggests that Shell does not contract capacity on the Trans Mountain pipeline for refined product deliveries but sources its supply primarily via marine and rail. Suncor and Imperial ship refined product along Trans Mountain and by way of rail and marine. It is unclear what the relative volume shipments are by each of these companies in total and by each transportation mode.

I. Parkland Fuel Corporation's Burnaby, BC Refinery is a light oil refinery that supplies the lower mainland and Vancouver Island. Parkland is Canada's largest supplier and marketer of fuel and petroleum products. In October 2017, Parkland purchased the Chevron refinery in Burnaby, BC along with 129 retail outlets located in the province. The refinery's nameplate capacity is 55,000 barrels a day of light crude which is refined into gasoline, diesel, jet fuels, asphalts, heating fuels, heavy fuel oils, butanes, and propane.⁵ Parkland does not use heavy oil as feedstock since its refinery is not configured to process it.

The Parkland Burnaby refinery supplies⁶ approximately 25,000 barrels a day of gasoline and 14,000 barrels a day of diesel to the lower mainland market place. Parkland is an exporter of gasoline and diesel to US retail markets.

BC consumes 70,000 – 85,000 barrels a day of gasoline and 55,000 to 70,000 barrels a day of diesel.⁷ The Parkland refinery represents approximately 33 percent of BC's gasoline supply and 22 percent of the province's diesel supply.

II. Husky Oil's Prince George, BC Refinery is a light oil refinery that produces low-sulphur gasoline and ultra-low sulphur diesel fuel sold in Husky stations and other retail outlets in the central and northern regions of the province through a network of

⁵ [Parkland, Our Business](#), Supply, Website.

⁶ Supply calculated on the basis of Parkland operating at 92 percent capacity, a barrel of crude expanded by 6.5 percent in the refining process, and output of 46 percent gasoline and 25 percent diesel.

⁷ Affidavit of Michael Rensing, Sworn April 11, 2019, op. cit.

167 service stations and industrial card locks.⁸ Husky's refining capacity is 12,000 barrels a day. The Husky refinery supplies approximately 5,500 barrels a day of gasoline and 3,000 barrels a day of diesel.

The Husky refinery represents approximately 7 percent of gasoline supply and 5 percent of diesel supply in the province, but is a major supplier if only considered from the perspective of the northern and central regions of the province.

III. Suncor Energy's Edmonton, Alberta Refinery processes 142,000 barrels a day of tar sands crude⁹ into gasoline, diesel, and other refined products. BC is an inter-provincial export market for gasoline and diesel products produced by Suncor with product shipped along Trans Mountain's existing pipeline and by rail, since Suncor has rail infrastructure facilities at its Burrard Terminal. In the fall of 2017, Suncor "began making improvements to the terminal to increase our capacity to unload diesel received via rail." The facilities are expected to be completed and operating in 2020.¹⁰ More transparent and accurate data is required to determine the relative contribution of pipeline, rail and marine as delivery sources as well as Suncor's market share.

IV. Imperial Oil's Edmonton, Alberta Strathcona Refinery processes 191,000 barrels a day of light oil into gasoline, diesel and other refined products. The extent to which Imperial delivers gasoline and diesel to the BC market by way of Trans Mountain rail and marine is unclear and Imperial should be required to provide more detailed and current information to identify for the inquiry the role it plays as a supplier of refined product to BC. Imperial has indicated that it ships refined product on Trans Mountain.

"We're (Imperial) shippers predominantly of refined products from our Strathcona refinery and we ship on Trans Mountain to feed our marketing network in British Columbia, including direct deliveries to Kamloops and including deliveries to the Suncor terminal in Burnaby and from there, refined products are distributed elsewhere in the province... We're also delivering refined products for exports out of the Vancouver area..."¹¹

⁸ Husky Energy, [BC Low Carbon Fuels Pathway Assessment](#), January 5, 2018.

⁹ Tar sands is a more accurate term for non-conventional heavy sourced in Alberta. The term 'tar sands' was rebranded to 'oil sands' in an attempt to sway public perception. This report elects to rely upon the accurate term. Suncor, [Refining](#).

¹⁰ Suncor Connections, [Construction continues at Burrard products terminal](#), June 2019.

¹¹ NEB, Chevron Priority Destination Designation, Hearing Transcripts, [Volume 6](#), paragraph 7856 and 7857.

Imperial has been clear that additional capacity on Trans Mountain would result in increased exports of refined product, not in increased supply to the BC market. “While Imperial Oil has been able to deliver the refined products to meet its domestic requirements, it has only been able to do so by cutting its planned deliveries to export markets, in which Imperial Oil competes with Chevron (now Parkland).”¹²

- V. **Shell’s Edmonton, Alberta Scotford Refinery Complex** processes 100,000 barrels a day of tar sands into gasoline and diesel and exports to British Columbia via rail to its Shellburn distribution terminal. The facility also has a dock where two or three barges a week, and the occasional tanker, arrive to drop off or pick up product. Shell does not appear to use the Trans Mountain pipeline for shipment of refined product.¹³ More transparent and accurate data is required to determine the relative contribution of rail and marine as delivery sources for refined product as well as Shell’s market share.

3.3 Gasoline and Diesel Delivery to the BC Market

Parkland and Husky rely on domestic refinery production to serve the BC market, with Parkland importing small volumes of gasoline along Trans Mountain at various times.

Parkland sources its light crude oil by way of the Trans Mountain pipeline while Husky sources its light crude by way of the Pembina pipeline in northeast BC. Parkland has rail and truck delivery facilities that are capable of providing approximately 14,000 barrels a day (8,000 barrels a day by way of rail and 6,000 barrels a day by way of truck) should deliveries via Trans Mountain become constrained.¹⁴ It appears that Parkland has not found it necessary to rely on crude by rail or truck since, at least, 2015 because it can successfully source all the light crude it requires to operate its refinery.

Graph 1 illustrates light oil deliveries to Parkland’s refinery in Burnaby (formerly Chevron) from 2006 to the first quarter 2019. Since Parkland’s refining capacity is 55,000 barrels a day, it is apparent that since at least 2015, the refinery has been sufficiently supplied through access to capacity on the Trans Mountain pipeline.

¹² NEB, Chevron Priority Destination Designation, [Final Argument Public Version](#), Imperial Oil, April 16, 2013, page 2.

¹³ NEB, [Reason for Decision](#), Application dated 15 October 2013, pursuant to Part IV of the National Energy Board Act, for approval of Tariff Amendments regarding Verification Procedures, RHW-001-2013, January 2015, page ii.

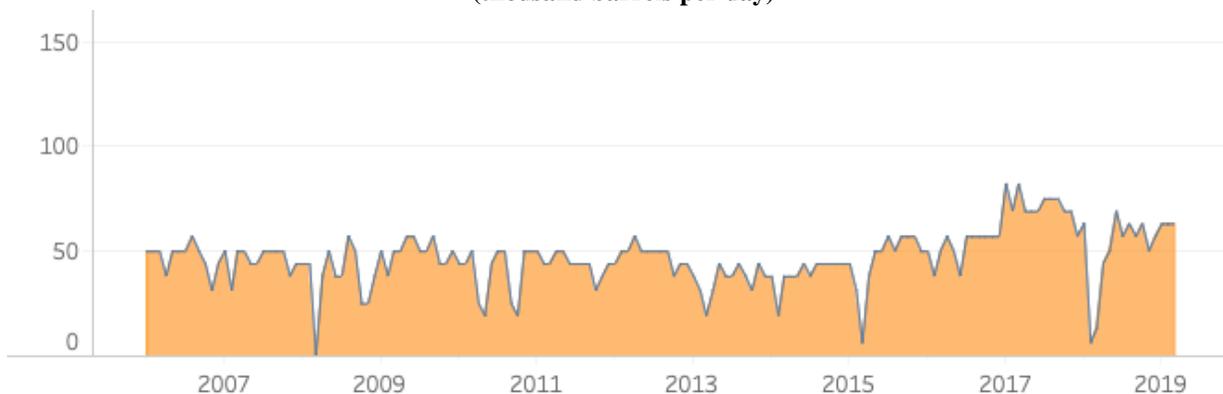
¹⁴ NEB, Chevron Priority Destination Designation, Chevron Evidence, [Schedule A](#), June 19, 2012. The investment in truck and rail was subsequently made.

The dip in deliveries in February 2018 to six thousand barrels a day was due to Parkland’s planned maintenance activity. For the entire year 2018, Parkland averaged 50,000 barrels a day of light crude delivered via the pipeline, sufficient to meet its needs, since the year prior an average of 72,000 barrels a day were delivered to Burnaby as Parkland stockpiled supply.

As Graph 1 illustrates, Parkland was storing light oil toward year end 2017 since deliveries exceeded its refining capacity. Parkland has been able to source the crude oil supply it needs to operate its refinery since 2015. The dip in March 2015 was due to planned refinery maintenance rather than inadequate pipeline capacity.¹⁵

Graph 1

**Light Crude Oil Deliveries to Burnaby
along Trans Mountain
2006-2019
(thousand barrels per day)**



Source: Trans Mountain, NEB

BC’s gasoline and diesel is domestically sourced through the Parkland and Husky refineries and inter-provincially sourced from Alberta by way of the Trans Mountain pipeline, rail and to a limited extent truck. International imports and exports occur by way of marine and rail. Available data indicates that BC consumes on average 140,000 barrels a day of gasoline and diesel with approximately 48,000 barrels a day supplied domestically by refineries. The historical volume of gasoline and diesel shipped on Trans Mountain is approximately 50,000 barrels a day, relegating rail and marine to supply approximately 42,000 barrels a day of BC’s refined product needs.

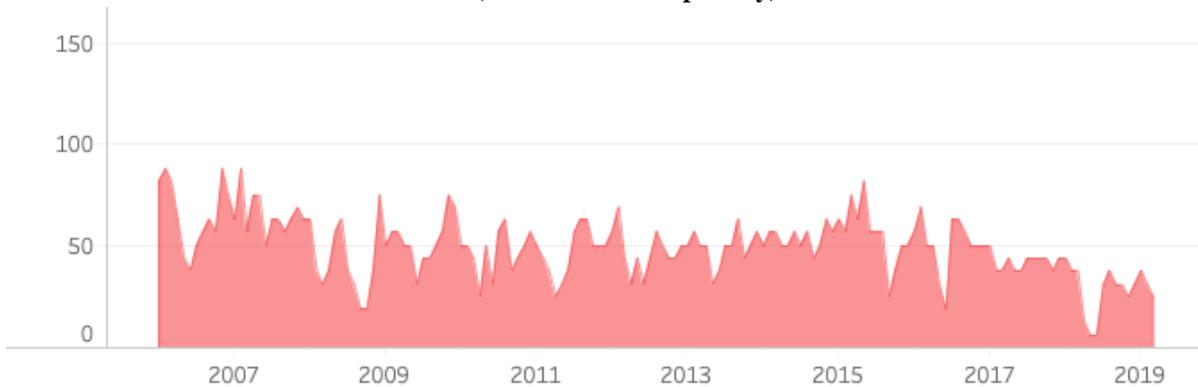
Rail is an important transportation method and yet there is near to no information publicly available regarding rail deliveries of refined product by supplier to the BC market.

