

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

Conclusions & Recommendations

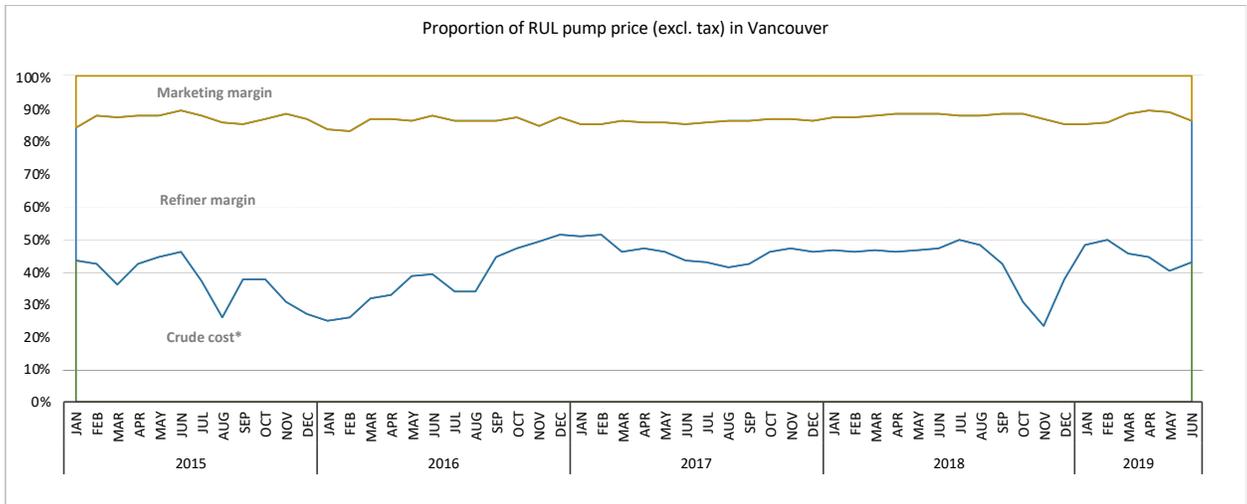
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Summary & Conclusions

Advanced Biofuels Canada provides here both a summary of what we believe the testimony to have revealed about the structure and function of the BC fuels market, and commentary on the testimony of other intervenors.

1. The Canadian and British Columbia refined petroleum products market is highly concentrated by national and international standards
 - a. The Canadian refined products market is highly concentrated, as evidenced by data provided to the inquiry. (Sources: US Energy Information Agency, Canadian Association of Petroleum Producers, and Canadian Fuels Association)
 - i. In BC, the top 5 fuel suppliers – all refiners – have approximately 90% of wholesale gasoline. This compares with the US average of 45%
 - b. The BC market has particular factors – geography, higher share of captive retail stations, few independent wholesalers, etc. – that exacerbate the problems of concentration more so than in other Canadian and US jurisdictions.
2. High concentration increases the ability of incumbent fuel suppliers (refiners) to unduly exercise market power
 - a. Competitive theory is clear that overt collusion is not necessary for the market to be workably uncompetitive
 - b. “With tacit collusion (conscious parallelism), there isn't any illegal agreement or even any contact or communication among the competitors. Instead, each competitor acts unilaterally, in response to the behavior of its rivals, to raise price above competitive levels.” https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3282235
 - c. “Conscious parallelism is a term used in competition law to describe pricing strategies among competitors in an oligopoly that occurs without an actual agreement between the players. Instead, one competitor will take the lead in raising or lowering prices. The others will then follow suit, raising or lowering their prices by the same amount, with the understanding that greater profits result. The term has also been used to describe industry-wide assumption of terms other than price.” https://en.wikipedia.org/wiki/Conscious_parallelism
3. Refiners control prices at the majority of retail stations in BC, and retailing has a small impact on total fuel cost.
 - a. In the Q1 2015 – Q2 2019 period, marketing (retail) margins represented 8% of the price of gasoline (including taxes). Refiners margins averaged 29% of total gasoline prices in Vancouver.
 - b. The variability in retail margins is small relative to refining margins
 - c. Reductions in crude prices are not passed on to consumer pump prices



source: Kent Marketing

4. The control of fuel pricing is overwhelmingly controlled by refiners who supply gasoline and diesel from a small number of wholesale terminals that are operated under terms that are not conducive to competition
 - a. Most refiners use other refiner's racks at locations across the province under 'swap' agreements
 - b. These agreements make them reliant on each other and less likely to compete on price
 - c. These agreements increase the ability of non-price factors to limit the availability of competitive (i.e. non-fossil) fuels
 - i. If one party in a shared terminal does not want to allow biofuel into the terminal, the other party cannot access biofuel.
 - ii. This prevents product differentiation as a competitive tool – in US markets, the supply of 15% ethanol blends, for instance, has become a significant differentiator