¹⁵ Chevron, [The Burnaby Refinery’s Neighbourhood News](#), Summer 2016, page 6.

Graph 2 illustrates the volume of refined product shipped to BC along Trans Mountain from 2006 to Q1- 2019.

Graph 2

Refined Product Deliveries to BC along Trans Mountain 2006-2019 (thousand barrels per day)



Source: Trans Mountain, NEB

It is clear from Graph 2 above, that the volume of refined product delivered to the BC market by way of Trans Mountain has declined since mid-2017. However, in prior periods there were significant swings in delivery volumes without a corresponding public claim that capacity constraints led to a lack of supply.

On May 1, 2019, Premier John Horgan stated that, “I can’t rationalize the outrageous spike in prices here relative to other jurisdictions, beyond what I’ve said several times, a lack of supply....now the owner of the pipeline (the federal government) certainly could direct that light oil that could be refined at Parkland, or refined product could replace the diluted bitumen that currently is thwarting our efforts to get more gas to the Lower Mainland.”¹⁶

As illustrated above in Graph 1, there is no shortage of supply of light oil to Parkland. Parkland has not indicated to its investors that its refinery is having difficulty sourcing crude feedstock along Trans Mountain.

Graph 2 confirms that refined product volumes have declined on Trans Mountain, but that does not mean refined capacity is crowded out by diluted bitumen transport.

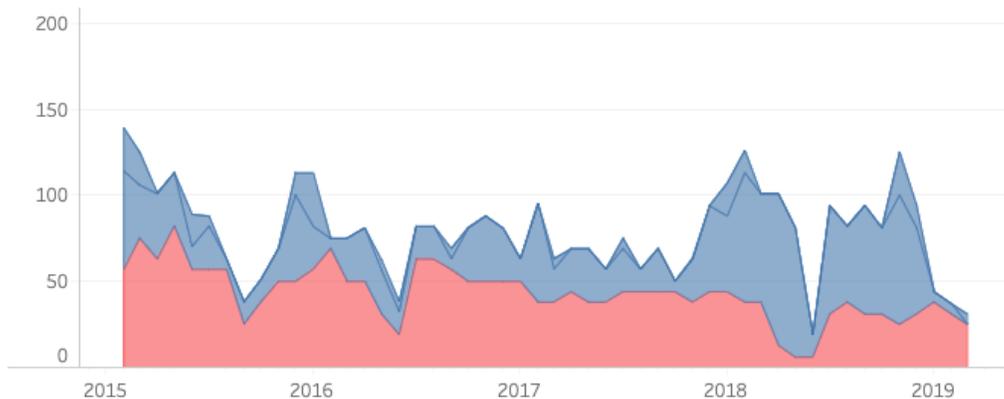
¹⁶ Fletcher, Tom, [BC taking Alberta to court over ‘turn off the taps’ gas legislation](#), Surrey Leader, May 1, 2019, see video.

Analysis provided in Section 4.3 reveals that the capacity on Trans Mountain is 400,000 barrels a day, **falling to 300,000 barrels a day only if 20 percent of the capacity is taken up by heavy oil.**

Trans Mountain rarely ships 20 percent heavy crude and therefore capacity is generally greater than 300,000 barrels a day. For example, in Graph 3 below, during the first quarter of 2019, the shipment of heavy crude was only 6,000 barrels a day (the thin blue area) which represents 2 percent of capacity, and thus Trans Mountain could have shipped approximately 386,000 barrels a day during each of the first three months of the year. It did not. In March 2019, as much as 97,000 barrels a day of capacity on Trans Mountain was available according to Trans Mountain documents filed with the NEB. If there was a lack of refined product supply (which there was not), it was not because of lack of space on Trans Mountain to deliver it to market. Capacity to ship greater volumes of refined product was available leading up to the most recent price spike and it was not used.

Graph 3

**Refined Product to Burnaby
and Heavy Oil to Westridge and Sumas
Trans Mountain 2015-2019
(thousand barrels per day)**



Source: Trans Mountain, NEB

■ domestic heavy
■ refined petroleum products

As can be seen from Graph 3 above, heavy crude deliveries tend to mirror the trend in refined product deliveries rather than crowd them out.

Trans Mountain was contacted to explain why excess capacity existed on its pipeline during Q1-2019, particularly in March, but would not provide an explanation for why it was not utilized. Generic reasons for why capacity may be underutilized month to month were offered but the response did nothing to shed insight into the situation that preceded the recent price spikes.

Reduced reliance on Trans Mountain’s capacity to deliver refined product to the BC market does not mean a lack of supply. Rail and/or marine vessel imports may have picked up the difference, or supply build from prior periods may have required inventory management. Reduced reliance on Trans Mountain could also be due to factors in the source market. Alternatively, demand could be lower in the BC market than expected. Demand for gasoline declines in the winter season, for example. As well, in the first quarter of 2019, Parkland operated at a greater throughput capacity (92 percent) than during the last quarter of 2018 (88 percent).¹⁷ Parkland’s greater capacity utilization would be expected to have reduced the need to import refined product from Alberta.

Gasoline and diesel products are imported and exported through the Vancouver port. Port Metro Vancouver (PMV) provides statistics on gasoline and diesel volumes exported and imported internationally by marine vessels, including barges and tankers. Surpluses or deficiencies in gasoline and diesel product are managed in this manner. Historically, BC has been both a net exporter and a net importer of gasoline and diesel. Table 1 below provides annual volumes since 2015.

Table 1

NET INTERNATIONAL IMPORTS AND EXPORTS - BC

Gasoline and Diesel Barrels per Day
(Brackets represent **Net Exports**)

Year	2015	2016	2017	2018	Q12019
Gasoline	4,953	(1,531)	(6,349)	13,531	2,654
Diesel	(1,717)	(7,260)	(9,984)	(7,116)	(5,461)

Source: Port Metro Vancouver¹⁸

Table 1 illustrates that BC was a modest net importer of gasoline in 2015 with 4,953 barrels a day, a net exporter of gasoline in 2016 and 2017, and a net importer of 13,531 barrels a day in 2018. For the past four years the province has been a net exporter of diesel. For the first quarter of 2019,

¹⁷ Q4 - 2018 Investor Call, Transcripts. “Refinery utilization was just under 88% this quarter... We actually operated very well, but strategically made some decisions to reduce crude throughput in light of high land price for the uncontracted portion of our line space. This was the right economic... We also processed some biofuels in the quarter, canola and tallow, which don’t get caught in the calculation. This was an exciting test for us, which was successful and puts us up with more optionality here in the future.” [Parkland News Release](#), May 1, 2019, “Refinery utilization, which measures the amount of crude oil processed and converted to products in the Burnaby Refinery, was 92.0% for the first quarter (2019).

¹⁸ [For the conversion ratio of diesel and gasoline](#) from metric tonnes as provided by PMV to barrels.

BC continues to be a net exporter of diesel, while net imports of gasoline have declined compared to 2018.

In 2017 and 2016, sufficient supply was available in the BC market because BC was a net exporter of both gasoline and diesel during those years. If there was a supply shortfall due to a reduction in throughput on Trans Mountain in 2017 or 2016, it was more than satisfied by rail or increased domestic refinery output.

In 2018, PMV statistics reveal that approximately 15 percent of gasoline demand was met by net imports, while BC continued to be a net exporter of diesel last year. If BC is a net exporter of diesel, it would follow that inter-provincial imports of diesel could be reduced on Trans Mountain, or by rail, if there were a need for increased gasoline deliveries. The evidence clearly shows there was no lack of supply to meet BC refined product needs since 2015.

It is unclear which suppliers engage in international trade to augment or reduce their supplies of gasoline and diesel within the BC market, however, anecdotal information tells us that Parkland and Shell certainly engage in barge and/or tanker shipments and Imperial has indicated that it engages in gasoline and diesel exports to the extent it can source capacity on Trans Mountain. Little information regarding Suncor's imports and exports via marine is publicly available.

3.4 Market Concentration

Once the range of suppliers and their relative market share are recognized, it is possible to evaluate whether the BC market is workably competitive or more appropriately characterized as a concentrated—or oligopolistic (few sellers)—market. As stated above, there is limited information available to get a complete picture of the situation, but enough information exists to estimate concentration levels.

A market that is not concentrated—a workably competitive market—is one with many suppliers which removes the risk that any individual supplier could engage in anticompetitive behaviour. The more concentrated a market, the more likely suppliers to that market will be able to engage in anticompetitive behaviour and raise prices above those that would be expected to exist in a competitive market.

Stated another way, if a market is found to be workably competitive, then no single supplier would be expected to profitably engage in exerting market power within that marketplace by unfairly raising price. However, if a market is not workably competitive, unfair pricing practices may exist.

There are two methods by which the degree of competition within the BC refined product market can be tested. The first is a concentration ratio—or the Four Firm Test—which identifies the degree

to which market control is held by the four largest firms. The Four Firm Test is a common method to identify the degree to which an industry is concentrated. If 90 percent or more of a market is controlled by four firms, it is considered to be highly concentrated, or, oligopolistic.

There are five suppliers of gasoline and diesel to the BC market, with Husky representing the smallest contribution of supply at approximately 7 percent for gasoline and 5 percent for diesel. Since Husky is the smallest player in the overall BC market, it is excluded from the four firm concentration ratio.

The remaining four firms represent 93 percent of gasoline supply and 95 percent of the diesel supply in the province. BC's refined product market is highly concentrated.

On a regional basis the Four Firm Test concludes that four firms control 100 percent of the market of the lower mainland and Vancouver Island market, since Husky's supply is delivered to the northern and central regions of the province. Husky exhibits features of a monopoly player in northern markets since evidence suggests it is responsible for almost all of the supply to that market. Central BC is served to a small extent by refined product deliveries to Kamloops via Trans Mountain and likely by some rail deliveries.

A second, and related way to measure whether a marketplace is workably competitive is the Herfindahl-Hirschman Index (HHI). HHI is a measure of market concentration that takes into account not only the market share of suppliers, it also includes the relative size of each of the suppliers.

HHI is calculated by taking the square of the market share for each supplier and summing the total. The maximum number is 10,000 which would indicate a monopoly, while an HHI over 2,500 is considered to represent a highly concentrated or oligopolistic market structure.

The HHI calculation for gasoline in the BC market place is not straight forward since information about the relative share of Suncor, Imperial and Shell are not readily available. Without more accurate information from Suncor, Imperial and Shell regarding their relative share an alternative approach to the HHI is required.

What we do know is that, "Approximately 55 percent of BC's gasoline and 71 percent of its diesel is imported from Alberta refineries."¹⁹ This means approximately 42,000 barrels a day of gasoline and 45,000 barrels a day of diesel arrive in the province from Alberta.²⁰

¹⁹ Affidavit of Michael Rensing, Sworn April 11, 2019, paragraph 9.

²⁰ It should be noted that international net imports are ignored since the same suppliers engage in international trade as those that engage in interprovincial trade. Therefore, the HHI includes the relative share of domestic refinery production and inter-provincial trade.

Recently, the government of Alberta has attempted to establish that supply from Alberta refineries is so significant that it can exert crippling market power over BC. Premier Kenney confirmed that BC's market is not workably competitive when he proclaimed Bill-12. This market supply dominance legislation would restrict the supply of gasoline and diesel to the province in an attempt to force BC residents to accept Trans Mountain's expansion.

If the HHI is calculated assuming that supply from Alberta refineries represents one supplier, the HHI for gasoline is 4,738 and the HHI for diesel is 5,837. The gasoline and diesel market in BC is identified by HHI analysis as highly concentrated.

If the HHI is calculated using assumptions about the disaggregation of supply the HHI for the province becomes lower, but still indicative of a concentrated or oligopolistic market. Assuming Suncor supplies 30 percent of the market, with Imperial and Shell supplying 15 percent each, the HHI is 2,488. On a regional basis excluding Husky, and allocating half to Suncor and a quarter each to Imperial and Shell, it is 2,827.

Similarly calculated, the HHI for diesel is 3,965 on a provincial bases with an HHI of 4,135 excluding Husky to obtain a regional estimate.

An HHI of 2,500 or higher is considered to be a highly concentrated market. It does not necessarily mean that the market is not workably competitive—or prone to failure—and therefore requiring regulatory intervention. It only means that further analysis needs to be undertaken to determine if the market is operating efficiently and effectively in spite of the apparent ability of the market players to exert power over price.

Further analysis needs to include:

- i) an evaluation of the ease of entry into the market;
- ii) the likelihood that new entrants could significantly supply the market; and
- iii) whether the characteristics of the industry lend themselves to benefits from uncompetitive behaviour.

Barriers to entry into the BC retail market have existed since the late 1990s. Shell and Suncor both operated refineries in the lower mainland until 1993 and Imperial until 1995. Their facilities were turned into distribution centres upon closure. As a result, "There is inadequate infrastructure in place in British Columbia to transport, receive, store and distribute large quantities of refined fuels required from a market other than Alberta. Existing pipeline networks do not connect to US pipelines for the purposes of supplying British Columbia with refined fuels. Refined fuels from US jurisdictions would have to be transported to British Columbia by marine barge, rail or

trucking. Ports in British Columbia are not equipped to receive large scale shipments of refined fuels by ship or marine barge.”²¹

Since entry into the market is not easy the likelihood of new entrants being able to supply the market is low. The relative lack of alternative supply sources—lack of ease of entry into the market—suggests that the market in BC is not workably competitive.

Finally, the characteristics of the market, need to be examined. Inappropriate pricing behaviour among suppliers becomes increasingly facilitated if the characteristics of the market reflect:

- i) Relatively low fixed to variable costs in the cost structure;
- ii) Similar cost structures among suppliers; and
- iii) Product or brand differentiation

BC’s market exhibits all these characteristics, suggesting that not only is the gasoline and diesel market in BC highly concentrated, it is also ripe for unfair pricing practices.

Refining and marketing have relatively low fixed to variable costs compared to the production of crude oil, and each of the suppliers face similar cost structures except possibly Parkland which is the only non-integrated refiner. When crude feedstock costs are relatively low, the ability of Parkland to experience higher profits as compared to integrated producers, rise.

Product or brand differentiation is aggressively engaged in through advertising and reward programs, however, this characteristic—although it is present—is the least compelling of the indicators pointing to inappropriate pricing practices in BC’s gasoline and diesel market. It is useful to point out that all suppliers are engaging in strategies to intensify their brand loyalty adding to the likelihood that they can and will engage in unfair pricing.

²¹ Affidavit of Michael Rensing, Sworn April 11, 2019, paragraph 19-21.

4. Supply—Adequate or Lacking?

It is possible that barriers to entry exist and market characteristics support inappropriate pricing practices rendering a market not workably competitive, and yet the market suffers not from contrived supply constraints enabling inappropriate pricing practices, but from supply constraints that would exist in a competitive market.

There are two issues that need to be addressed this regard. The first issue is whether there is evidence of a lack of supply in the gasoline and diesel market. If there is evidence of a lack of supply, then the second issue arises. That is, is the lack of supply due to authentic market forces or deliberate actions by suppliers with a view to manipulating price so as to generate windfall profit? To get at answers to these questions it is useful to define three relevant supply conditions.

Types of supply conditions:

1. Chronic Lack of Supply
2. Intermittent Lack of Supply
3. Artificial Scarcities

4.1 ‘Chronic’ lack of supply?

In recent years it has often been alleged that there is a ‘chronic’ lack of refined product supply in the BC market.²² This ‘chronic’ lack of supply is then invoked to justify abnormally volatile and high prices. Upon scrutiny, however, characterization of the BC refined product market as one that suffers from a ‘chronic’ supply shortage is without merit.

Claiming a ‘chronic’ lack of supply is a headline grabbing strategy that serves to insulate refined product suppliers from proper scrutiny. Facts reveal that although the BC market place is dependent on Alberta for a large portion of its supply, the BC market is adequately serviced. This is largely due to the fact that BC is an important market for Alberta’s oil refiners who are also retail market players either directly through their branded retail outlets or through their contracts with independent retailers.

BC represents more than 20 percent of Alberta’s gasoline and diesel sales, and contributes significantly to Alberta’s economy. The BC market is necessary for Alberta refiners to clear their

²² For example, see Chan, Cheryl, [Vancouver-area gas prices set to surpass record](#), Times Colonist, March 18, 2018, “The Lower Mainland has a chronic lack of supply and it’s not going to go away,” (Dan) McTeague said.” Little, Simon, [Should BC regulate the price of gas?](#) Global News, April 19, 2019. Leighton, Beth, [People are shaking their heads: Record highs on the way for B.C. gas prices, analyst warns](#), CBC, March 19, 2019.

excess supply, otherwise they would need to lower gasoline and diesel prices in Alberta and/or reduce refinery throughput levels causing a reduction in crude oil production. In this respect, BC is an important market to support employment in the Alberta economy.

Regrettably, the ‘chronic’ lack of supply mantra has been reported on so often, it seems to have become part of conventional wisdom. It will serve the Commission in its deliberations to provide clear refutation of this ‘chronic’ lack of supply argument often advanced—in varying forms—to justifying volatile and high prices.

Chronic means persistently occurring or constantly recurring. There have been no reports by gasoline and diesel wholesalers or retailers that there is inadequate supply of gasoline or diesel for the BC market on a recurring basis. In presentations to investors, none of the refined product suppliers have indicated, at any time since the beginning of 2015, that there is an ongoing supply constraint in the BC market.

It is a contractual obligation of refined product suppliers that they inform their retail outlets of any meaningful supply concerns, and certainly it would be expected that investors would be informed, particularly because of the contractual commitments and potential financial consequences refined product suppliers face for breaking supply commitments.

If there were a ‘chronic’ supply shortage there would be refined product rationing and drivers would be lining up at the pumps. This has not occurred in BC.

When the rare supply shortage occurs, it is limited to a relatively few number of stations, solved within a matter of days, is accompanied by a corporate announcement, explanation as to cause and an apology. The two supply interruptions experienced by Suncor since 2015 impacted the Alberta market more severely than BC’s.

At the end of May 2018, for example, there was an instance in Calgary, Edmonton and six locations in the interior of BC where some Petro-Canada retail stations, supplied by Suncor, had exhausted their supply for a few days. In a statement from Suncor, the company said, “we are currently experiencing a gasoline supply shortage.” Suncor explained the brief shortage at a relatively small number of retail outlets was due to “ongoing seasonal maintenance in the industry and that has reduced our product inventory.”²³

In June 2016, a supply shortage existed at Petro-Canada stations “in sites in Alberta, Saskatchewan and Manitoba as well as the interior of B.C.,” Sneh Seetal, a spokesperson for Suncor Energy, said. “We apologize for the inconvenience and we are doing everything possible to make sure we can continue to be serving them. Typically we have ample refined

²³ Potenteau, Doyle, [Lack of fuel at several Okanagan gas stations due to supply shortage: Suncor](#), June 12, 2018.

product. Given the prolonged duration of the (Fort McMurray) fire and its impact on the supply for our refinery and the unplanned unit outage at the Edmonton refinery, our product inventory levels were greatly reduced.”²⁴

Absent corporate announcements of supply shortages, explanations and apologies for customer inconvenience, it is a mischaracterization to suggest the Vancouver, Victoria or the broader BC marketplace is a market with a ‘chronic’ supply shortage.

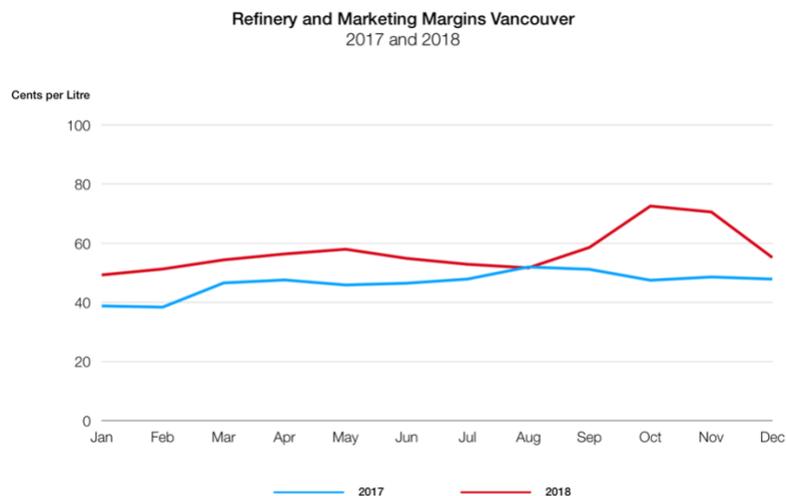
4.2 Intermittent lack of supply?

There are two main potential sources of intermittent lack of supply—planned maintenance and unplanned refinery outages. These each need to be addressed separately since the factors that lead to them are quite different.

4.2 (a) —Shortage due to planned maintenance?

Planned refinery maintenance is often offered publicly as a reason to justify price spikes—although not by the companies who supply product but by media commentators. In early 2018, pump prices began to escalate. The rationale offered was planned refinery maintenance at Parkland’s refinery in Burnaby. Graph 4 below, illustrates gasoline refinery and marketing margins in Vancouver during 2017 (blue line) as compared to 2018 (red line).