5. The majority of pump price increases were not from retail prices margins, but from increases in the gross margins that refiner's realized selling wholesale fuel
 - a. Between Q1 2015 and Q2 2019, refiner margins raised Vancouver gasoline prices by \$0.192/litre while marketing (retail) margins raised prices by \$0.037/litre.
 - i. Refiners were responsible for 84% of the 2015-2019 pump price
 - b. Refining margins increased 50.6% in that period; marketing margins increased 12.6%.
 - c. We concur with the testimony of Supersave – a true 'independent' not captive to any refiner rack – that if a wholesaler captures all of the margin accruing to the refining of deeply discounted crude oil, you've constrained competition at the retail level
 - d. No evidence was presented regarding, nor was there any discussion about, 'price wars' at the wholesale racks, notwithstanding that considerable refiner testimony was focused on the degree of competition at the retail level in support of the claim that fuels markets are competitive

6. A very small portion of retail stations can accurately and fairly be categorized as independent. The majority of stations labelled as independent by the fuels industry and associated service providers are in no manner free agents with respect to their fuel supply or how they operate their retail stations (including the sale of renewable fuels). Truly independent retail stations can

acquire fuel from the lowest-cost source, and hence incent competition at the wholesale level.

7. The assertion by refiners that the prospect of losing supply agreements at the end of contracts is an incentive to maintain competitive wholesale pricing for their branded captive retail stations is inaccurate and misleading
 - a. The differentiation (refiner-refiner) in rack pricing is so insignificant that a brand switch has no reasonable expectation of more competitive wholesale supply
 - b. Switching costs for a retailer (from brand A to brand B, or to their own brand) are prohibitive with little differentiation in agreement terms
 - c. Branded retailers have invested very significantly with their own capital in all aspects of branding
 - d. Backcourt offerings are also refiner-branded (e.g. Esso 'On the Run') and switching brands would be prohibitive
 - e. Very thin margins at retail provide little financial support for the expense of a brand change
8. BC's unique geography and infrastructure profile enables the exercise of market power
 - a. Significant shortage of existing bulk liquid storage and constraints on the construction of new bulk storage (including that for fuels) serves as a barrier to entry
 - b. Incumbents own potential sites (e.g. loco – Imperial Oil)
9. The exercise of market power by incumbents creates conditions that have unduly raised fuel prices
 - a. The Deetken reports assessed unexplained differences between BC and adjoining markets
 - b. No quantitative evidence or assessment was provided to explain the difference
10. Evidence was provided showing BC to have lower renewable content in gasoline (i.e. ethanol) than every other province west of Quebec (excepting Alberta), yet no evidence was provided to show why BC regulations regarding this content would create higher costs for consumers
11. No evidence was provided that 'other factors' beyond those identified by Deetken unduly raise consumer fuel prices.
12. Refiners' testimony contained highly inaccurate information relative to the cost of alternative fuels
 - a. One intervenor stated that a renewable fuel product was 'often times 4-5 times the cost of diesel'; the producer of that product subsequently stated that this was a highly inaccurate claim
13. New wholesale supply, in isolation to other factors, is unlikely to lower fuel prices
 - a. Control by refiners of fuel purchasing decisions of over 90% of BC retail stations severely limits the potential market of new wholesale supply entrants
 - b. New wholesale entrants' lack of access to established supply chains with lower costs (e.g. Burnaby pipeline-supplied racks) places them at a cost disadvantage

14. Imperial Oil’s final arguments regarding E15 compatibility contain the claim that ABFC’s testimony was incorrect and misleading.

Additional information provided here shows that Imperial Oil’s statement omits important information that undermines its assertions that E15 cannot be safely used by consumers.

- a. In June 2011, the US EPA formally approved the use of E15 in model year 2001 and newer automobiles. The EPA approval was based on extensive engine testing conducted by the US Department of Energy.¹
- b. The CRC reported was issued in April 2012. The CRC is a jointly-funded body of oil and auto companies. On the day the CRC report was issued, the US Department of Energy issued a summary of the errors in the CRC report, saying “The study claims mechanical damage and suggests degraded engine performance, emissions and durability on conventional vehicles from the use of E15 or E20 fuel. We believe the study is significantly flawed.”² The DOE statement listed the errors, and concluded, “We believe the choice of test engines, test cycle, limited fuel selection, and failure criteria of the CRC program resulted in unreliable and incomplete data, which severely limits the utility of the study.”
- c. US DOE issued an additional report in October 2013³ which reviewed 43 studies relevant to the effects of E15 on model year 2001 and newer lightduty vehicles (including 33 unique studies, and 10 on methodology, etc.). The report concluded:

“The data presented in these studies did not show any evidence of deterioration in engine durability or maintenance issues for E15 (or E20) in comparison to E0 and E10 (when tested). Materials compatibility testing provides no evidence that 15 volume percent ethanol blends will cause increased rates of metal corrosion in comparison to 10 percent blends. In most cases increasing ethanol content from 10 to 15 volume percent had no significant effect on elastomer swell. For 2001 and newer cars emission studies also show that engine control units are able to adequately compensate for the higher oxygen and lower energy content of E15. The engine performance and durability expectations from the materials compatibility and emission test results are confirmed by studies of fuel system, engine, and whole vehicle durability. The main conclusion from our analysis is that the data in the 33 unique research studies reviewed here do not show meaningful differences between E15 and E10 in any performance category.”
- d. The petroleum industry has repeatedly relied on this single study – now 7 years old – as the basis for its claims and has never produced another study. It also uses terms such as ‘might’, ‘could’, ‘may’, ‘potentially’ etc. in relation to the CRC study claims; the data were sufficiently inconclusive to allow the use of any definitive terms.
- e. A February 2018 report by the Fuels Institute – which includes many refiners and automobiles OEMs – polled retailer experience with E15 and consumer acceptance. The study cites no case of engine damage in its assessment of consumer acceptance.⁴

¹ <https://www.energy.gov/articles/getting-it-right-accurate-testing-and-assessments-critical-deploying-next-generation-auto>

² <https://www.energy.gov/articles/getting-it-right-accurate-testing-and-assessments-critical-deploying-next-generation-auto>

³ https://www.researchgate.net/publication/283721687_Review_and_Evaluation_of_Studies_on_the_Use_of_E15_in_Light-Duty_Vehicles

⁴ <https://www.fuelsinstitute.org/Research/The-Case-of-E15>

The fact that most completely invalidates the refiners' dated claim about 'potential' damage from E15 use is the experience in the real market from actual data over 7 years of use (2012-2019).

- f. Since 2012, E15 has been used in over 10 billion miles of on-road use in the US, with no claims by any body – neither petroleum firm, not automaker, nor consumer association (e.g. AAA, which also expressed alarm in 2012) of evidence of any impact on vehicles using E15. This complete absence of engine or fuel system damage has been confirmed with state regulatory and consumer protection staff in states with high ethanol consumption (e.g. Minnesota).
- g. The government of Ontario also confirms that, in the process of its consultations on proposed regulations for renewable content in gasoline, no evidence of harm from E15 has been provided by stakeholders despite extensive consultations and requests for such evidence.
- h. E15 is currently sold in over 1800 stations in 31 states by large independent retailers such as Casey's, Cumberland Farms, Family Express, Holiday, Kum & Go, Kwik Trip, Minnoco, Murphy USA, Protec Fuel, QuikTrip, RaceTrac, Royal Farms, Rutters, Sheetz and Thorntons
- i. These retailers are truly independent of any refiner, and unlike Canadian retail stations that petroleum firms claim to be 'independent,' are free to buy their gasoline from the refiner or supplier of their choice (based on the most competitive wholesale price). These US retailer acquire and blend less-expensive ethanol into straight gasoline and provide E15 at prices to consumers that is below the cost of E10 offered by major brand retailers.⁵

Refiners, including Imperial Oil – also have a very significant problem with their E15 base claim (“for the legacy fleet, fuel changes outside the original design increase risk and the probability of problems developing should fuel blends or fuel properties exceed those validated by the manufacturers. Consumers should not be at risk with respect to fuels available in the market.”).

- j. US refiners – including Imperial Oil's parent Exxon Mobil - sell a sub-octane gasoline (85 octane) that would completely fail their own criteria re:E15 suitability. Regular gasoline – what cars were designed to use – has an 87 octane rating.
- k. Refiners are motivated by higher margins in the sale of 85 octane⁶
- l. Engine manufacturers do not approve of or explicitly express against the use of 85 octane fuels in most light duty vehicles.⁷
- m. Calls to retailers in Colorado confirm the availability of 85 octane gasoline at Exxon and Shell stations.^{8,9}
- n. The US DOE – which conducted the testing for the US EPA to enable use of E15 fuels in post-2001 vehicles, states,

⁵ E85prices.com

⁶ https://web.archive.org/web/20140110154625/http://www.aaa.com/aaa/006/EnCompass/2007/mar/mar_AutoTalk.htm