Graph 4



Source: Kent Group

²⁴ Ramsay, Caley and Suri, Bindu, [Suncor Energy apologizes for gas shortage across Western Canada](#), Global News, June 2, 2016.

Restricting the data to refinery and marketing margins in the above graph allows for the exclusion from the analysis any role crude oil feedstock costs and taxes may have played in determining retail prices.

Graph 4 shows that marketing and refinery margins were high beginning in 2018, before Parkland's refinery entered into the period of planned maintenance. There is no explanation as to why refinery and marketing margins would be 10.5 cents a litre higher in January 2018 than they were in January 2017 other than they were increased in a gradual manner throughout 2017. Gradual increases tend to be less noticeable to end users.

By February 2018 pump prices began to rise rapidly, continuing into May when Vancouver pump prices averaged \$1.60 a litre. From January to May 2018, refining and marketing margins rose 8.7 cents a litre (as illustrated in the graph), crude prices rose 7.7 cents a litre and taxes rose 2 cents a litre (not illustrated in the graph).

The reason given for the spike in refinery and marketing margins in early 2018—not by Parkland or any other company, but by industry commentators—was Parkland's planned maintenance at its Burnaby refinery on top of an ongoing 'chronic' supply shortage.

Planned maintenance rarely causes supply shortages. In the BC context, planned maintenance is consistently and inappropriately pointed to as the justification for excessive and rapid price hikes.

“Blame for near-record high gas prices in the Vancouver area rests with a chronic supply shortage made worse by concurrent maintenance work on a Burnaby refinery and gas infrastructure in Washington state, says one industry expert...When asked what could be done to improve the region's fuel supply, McTeague said twinning the controversial (Trans Mountain) line could be the only viable option short of knocking on the doors of American suppliers.”²⁵

Or, in another article at the time, “One of the reasons you're paying \$1.48 per litre (in February) has everything to do with the fact that Parkland's closed down right now,” said Dan McTeague. “You can see what a temporary shutdown does. It causes a six-cent disruption, and that's on the clear assumption that there's plenty of time to ramp up and create alternatives.”²⁶

Parkland was clear that there was no disruption or shortage of supply during the shutdown. The company's planned maintenance was done under the time horizon that the company anticipated.

²⁵ Robinson, Matt, [Twinning Kinder Morgan will lead to big drop in gas prices, expert says](#), Vancouver Sun, March 20, 2018.

²⁶ Bennett, Nelson, [Burnaby refinery shutdown causing gas price spike](#), Business in Vancouver, February 14, 2018.

There was no cost push reason for the price spike, or supply constraint. Further, planned maintenance was scheduled for a period of reduced demand, as is typical for planned maintenance.

“During the turnaround, Parkland had to keep its stores stocked with fuel. “Our turnaround supply was a combination of inventory that we built and supply from third parties,” said (Parkland’s) Bruce. “We’ve been able to keep our gas stations operating normally. No one was running out of gasoline. That was a critical commitment to our customers. We were able to cover any potential shortfall as a result of this turnaround.”²⁷

Parkland publicly announced in the fall of 2017 that no supply shortages were anticipated while the refinery was undergoing its planned maintenance. “Having the refinery shut down for a prolonged period of time affects the supply of fuel to customers in the Lower Mainland. To ensure there is a consistent source of gasoline, the refinery is building up its volume of stored fuel and will also work with partnering organizations to offset supply during the down time. No supply shortfalls are anticipated.”²⁸

In May 2018, Parkland told its investors that, “On the supply side, we executed a significant turnaround at the Burnaby Refinery, that was successfully completed in early April.... We also demonstrated our ability to reliably source and maintain uninterrupted fuel supply for customers during the Burnaby Refinery turnaround.”²⁹ The maintenance was completed in early April and yet record prices—and record refinery and marketing margins—were experienced into May.

The third-party narrative offered in the media to justify the price spikes was without substance. There is no ‘chronic’ supply shortage in BC, nor was there a lack of supply in the spring of 2018. Parkland (formerly Chevron) spent five years planning the scheduled maintenance to ensure there were no supply interruption for their customers.

An important question that must be addressed is the extent to which suppliers in the BC market—including Parkland—are able to take advantage of false narratives regarding price spikes. Hiding behind erroneous explanations aggressively proffered to media while tucking the truth away in shareholder statements and community news letters, suppliers are conveniently shielded from transparency and accountability. When Parkland does not correct the misinformation about lack of supply due to its planned maintenance, it is not only Parkland that benefits, but all suppliers.

When consumers have systematically been conditioned to believe the market is under-supplied—which has certainly been the narrative over the past five years—companies benefit because they are shielded from being accountable to the public for the real reason behind their pricing practices.

²⁷ Canadian Fuels Association, [Five years in the making: a full mechanical shut-down of Burnaby refinery](#), April 12 2018.

²⁸ Parkland Fuel Corporation, The Burnaby’s Refinery, [Neighbourhood News](#), Fall 2017, page 5.

²⁹ Parkland Fuel Corporation, Quarter 1-2018 Earnings Call, Seeking Alpha Transcripts, May 5, 2018.

In this way, refined product suppliers can ride a wave of public deception that manages consumer expectations and allows them to raise prices further and quicker—and keep them there for longer—than what would occur in a market with accurate and reliable information that holds companies accountable for their price setting behaviours.

British Columbians have systematically been led to believe prices are determined by a lack of supply when refiner business planning behaviours and statistical evidence proves the opposite.

It is regrettable that erroneous commentary about lack of supply is not more thoroughly checked. It is regrettable that companies like Parkland do not set the record straight when their situation is misrepresented by commentary. Parkland was clear before and after the planned maintenance that supply would not be interrupted and would be adequate to meet market demand. There was no cost-push reason for record setting margins. If supply was not adequate, Parkland had an obligation to inform its retailers and the broader public. It did not, because there was no need.

One rule of thumb moving forward should be that there is no lack of supply for the BC retail market unless a company announces there is, and provides details as to the extent of the supply shortage, why it has occurred, and when it will be addressed.

There is further evidence that not only was Parkland adequately supplied to serve its customers in BC moving into its planned maintenance; the company was **over-supplied**.

In January 2018, Parkland exported 180,000 barrels—almost 30 million litres—of gasoline to Washington state. “...Customs data shows...that it is far more common for gasoline to travel from Vancouver, British Columbia, into Washington (than from Asia). **In January (2018), more than 180,000 barrels of gasoline made this journey, with the Canadian division of Parkland Fuels listed as the shipper for all of these barrels.**”³⁰

The Canadian Fuels Association which represents major oil refiners and marketers in Canada explain that, Refinery disruptions are very unusual—adequate supply during planned maintenance is the rule. “These facilities operate continuously at close to peak capacity 24 hours every day. They are not turned off without significant advance planning. Maintenance and upgrade shutdowns are carefully managed by increasing product inventory ahead of time, or through exchange agreements with other refiners. Refiners also carefully manage their production to meet demand peaks and valleys throughout the year, to formulate the different fuels that are required in summer and winter, and to meet the needs of Canada’s vast geography and different climatic conditions.”³¹

³⁰ S&P Global Platts, Washington state receives rare Japanese gasoline cargo amid local refinery turnarounds, April 8, 2018.

³¹ Canadian Fuels Association, Fuel Facts, [Do refinery disruptions happen?](#)

The US Energy Information Administration unequivocally corroborates the industry understanding that, “Planned refinery outages typically do not drive large price increases. Refineries prepare ahead of outages to ensure adequate inventories and alternative sources of supplies are available.”³² This is supported by findings of the US Federal Trade Commission that explains planned maintenance, “occur(s) more often in the spring and fall when demand for gasoline is generally lower and during times of relatively low margins as measured by crack spreads.”³³

The refinery industry knows planned maintenance does not lead to shortages, and yet, none of the refiners, including Parkland saw fit to set the record straight in early 2018.

The rapid rise in pump prices in early 2018 were not due to a supply shortage caused by Parkland’s refinery maintenance yet this is the narrative that dampened consumer and business concerns around pricing practices. If refinery maintenance was not the cause of the price spike in early 2018, there was no supply shortage, and neither crude oil or taxes, can be blamed, what was the cause? The evidence points to unfair pricing practices by suppliers.

Before leaving the pricing reality of 2018 as discussed in this section, it is useful to note that during the latter part of 2018, when spot market crude feedstock costs for heavy and light oil declined significantly, refinery and marketing margins reached record levels in Vancouver. In October 2018, the refinery and marketing margin was 72.1 cents a litre (as shown by the red line in Graph 4). Putting this margin in context, from 2000 to 2014 the average refinery and marketing margin in Vancouver was 18.4 cents a litre.

Instead of passing on the benefit of lower crude feedstock costs to the retail market in late 2018, refiners and marketers kept the majority of the windfall gain for themselves as their price gouging behaviour could be masked with marginally declining prices at the pumps. The more extreme decline in crude prices during the latter part of 2018 should have led to much lower retail prices than experienced, indicating the market is not workably competitive.

4.2(b) — Shortage due to outages?

Unplanned outages occur as a result of equipment failure or other unforeseen problems such as hurricanes, floods and fires due to climate change. They are often relied upon to justify price spikes in the Vancouver marketplace even though they usually have nothing to do with the cost structure or supply of the gasoline delivered to the BC market. Somehow outages in markets unrelated to

³² EIA, This Week in Petroleum, [West Coast retail gasoline prices increase because of refinery outages and declining inventories](#), May 15, 2019.

³³ Chesnes, Matthew, [The Impact of Outages on Prices and Investment in the US Oil Refining Industry](#), US Federal Trade Commission, June 2014, page 4.

BC—such as southern California—are regularly cited as justification for pumping up prices in the domestic market.

For example, to justify for the most recent price spike, and to keep the unfair pricing practices of refined product suppliers off the radar, a commentator was reported as stating that “the continued upward pressure is a result of Metro Vancouver competing with the entire U.S. West Coast for gas amid refinery maintenance and shutdowns at six American facilities in Washington state and California. “That’s the main reason why we see prices moving up as quickly as they are, not just here in Vancouver, where the problem is exaggerated by a constant (reliance) on external sources for most of our gasoline needs,” he said.”³⁴

As explained above, BC does not have a “constant (reliance) on external sources for most of our gasoline needs.” In 2017 and 2016, BC was a net exporter of gasoline. In 2018, the volume of imports was approximately 15 percent of the need—hardly “most of our gasoline needs.” BC does not compete with the entire West Coast for gasoline. In fact, there is no evidence to suggest that BC competes with any US market for gasoline since sufficient capacity exists to deliver refined product to BC from Alberta. The international trade that takes place is a function of business decisions made by refiners to manage their business reality, not a dependency on US markets.

The six refinery shutdowns referenced above include refineries that were undergoing planned maintenance. As explained, planned maintenance does not lead to a supply shortage and should not affect price, particularly since planned maintenance is scheduled during times when demand is reduced, and if anything prices should be lower. Finally, unplanned shutdowns—the outages—in California and Washington have no effect on the cost structure of the companies who supply the BC market and therefore should not lead to price spikes as soon as the problems are reported in the news. If outages cause supply impacts there would at least be a lag time based on business realities.

In 2009, the US Government Accountability Office determined that, “While it can be expected that some refinery outages have quite large price effects (such as in the aftermath of hurricane Katrina and Rita), the results of our analysis found that on average refinery outages were associated with small increases in gasoline prices. Based on our analysis of wholesale prices across 75 U.S. cities from 2002 through September 2008, planned outages (maintenance) did not influence prices, while unplanned refinery outages had generally small wholesale gasoline price effects in the cities they serve. Price increases varied depending on whether the gasoline was branded or unbranded and according to the gasoline type affected by the outage.”³⁵

³⁴ Little, Simon, [Metro Vancouver gas prices set record high, and more records are around the corner](#), Global News, April 11, 2019.

³⁵ Report to Congress, United States Government Accountability Office, [Energy Markets](#), July 2009.

While refinery outages may be expected to affect the cost structure of the refinery that experiences the outage, it does not affect the cost structure of unaffected refiners and certainly does not spill over into the cost structure of other markets unrelated to the market affected by the outage. However, in recent years, unforeseen refinery outages of others have been relied upon to justify price increases by refiners who serve BC markets even though these refiners are not affected by the outages.

Using outages experienced by other firms in unrelated markets to justify an increase pump prices is evidence of unfair pricing practices. Suppliers who do not experience a change in their cost structure react quickly to raise pump prices when the problems of others become apparent.

Parkland is explicit in its communications with investors that it considers outages in California and Seattle to justify price increases in the BC market, even though the outages have no impact on Parkland's cost structure.

Parkland is admitting that it is not the company's cost structure that drives the determination of Parkland's gasoline prices, but price increases in other markets due to unforeseen problems of individual refineries. "During Q1, on the West Coast, you did have refinery outages both in the Los Angeles market and in the Pacific Northwest, so think of the Seattle area. And those markets tend to move together, and a lot of that was driving the higher prices not just in the Vancouver market, but also Seattle and LA."³⁶

On what basis should gasoline prices in Vancouver reflect gasoline prices in Seattle and LA? Does Parkland source supply from these markets to serve its own Chevron outlets and to meet the supply commitments to its retail outlets under contracts? Does Parkland intend to limit supply in BC when outages occur and export gasoline to higher priced markets? Not likely when it has supply contracts to honour, and market relationships to protect. Why then does Parkland believe it can piggy back on price spikes in California and Washington state? Parkland needs to explain its pricing practice to BC motorists.

Refinery outages in foreign markets are not a reason for price increases, they are a rationalization. The underlying threat contained within this rationalization is that if the local market does not accept higher prices in concert with, say, unforeseen problems in California, Parkland will ship its gasoline to those markets and generate scarcity locally such that prices rise anyway.

This phoney market competition argument is an idle threat for a number of business and logistical reasons, but it appears it is one upon which Parkland establishes its pricing practices locally. This behaviour requires regulatory oversight to ensure that, at the very least, if a refiner is going to rely upon refinery outages in foreign markets to argue for jacking up prices on all its supply locally, it

³⁶ Parkland Fuel Corp., Q1-2019 Earnings Call, Dirk Lever, VP Finance, Supply, Refining, Trading, May 2, 2019.

must prove it intended to import gasoline or diesel from that specific refinery before the unexpected outage occurred.

Finally, what is unclear is how refinery outages in far off markets can be used to rationalize price spikes in gasoline, but when it comes to diesel prices there does not appear to be a corresponding impact despite the fact that both gasoline and diesel are produced from every barrel of crude, in relative proportion. Why are diesel prices not impacted to the same degree as gasoline prices from unforeseen outages in distant markets?

The problem with reliance on outages is they are always asymmetrical with respect to price. That is, there never seems to be a situation that arises whereby an unforeseen event leads to a reduction in price—refiner and marketing margins just continue to ratchet upwards.

4.3 Shortage due to Trans Mountain transportation constraints—artificial scarcity?

There is no evidence that the BC market suffers from a ‘chronic’ or intermittent lack of supply. However, claims of a ‘chronic’ shortage are often advanced, and in recent years, followed with an assertion that the culprit is the delay in Trans Mountain’s expansion. Once built, we are told, exorbitant pump prices will disappear. Disciplining BC consumers and businesses into accepting a financially challenged and environmentally risky diluted bitumen pipeline in this manner is an egregious abuse of the public trust.

On the surface, the suggestion sounds somewhat plausible, but when facts and evidence are reviewed, it becomes obvious that there is no lack of product supply to BC’s market, and even if there were, Trans Mountain’s expansion would do nothing to solve it. Claims of supply scarcity due to Trans Mountain’s capacity are artificial.

It is not the purview of this Commission to address the impact of Trans Mountain’s expansion on gasoline and diesel prices in BC. However, it is important that the Commission recognize that the existing pipeline has had capacity to increase refined product deliveries—particularly during the first quarter of 2019—but the capacity was not used.

Building Trans Mountain’s expansion will not increase refined product deliveries but may, in fact, crowd them out. Further, since subsidization of the cost of the expansion is necessary through a likely tripling of toll rates on the existing pipeline, Trans Mountain’s expansion represents an increased delivery cost that will raise pump prices by as much as 5 cents a litre.

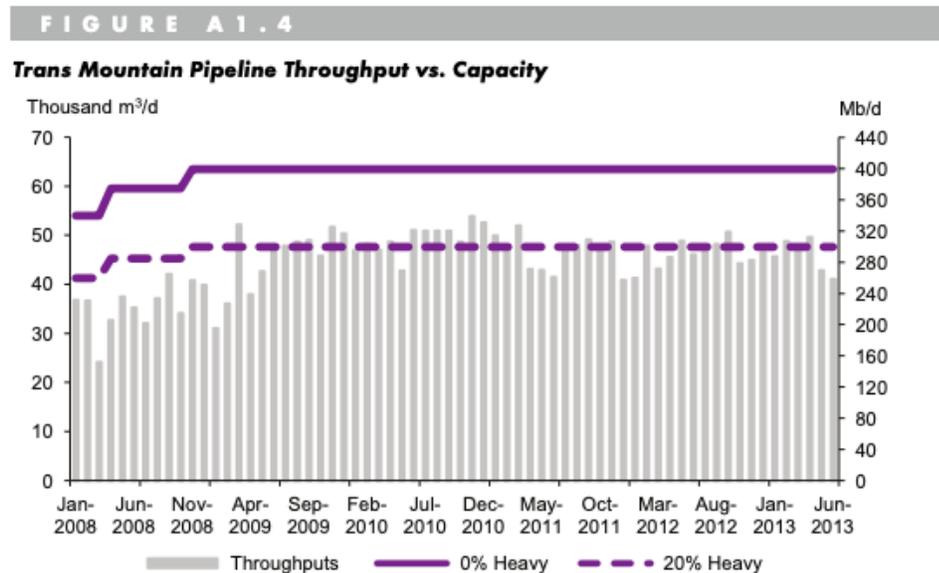
4.3(a) Capacity on Trans Mountain

There is sufficient capacity to increase the delivery of refined product supply to the BC market, but it is not being used.

The Trans Mountain pipeline has a capacity of 400,000 barrels a day and transports light crude, heavy crude and refined petroleum products west from Edmonton, Alberta to locations in both British Columbia and Washington State. Light and heavy crude is also shipped to offshore markets via Trans Mountain’s Westridge Dock in Burnaby. No refined product is transported to marine vessels from Westridge or to Washington State by way of Sumas. Trans Mountain does not transport biofuels or jet fuel due to product contamination concerns.

The NEB has explained the relationship between Trans Mountain’s capacity and the volume of heavy crude shipped. “When heavy crude oil is shipped, it reduces the pipeline’s (400,000 barrels a day) capacity. Figure A1.4 shows two capacities for the Trans Mountain pipeline; one assumes no shipments of heavy crude oil and the other assumes 20 percent heavy crude oil.”³⁷

Graph 5



Source: NEB

In its February 2019 Reconsideration Report the NEB stated, “The existing TMPL system carries a variety of crude oil batches in a single line between Edmonton and the Burnaby area, shipping 20 per cent heavy crude oil and 80 per cent light crude oil and refined products.” Trans Mountain

³⁷ National Energy Board, Energy Market Assessment, [Canadian Pipeline Transportation System](#), April 2014. In its 2016 [Canadian Pipeline Transportation System Report](#) the NEB states on page 40 that Trans Mountain’s capacity is 300,000 barrels a day if 20 percent is heavy. “Capacity is higher if moving less heavy crude oil.”

rarely transports twenty percent heavy crude. “...Trans Mountain said that experience with the existing Trans Mountain Pipeline system has shown that impacts to capacity occur with the introduction of less than 10 per cent heavy crude oil in batches. Moreover, the transportation of approximately 30 per cent heavy crude oil in batches has the same impact on capacity as if the system were transporting 100 per cent heavy crude oil.”³⁸

The findings referred to by the NEB are quantified in a document Trans Mountain filed with the Board in 2010. Trans Mountain historically has been very clear about its pipeline capacity being 400,000 barrels a day, reduced to 300,000 barrels a day assuming 20 percent of the product is heavy oil.

More recently, however, the company fails to include the important proviso that capacity on the pipeline is a function of heavy oil shipped so the company consistently claims that Trans Mountain’s capacity is 300,000 barrels a day even though in recent months it has been much higher. Therefore, when shipments on the line reach 300,000 barrels a day, but the proportion of heavy falls, exaggerated claims about limited capacity are made. These claims enable unfounded assertions suggesting that space to deliver refined product is being crowded out by offshore demand when this is not the case.

In 2011, the NEB granted Trans Mountain priority destination to the Westridge dock. The pipeline company promised the NEB that priority destination to the dock would develop markets in Asia. The NEB approved guaranteed dock access of 79,000 barrels a day—54,000 barrels a day secured under 10 year take or pay contracts that expire at the end of 2021, and 25,000 barrels a day for monthly uncommitted deliveries.³⁹ Since granting priority destination, the dock capacity has never been fully utilized.

When the price of tar sands crude is deeply discounted relative to light, the demand for the lower quality products does increase, but at no time during the recent past has the demand for tidewater access reached the extent of guaranteed dock space the NEB approved as illustrated in Table 2, below.