⁷ <https://www.usatoday.com/story/money/cars/2013/05/29/bad-gasoline-low-octane-too-much-ethanol/2369579/>

⁸ <https://www.exxon.com/en/gas-station/coloradosprings-co-174gardenofthegods-200322177>

⁹ <https://www.shell.us/motorist/gas-station-near-me.html#iframe=Lz9sb2NhbGU9ZW5fVVMjL3NIYXJjaC9AMzguODk2NDEsLTEwNC44MzM1MywXNno=>

“The sale of 85 octane fuel was originally allowed in high elevation regions—where the barometric pressure is lower—because it was cheaper and because most carbureted engines tolerated it fairly well. This is not true for modern gasoline engines. So, unless you have an older vehicle with a carbureted engine, you should use the manufacturer recommended fuel for your vehicle, even where 85 octane fuel is available.”¹⁰

- o. Fewer than 2% of US vehicles on the road today are reported to have aspirated engines (i.e. carburetors).¹¹ Refiners have no ‘safe to use’ claim re: sale of sub-octane gasoline as 98% of cars were not intended to use it.

¹⁰ <https://www.fueleconomy.gov/feg/octane.shtml>

¹¹ <https://www.usatoday.com/story/money/cars/2013/05/29/bad-gasoline-low-octane-too-much-ethanol/2369579/>

Recommendations

Improve Transparency – Market Share

1. We recommend that the government of BC should make available the same data that the California (Department of Tax and Fee Administration) <http://www.cdtfa.ca.gov/taxes-and-fees/spftrpts.htm>
 - a. Refiners inherently benefit from a highly concentrated market – this can be offset partially by greater visibility on the relative market control of fuel suppliers
2. We recommend that the government of BC contract with a retail fuel census provider to create an annual report of price control
 - a. The report would provide detailed information about the breakdown of fuel price components
 - b. The report would make more precise distinctions about which entities have control over what components of fuel price
 - c. The report would be peer-reviewed
 - d. The report would be published

Improve Transparency – Fuel Costs and Prices

3. We recommend that the government of BC require refiners who supply fuels in the province to submit quarterly reports that show the components of wholesale fuels they provide
 - a. Refiners who produce some or all of the crude component in their BC-supplied products would provide detailed component breakdown of the crude transfer price (to their refining division)
 - b. Refiners who acquire crude from other parties would report acquired price and all the processing, transport, etc. components in their refined product wholesale prices
 - c. Submissions would also include summarized data that show, by fuel type, total volumes and price components to enable a straightforward and administratively simple collation of data into summary reports
 - d. We recommend that BC publish a summary of cost of each cost component, by fuel type, aggregated for all suppliers and that data filed by fuel suppliers enable low-administration publication
4. We recommend that the government of BC examine the California Energy Commission’s fuels information portal and consider the benefits of a comparable, appropriate-to-BC report such as the Fuels Watch report
https://ww2.energy.ca.gov/almanac/petroleum_data/fuels_watch/index_cms.html

Rationale

The government of BC has no visibility on data related to fuel pricing. Policy formulation and associated decision-making by government is impaired when data are not available. British Columbians likewise have little information about a large household and commercial expense. Refiners selling fuel in BC realize higher profits on the sale of fuels here than they do in almost every other market in the world. In exchange for that benefit, it is fair to

require refiners to provide information (that will be confidential) to enable greater transparency on prices and market share.

Improve the potential for more competition at the rack

5. The government of BC should require entities that supply wholesale fuel under retail-branded supply agreements to submit to Consumer Protection BC, on an annual basis, a summary of the terms for each agreement
 - a. The parties' identities would be withheld
 - b. The fuel supplier would submit a list of the retailers covered by supply agreements
 - c. Consumer Protection BC would make available on its website, updated annually
 - i. The terms of supply agreements, in aggregate form
 - ii. The names of the retailers covered by supply agreements
 - d. The specific information to be submitted and the information to be made available would be subject to further consultation with stakeholders

Rationale

British Columbians lack information about the fuels they buy. Considerable misinformation about the factors that determine fuel prices do not support good consumer choice.

6. The government of BC should examine, in detail, the terms of fuel supply agreements to determine if they constitute an unfair restriction in retailers' operations and if they are unduly impairing competition at the pump (and at wholesale)
 - a. Renewable fuels, in particular, are not allowed to be offered by the retailer unless the rack supplier approves of the sale – which historically has been denied (as it represents lost market to the fossil fuel supplier)

Rationale

The government has no ability to assess the reasonableness of supply agreements. Restricting the ability of renewable fuels undermines the ability of consumers to access to fuels such as E15 that are less expensive than regular gasoline (<https://e85prices.com/>).