The five companies that entered into long-term contracts are PetroChina, Nexen (now also owned by PetroChina), Cenovus, Astra, and US Oil. US Oil was interested in securing light oil for its Washington State refinery and delivers crude to Washington from the Westridge dock by barge. The remaining parties—half represented by the national oil company of China—were interested

³⁸ NEB, [Reconsideration Report](#), February 22, 2019, page 50.

³⁹ NEB, [Reasons for Decision](#), RH-2-2011, Application for Firm Service to the Westridge Marine Terminal, December 1, 2011. Chevron applied for priority destination for light oil to its refinery which the Board denied, stating, “The Board finds that Priority Destination is a relief that should only be applied in extraordinary circumstances.” It is unclear how the relief sought in the Firm 50 Application to guarantee priority to the dock to serve foreign markets could be considered extraordinary, while the relief sought by a domestic refinery would not.

in developing Asian markets for Alberta’s tar sands. Asian markets have not been developed and as the evidence below shows, it is not because of insufficient dock capacity.

Long-term shippers can sell their right to pipeline capacity in the secondary market, and Trans Mountain sells its uncommitted capacity in the primary market. When dock capacity is not used it is allocated to land destinations or becomes unused capacity. This situation is what has given rise to unused pipeline capacity at various times, but especially in the first quarter of 2019.

The amount of heavy oil shipped along Trans Mountain is a function of its price and failures on competing transportation systems—if the price of heavy crude is deeply discounted, demand for dock deliveries increases. Similarly, when pipelines fail, such as occurred on Enbridge Line 6B in 2010 and more recently on Keystone in November 2017, demand for deliveries along Trans Mountain increases.

Table 2 below, illustrates that guaranteed capacity at the dock has not been fully utilized since the NEB granted priority destination to Westridge.

Table 2

Deliveries to the Westridge Dock
Light and Heavy Crude thousands of barrels a day
2011 – Q1 2019

Deliveries	2012	2013	2014	2015	2016	2017	2018	2019
Light	5.25	3.67	8.42	10.15	1.58	3.08	2.58	10.56
Heavy	55.08	53.83	46.67	28.33	22.42	25.67	58.58	4.00
Total	60.33	57.50	55.08	38.83	24.00	28.75	61.17	14.56
Utilization Rate	76%	73%	70%	49%	30%	36%	77%	18%

Source: NEB, Trans Mountain

In the first quarter of 2019, less than 20 percent of the guaranteed dock space was used, and barely any was used to ship heavy oil. Heavy oil deliveries to Westridge averaged 4,000 barrels a day during the first quarter of 2019. Refined product deliveries were not crowded out by diluted bitumen shipments.

Unused dock capacity can be allocated to land destinations because Trans Mountain has a two stage nomination process for capacity. Land bids take place two days after dock nominations. This two staged approach distorts Trans Mountain’s apportionment calculations and gives rise to a false positive result. That is, the pipeline can appear to be oversubscribed when it is not.⁴⁰

⁴⁰ Allan, Robyn, [Kinder Morgan’s pipeline capacity methodology flawed](#), Alaska Highway News, April 6, 2018.

Trans Mountain, its shippers and the NEB recognize the misleading results that arise from Trans Mountain's estimation of apportionment, but have not communicated this understanding to the public.

During Chevron's priority destination designation (PDD) hearing, Imperial Oil explained that "Chevron is applying for a PDD because of the very high level of apportionment that is occurring on the Trans Mountain Pipeline. But this high level of apportionment is artificial. The answer to the apportionment is not to give the Burnaby refinery a PDD. The answer is to rectify the artificial apportionment." Imperial Oil outlined why the apportionment figures were artificial. "...Artificial apportionment arises because volumes are nominated that are grossly in excess of the (Burnaby) refinery requirement and the Washington State refineries are nominating volumes that are grossly in excess of what can actually be delivered to them by the Puget Sound Pipeline."⁴¹ The over-nomination of barrels is what the industry calls 'air barrels'—barrels that do not actually exist but are nominated in an effort to secure capacity for barrels that do.

The NEB addressed the artificial apportionment figures at a subsequent hearing and yet approved a verification method that the Board knew to continue to report exaggerated apportionment figures. In its Reasons for Decision approving a revised verification method in mid-2015, the Board stated that, "The Board is of the view that, while there may be higher apportionment levels (than actually occur) and some potential for impact on Dock capacity utilization, including Dock redirections in the calculation of HBV Limits will aid in achieving a fair allocation on the Pipeline based on actual use and willingness-to-pay for Pipeline capacity."⁴²

Due to the two methods by which capacity on Trans Mountain is allocated, and the two methods by which the apportionment formulae suffers from upward bias, it is not necessarily correct that the existence of apportionment means demand for capacity exceeds the supply of capacity. The apportionment calculation Trans Mountain relies upon suffers from double counting due to redirection of barrels as well as from barrels being bid once, that are nominated again. Trans Mountain counts the same barrels twice, as if they represented separate physical supply, when they do not. Apportionment on Trans Mountain is an unreliable predictor of excess demand for pipeline capacity.

In order to understand when excess capacity on Trans Mountain is available for any given month a calculation of the proportion of heavy shipped to capacity available must be undertaken. When that calculation is undertaken it becomes clear that capacity constraints on Trans Mountain are exaggerated.

⁴¹ NEB, Priority Destination for Chevron Refinery, [Imperial Oil Final Argument](#), April 16, 2013, page 2 and 3.

⁴² NEB, Reasons for Decision, [Trans Mountain Tariff Amendments Regarding Verification Procedures](#), January 8, 2015, page 39.

Trans Mountain has filed a table with the NEB that allows a capacity utilization calculation to be undertaken. Table 3 below, provides detailed information regarding the relationship between heavy oil shipped and capacity. At 95 percent Operating Capacity, 20 percent Heavy Composition results in 300,000 barrels a day of throughput (see bold in Trans Mountain’s table). When there is no Heavy Composition, throughput at 95 percent Operating is 401,212 barrels a day.

Table 3
Capacity on Current Trans Mountain System

Calculation of Final Tolls
ITS - 26

INCENTIVE TOLL SETTLEMENT
Appendix 1
Table of Pipeline Capacities for Current System (TMPSE) and Anchor Loop Expansion
at Carrier's Reference Line Temperature
Barrels per Day

Line Definition % of Design Capacity	Heavy Composition	Design	Hydraulic Test	Operating	Tolls	Capacity Penalty
		100.00%	97.38%	95.00%	92.50%	90.00%
1 A. Anchor Loop Expansion ^[6]	0%	422,328	411,263	401,212	390,654	380,096
2 (Predicted)	5%	382,727	372,700	363,591	354,023	344,455
3	10%	342,835	333,852	325,693	317,122	308,551
4	15%	324,036	315,546	307,834	299,733	291,633
5	20%	315,790	307,516	300,000	292,105	284,211
6	25%	306,832	298,793	291,490	283,819	276,148
7	30%	297,755	289,954	282,867	275,423	267,980
8	35%	294,959	287,231	280,211	272,837	265,463
9	40%	285,970	278,478	271,671	264,522	257,373

Source Trans Mountain, ITS 2010, NEB Filing

In January, February and March of 2019, Trans Mountain had unused capacity, not only to the dock but for the entire system. In January and February capacity utilized for the system ran at about 85 percent while in March capacity utilization was 75 percent.

In March 2019, for example, Trans Mountain was capable of delivering approximately 385,000 barrels a day because only 2 percent of the volume shipped was for heavy oil. However, deliveries were 289,000 barrels a day. Had there been a need for increased refined product supply in the BC market in March, there was more than ample room to deliver it. There is no evidence to suggest the price spikes in April 2019 were in any manner related to lack of capacity to deliver supply along Trans Mountain.

It is curious that despite repeated claims in the media that there is insufficient capacity on Trans Mountain to deliver refined product to the BC market that no refined product supplier that ships along Trans Mountain indicated difficulty in serving the BC market, or that they wished for more capacity on Trans Mountain during the period that led to the most recent price spikes.

An assessment of throughput capacity versus capacity utilization on Trans Mountain during the period 2014 – Q1 2019 shows that there have been periods prior to Q1 2019 when there was capacity available on Trans Mountain’s pipeline, but it was not utilized. For example, in June 2016 only 83 percent of available capacity was used, in September 2017 only 83 percent of capacity was used, and in June 2018 only 78 percent of capacity was used.

4.3(b) Trans Mountain’s Expansion will not increase refined product deliveries

Trans Mountain’s expansion application approved by the NEB very clearly states that there will be no increase in the supply of refined products to the BC market. Trans Mountain advised the Board that, “refined product shipments are approximately 7,950 m³ /d (50 kb/d), and that refined product shipments will not increase as a result of TMEP.”⁴³

If anything, British Columbians should be worried that refined product capacity will be crowded out if Trans Mountain is built. The NEB has approved deliveries to the dock of 630,000 barrels a day. The new pipeline will deliver 540,000 barrels a day. Where is the additional capacity to the dock going to come from? It will come from the legacy line—90,000 barrels a day siphoned away from land destinations, including refined product capacity.

Under the expansion scenario the NEB has approved, there will be **40,000 barrels a day less capacity** on the old line after the expansion than currently exists.⁴⁴ The authors appreciate that the Commission is not examining the impact of the Trans Mountain expansion during this inquiry, but it is important to understand that false narratives around the need to build the expansion in order to witness less volatile and lower prices have been aggressively advanced. For example, Premier Kenney of Alberta stated that, “people in the Vancouver region are rightfully ticked off” about paying \$1.70 per litre to fill up their vehicles. (He argued) that the expanded pipeline will alleviate the shortage and bring pump prices down.”⁴⁵

There is no question that politics are being played. The heated political rhetoric that has accompanied Trans Mountain’s expansion cannot be denied. What is curious is how readily the price spike was blamed on a lack of supply (when there is no evidence that supply was limited) because of reduced volumes on Trans Mountain and claims made that if Trans Mountain were expanded—which will take at least four years—all pricing pressures will be solved.

During the first quarter of 2019, as shown above, there were reduced shipments of refined product along Trans Mountain, but there was sufficient capacity to ship more than 50,000 barrels a day of

⁴³ NEB, Application for the Trans Mountain Expansion Project, [Market Prospects](#), page 2.

⁴⁴ Trans Mountain told the NEB that the existing capacity would increase by 50,000 barrels a day when no heavy oil is shipped. Therefore, 50,000 of the 90,000 for additional dock deliveries would come from the ‘expanded’ capacity resulting in net fewer barrels of capacity of 40,000 after the expansion.

⁴⁵ Fletcher, Tom, [BC taking Alberta to court over ‘turn off the taps’ gas legislation](#), Surrey Leader, May 1, 2019.

refined product if the market needed them. Any suggestion that there was a lack of supply in the market because of Trans Mountain's limited capacity is entirely artificial.

There is no shortage for the expanded pipeline to alleviate and there was no lack of capacity on Trans Mountain's existing pipeline when prices skyrocketed in early 2019.

4.3(c) Trans Mountain's Expansion will increase pump prices

Trans Mountain's expansion is not commercially viable on its own merits. The capital cost of the expansion needs to be funded in part by increased toll rates on the existing line. Because of the cross-subsidization of existing assets to help pay for new assets, the cost to deliver a barrel of gasoline or diesel to BC's market by way of Trans Mountain after the expansion will be as much as three times the cost to deliver a barrel of gasoline or diesel today.⁴⁶

Once a new capital cost for Trans Mountain's expansion is provided by the Government of Canada it will be possible to undertake a more accurate estimate. However, likely capital costs suggest that tolls may increase by as much as three what they are under current tariffs which translates into approximately 5 cents a litre. Since transportation costs are passed on in higher retail prices, this cost will be reflected in pump prices.

Before moving into Section 5, which addresses cost drivers in a competitive market and refinery and marketing margins, there are two remaining factors that are often advanced to explain why prices for refined product in BC are so high—dependency on US markets and exchange rates.

4.4 Shortage points to dependency on US markets?

An argument often advanced to justify higher prices in BC is, BC is dependent upon the US market for supply and therefore, if the price of a litre of imported gasoline is higher than domestically produced gasoline, then that higher price is attached to all barrels supplied.

Any party who relies on the marginal barrel imported from the US argument must be unaware that BC suppliers do not depend on the US market for supply. BC may import gasoline and diesel from the US, but it is also an exporter. Suppliers engage in cross border trade because it benefits their business needs, not because there is inadequate supply of refined product in BC from Canadian sources.

⁴⁶ Allan, Robyn, [Trans Mountain expansion will cost BC motorists \\$100 million a year](#), National Observer, March 27, 2017. This estimate was on only gasoline consumption and relied on a \$7.4 billion capital cost. Thus, the impact on pump prices will be much higher given likely capital costs for the project.

It is the net difference between imports and exports that must be examined to determine whether BC has an import dependency from the US. As Table 1 above shows, since 2015 BC has been a net exporter of diesel, and in two of the past four years a net exporter of gasoline. This is hardly indicative of an import dependency.

The marginal cost argument holds little validity in a highly concentrated market with oligopolistic pricing. Once it is established that a market is concentrated—as is the case for BC’s refined product market—the marginal price argument holds no weight.

A related argument often relied upon by industry commentators is that the exchange rate causes the relative price of imports to be higher and therefore the price for domestic gasoline must reflect the exchange rate. The absurdity of this logic becomes apparent when it is taken to its logical conclusion—that is, the exchange rate argument suggests that if one litre of gasoline is imported from the US then the price at the pumps must reflect a situation that suggests **every litre** of gasoline is imported from the US. This is erroneous logic, notwithstanding that the marginal barrel argument has no validity in a market that is highly concentrated such as is the case in BC.

5. Crude Cost Drives Price in a Workably Competitive Market

Having established that the gasoline and diesel markets are highly concentrated, that barriers to entry exist and that the characteristics of the market all indicate that prices are not being determined by freely functioning supply and demand factors, it becomes necessary to provide empirical evidence to indicate if inappropriate pricing has occurred and if so, to what degree.

All indicators point to BC gasoline and diesel prices being determined by suppliers who exert their market power and take advantage of the lack of competition to drive prices much higher and more quickly—and hold them there longer—than they would be allowed to do if the market were workably competitive.

In order to quantify the market abuse, it is necessary to establish a benchmark for prices that would be expected to exist if the market were performing in a workably competitive manner.

This section examines gasoline and diesel prices that would be expected to exist in a workably competitive market and measures these prices against the prices that have existed. The gap between workably competitive prices and actual prices provides an indication of the degree to which gasoline and diesel suppliers have been taking advantage of BC consumers and businesses.

What we find is that gasoline and diesel suppliers abuse the market across Canada, while their market abuse behaviour is much more extreme in BC than the rest of the country.

In mid-2014, when crude oil prices began to plummet it was anticipated that pump prices would follow suit proportionately in accordance with historical experience, since crude prices were believed to be the most important factor in determining retail prices. This did not happen. Although gasoline prices declined between July and December 2014, they never fully reflected the proportional decrease in crude prices. Beginning in 2015, gasoline prices began to spike without a corresponding rise in crude feedstock costs, most notably in Vancouver and on Vancouver Island.

With respect to diesel prices, the evidence suggests that refinery and marketing margins for diesel were abnormal to begin with, and therefore the relative lack of volatility and spikes observed in this market is more a function of established gouging practices having been present before crude prices plummeted.

Theory and practice tells us that there is a direct relationship between the price of crude oil and the retail price of gasoline and diesel at the pump. This is due to the fact that crude feedstock is the primary input into processing refined products and most of the remaining cost factors are considered to be relatively stable. The US Energy Information Agency (EIA) explains that

‘Because gasoline and diesel taxes and distribution costs are generally stable across the United States, changes in retail gasoline and diesel prices are generally driven by changes in crude oil prices.’⁴⁷

Prior to 2015, it was generally understood within Canada that retail prices track crude oil prices in the medium and long term because other input cost factors are relatively stable and crude feedstock represents the most significant input in the production and delivery process.

In March 2015, the Canadian Fuels Association explained to the Standing Committee on Finance that, “Crude oil is the single biggest cost input for refiners. Over the long term, refined product prices for gasoline, for example, generally track movements in crude prices, although other factors can come into play.”⁴⁸

The relationship between gasoline prices to the price of crude oil became disconnected beginning in 2014 when Brent crude oil prices plummeted from a high in June 2014 of US\$115 to less than US\$46 in January 2015.⁴⁹

When crude oil prices fell, the Bank of Canada expected retail prices to follow. The Central Bank was clear that it anticipated that the proportional relationship between crude oil and retail prices would be reflected at the pumps.

However, when refiners and retailers did not fully pass on the benefits of lower feedstock costs to the retail market as would be suspected in a workably competitive market, the Bank noted the disconnect and stated that, “...gasoline prices...have not fallen as much as the reduction in crude oil prices would suggest based on historical experience.”⁵⁰

Graph 6 below, was prepared by the Bank of Canada to illustrate the unexpected disconnect between crude costs and retail prices. The graph provides a clear picture of the erosion of the competitive pricing dynamics in the Canadian market that is so necessary to a healthy economy. The disconnect between crude prices and retail prices that began to appear in early 2015 illustrates that the market was failing.

⁴⁷ US Energy Information Agency, Today in Energy, [Summer 2019 gasoline prices forecast to be lower than last summer](#), April 17, 2019.

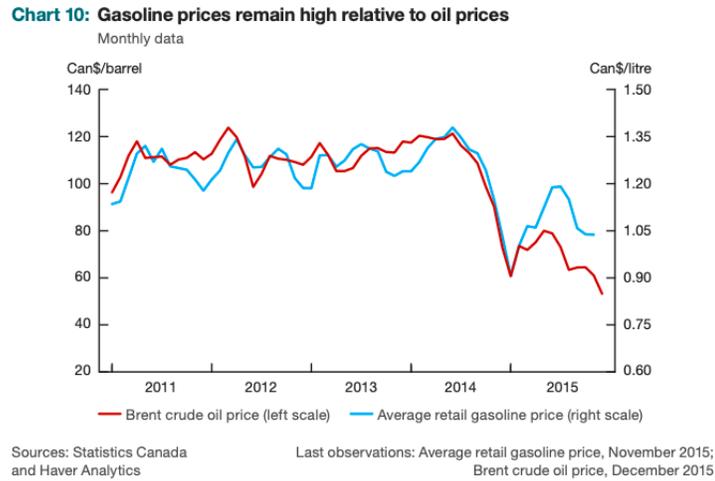
⁴⁸ Boag, Peter, Canadian Fuels Association, [Presentation to the Standing Committee on Finance](#), 2nd Session, 41st Parliament, March 11, 2015.

⁴⁹ Report of the Standing Committee on Finance, [Recent Oil Price Changes: Selected Canadian Impacts](#), June 2015, page 4.

⁵⁰ Bank of Canada, [Monetary Policy Report](#), January 2016, page 16-17.

Graph 6

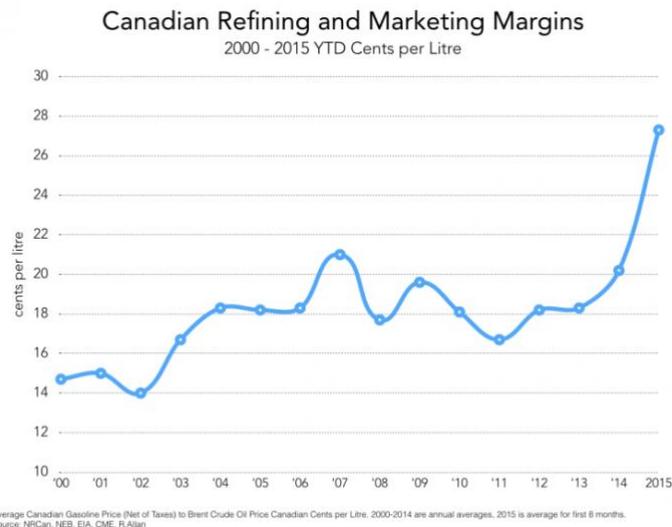
Canadian Average Gasoline Prices and Crude Oil Feedstock Costs 2011 - 2015



Source: Bank of Canada

Graph 7 below, illustrates the disconnect between input costs and price determination in the Canadian gasoline market—and hence the failure of the market—from a different vantage point than Graph 6. By plotting refinery and marketing margins, Graph 7 nets out crude feedstock costs and taxes from the trend line. In effect, the blue line below illustrates how refinery and marketing margins in Canada skyrocketed when crude oil prices fell instead of being passed on in retail prices as would be expected in a well-functioning market. As can be seen by the upward sloped blue line, when crude prices and taxes are removed from the gasoline pump price, the proportion of the price that refiners and marketers received increased rapidly.

Graph 7



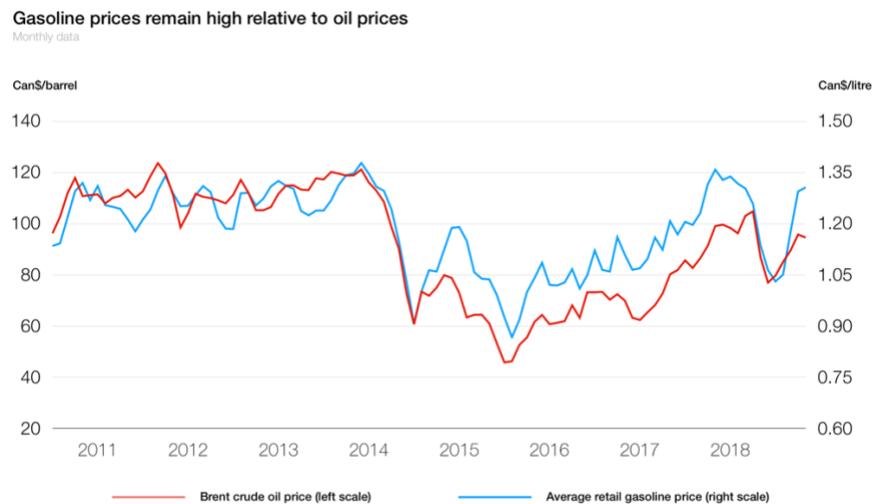
There was no market reason for the rapid rise in refinery and marketing margins across Canada during this period. Canada was a net exporter of gasoline, there was no scarcity of supply, and not only were crude prices falling, but operating costs related to energy costs were falling as well.

As Graph 7 illustrates, between 2000 and 2014, refining and marketing margins in Canada averaged 17.7 cents a litre. For the first eight months of 2015, they averaged 27.3 cents a litre. Canadian motorists were charged 10 cents a litre more in 2015 than crude feedstock costs suggest they should have been charged based on market experience during the previous fifteen years. Refining and marketing margins became excessive.⁵¹

The research and analysis on exorbitant refinery and marketing margins was interrupted during the Federal election campaign because Natural Resources Canada suddenly suspended its Fuel Focus Report that supplied the data upon which the analysis was based.⁵² Graph 8 updates the Bank of Canada data to illustrate that the disconnect between gasoline prices and refined product prices across the country have remained high relative to crude feedstock costs. This lack of responsiveness to input costs suggests a degree of market failure has continued, nationwide.

Graph 8

Canadian Average Gasoline Prices and Crude Oil Feedstock Costs 2011 – May 2019



Source: Data from the Bank of Canada

⁵¹ Allan, Robyn, [Canadians get ripped off at the pump](#), National Observer, September 18, 2015.

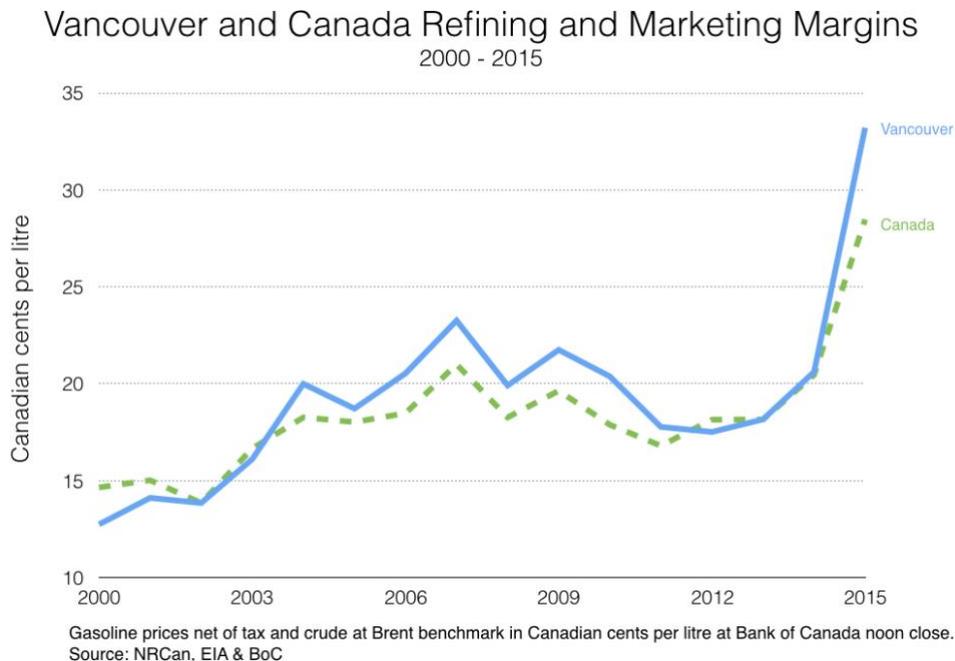
⁵² Macdonald, Neil, Why is NRCan's fuel price report suspended during election? CBC News, September 25, 2015. The Fuel Focus returned for a brief period after the election but has since ceased reporting interrupting the reliability of the time series upon which Graph 7 is based.

Excessive refining and marketing margins have been facilitated because of a lack of competition in Canada’s gasoline market. Crude prices are no longer the dominant price driver as would be expected in a workably competitive market.

Between 2000 and 2014, refining and marketing margins in Vancouver averaged 18.4 cents a litre. For the first eight months of 2015, they averaged 33.2 cents a litre. British Columbians were charged almost 15 cents a litre more for gasoline at the pumps than crude feedstock costs suggest they should have been charged based on fifteen years of market data.

Graph 9 below, charts the Vancouver experience compared to the Canadian experience. It illustrates that margins were higher in Vancouver than across Canada in 2015, as had been the case for much of the period from 2003 – 2012. Although inappropriate pricing behaviour post-2014 has been taking place across the country, it is more extreme in the BC market place as represented, in this instance, by Vancouver prices.

Graph 9



Graph 9 is also useful to illustrate the erosion of the competitive market. When crude prices plummeted in 2014, instead of passing the price benefit through to the retail market as was expected, refiners and marketers captured the majority of the benefit as a windfall gain reflected in their refinery and marketing margins.

In March 2019, retail gasoline prices skyrocketed again. Although crude oil prices were rising at the time, the price spike was primarily due to refinery and marketing margins increasing. In Vancouver in May 2019, gasoline refinery and marketing margins were 69.8 cents a litre.

Diesel prices rose through April and May as well, but not as aggressively. Refining and marketing margins rose to 48.8 cents a litre by May.

Recent research reveals that, “Since 2015, supply cost has not been the basis for wholesale pricing of gasoline and diesel, resulting in an increase in the average refining margin within the Vancouver area fuel market that cannot be attributed to competitive market forces. This high refining margin resulted in correspondingly high retail fuel prices.”⁵³ Research also shows that marketing margins are also excessive and that when combined a clear picture of the price abuse becomes transparent.

The Navius study estimated that excess profits to refiners in the sale of gasoline and diesel cost consumers \$2.4 billion between 2015 and 2017. This translates to about \$1,730 per household and is equivalent to a premium of 13 cents attributable to the refining margin because the market is not workably competitive. Including the premium charged through the marketing margin would increase the household burden even more.

The Canadian Centre for Policy Alternatives conducted an assessment on refinery margins for gasoline sold in the Vancouver market as compared to Calgary and Toronto between April 2016 and April 2019. CCPA found that excessive pricing—price gouging—exists and Vancouver motorists have been paying 20 – 30 cents more a litre than motorists in Calgary or Toronto. “The market power of refineries is the most notable factor in Vancouver’s sky-high gas prices.”⁵⁴

Suppliers to the BC market are primarily integrated companies, with Parkland representing the only refiner who supplies the BC market that is not also an oil producer. Parkland would be expected to benefit from lower crude feedstock costs, with the oil producer supplying that feedstock bearing the brunt of lower prices for its product. The remaining suppliers—Suncor, Imperial, Shell and Husky are integrated companies who supply both crude oil and refined product.

It could be argued that integrated producers require enhanced refinery margins when crude prices fall to sustain a reasonable return on their investment. However, there is no evidence to suggest any of the integrated companies that supply refined product from Alberta have reached the break-even point (covering costs and reasonable return on investment) since crude prices plummeted in

⁵³ Navius Research, [Refining Margins in British Columbia](#), June 15, 2018, page 2. In the interests of full disclosure this report acknowledges Robyn Allan for providing data sources and insights regarding the Trans Mountain Pipeline capacity and throughput as well as fuel imports and exports through the Port of Vancouver.

⁵⁴ Canadian Centre for Policy Alternatives, [Turn off the taps? Alberta already has Vancouver over a barrel](#), Policy Note, April 29, 2019.

mid-2014. In 2018, Suncor booked \$3.2 billion in profit, Imperial \$2.3 billion, Husky \$1.5 billion and Shell \$23.4 billion.

For years refiners were capable of operating with a much lower refinery margin with crude feedstock costs very similar to where they are today. There are no market forces or cost factors that supports the excessive refinery and marketing margins refiners and marketers are able to capture at the expense of BC consumers and businesses.

6. Recommendations

Included in the terms of reference submitted by the Government of British Columbia, BCUC has been requested to investigate:

- iv) “the extent to which price changes in gasoline and diesel have been determined by market competition and the extent to which those changes have been determined by other factors;”⁵⁵

and to advise on the “mechanisms the Province could use to moderate price fluctuations and increases.”

This report has provided evidence of market failure in the BC refined products market as a result of a highly concentrated market structure where companies who supply the market are responsible for excessive and volatile practices, especially in the Vancouver and Vancouver Island region.

Recommendation #1: The BC Utilities Commission recommend to the government of British Columbia that it establish the regulation of gasoline and diesel prices at the wholesale and retail level throughout the province.

The main objectives of the proposed regulatory environment should include:

- 1) **Transparency and Accountability:** Those who are responsible for refined petroleum products pricing must be required to be open, transparent and accountable. To date, refined product suppliers have been silent when asked to explain price changes. Narratives are introduced by individuals who have no precise knowledge or information about these price changes leading to uncertainty, confusion and distrust since the explanations offered are largely without merit. Third party rationale explaining away price spikes and volatility appears designed to serve the price gouging behavior of suppliers rather than shed light on actual market factors and conditions. This is not in the public interest nor is it in the interest of the market. Those who determine prices need to be accountable for them through a disciplined and consistent regulatory regime.
- 2) **Predictability and Affordability:** Price changes must be predictable and price levels affordable. Retail prices in a regulated environment where suppliers are required to provide cost and rate of return data, would better reflect the prices that would be expected to exist if the market were functionally competitive. A competitively determined price based on

⁵⁵ [Order Number G-112-19.](#)

cost and a reasonable return on profit would see gasoline and diesel prices lower than they have been since 2015, and these prices would be affordable.

Recommendation #2: The BC Utilities Commission become the regulator for gasoline and diesel prices in the province.

The Commission is an independent objective agency responsible for regulating rates (prices) and standards of service of British Columbia's natural gas and electricity utilities, as well as intra-provincial pipelines and the Insurance Corporation of British Columbia.

BCUC has quasi-judicial responsibilities and has developed processes that are fair and transparent. It has shown that it is committed to issuing well-reasoned, evidence-based decisions. In its current regulatory responsibilities BCUC ensures that government energy policy is implemented in a practical manner and that commercial entities earn a reasonable rate of return on their invested capital.

The Commission is the proper agency of government to implement and administer a regulatory regime for gasoline and diesel prices in British Columbia and ensure that if and when prices rise, there are sound cost-based reasons for doing so.