REPORT

Report on CFR Compliance Costs and Gasoline Blending in Newfoundland and Labrador (2026)

Prepared For:
Public Utilities Board Newfoundland and Labrador (PUBNL)

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Introduction and Project Overview

The Public Utilities Board of Newfoundland and Labrador (the PUBNL or Board) is responsible for setting maximum wholesale and retail prices for fuels in Newfoundland and Labrador. The PUBNL has engaged Signal Energy Consulting (Signal) to undertake a review of compliance costs incurred by industry's primary suppliers under the Clean Fuel Regulations in Newfoundland and Labrador, and of the composition of gasoline imported into the Province. This project will support the Board's ongoing regulatory mandate by providing impartial, objective analysis to inform any future reviews, actions, or decisions.

Specifically, the PUBNL seeks a review of:

- **CFR Compliance Costs** - Signal will collect, audit, and analyze industry-supplied data to support a detailed overview of supplier compliance costs under the Federal Clean Fuel Regulations for gasoline and diesel motor fuels on the Island portion of the Province and in Western Labrador.

- **Product Formulation (Gasoline) -** Signal will collect, audit, and analyze industry-supplied data to support a detailed overview of the composition of regular gasoline motor fuel imported into the Island portion of the Province and Western Labrador, including whether the regular gasoline product imported is conventional, E10, a combination of both conventional and E10, or some other composition.

This review will rely on data supplied by primary suppliers that covers expenses incurred from Newfoundland and Labrador-related CFR compliance efforts, as well as any other information used to assess the need to accommodate these costs within the PUBNL's regulatory approach, including any need to amend or update the methodology of CFR compliance cost accounting in their regulatory approach.

Signal Energy Consulting (Signal), an independent industry consultant, reviewed the information and prepared this report, outlining observations, findings, and potentially recommendations. This report aims to assist the Board in understanding the issues in this Matter, interpreting the evidence presented herein, and providing an impartial, objective analysis, enabling the Board to make the best possible decisions under the law.

Executive Summary of Findings

Our review, guided by the Board's outlined scope and subject to the analysis and methodologies described herein, has yielded findings for the Board's consideration. Those findings are summarized as follows:

- The gap (or differential) between regional rack prices and NYH benchmark prices has widened significantly since July 2023, driven by structural dynamics that asymmetrically affected their respective markets. Canada's Clean Fuel Regulations have created compliance costs that serve as an input cost for fuel supply, pushing Atlantic wholesale (rack) prices higher relative to NYH prices, while NYH markets have been unaffected by these regulations. The growth in the differential between the gasoline and diesel racks and their NYH equivalents is comparable in terms of timing and trend to the introduction and evolution of CFR regulations and their associated compliance costs, and the magnitude of these shifting differentials closely tracks some of the best-known proxies for these costs.

- On June 23, 2023, Newfoundland and Labrador amended the Petroleum Products Regulations to require the Board to include a Carbon Price Adjustment (CPA) component to the maximum petroleum price build-up. The CPA is intended to mitigate the compliance costs incurred by primary suppliers of regulated petroleum products. Under these changes, the Board established a CPA mechanism in its maximum price formula for all relevant regulated fuels. Beginning in July 2023, this CPA component was set at 3.74 cents per litre for gasoline and 4.17 cents per litre for diesel. These amounts were increased to 5.40 and 6.02 cents per litre, respectively, at the beginning of 2024 and have been maintained at those levels since then.

- Assessing total available margin in Newfoundland and Labrador between 2023 and 2025 showed that gasoline and diesel margins are currently below historical norms and roughly 4 to 5 cents per litre below their early-2023 levels. This finding is what one would expect if some aspect of the regulated approach were not aligned with the market reality. One such potential issue is whether the CPA is an accurate proxy for how CFR compliance costs are manifesting in regional rack prices. If the CPA is understating the actual impact of CFR compliance costs on rack prices, it would show up as a decline in total available margin, which could negatively impact the margins available to both wholesalers and retailers of regulated products in Newfoundland and Labrador.

- Signal identified five primary suppliers operating in Newfoundland and Labrador that could potentially provide their actual incurred CFR compliance cost data over the evaluation period. We contacted all relevant suppliers, and four provided data to Signal, likely representing most of the primary supply of regulated motor fuels in the Province. The data used in our analysis were deemed broadly representative of primary suppliers in Newfoundland and Labrador.

- The PUBNL's CPA figures closely followed reported supplier compliance costs in 2023 and 2024. Still, in 2025, there was a clear and material gap between the supplier-reported average compliance costs and the PUBNL's carbon price adjustments. Reported compliance costs were 4 to 5 cents per litre higher than the CPA in 2025 for both products, representing a significant shortfall. The PUBNL's current CPA levels are likely to have contributed to the real erosion of available margin for wholesalers and retailers with operations in the Province in 2025.

- This gap has likely expanded further in 2026, as annual increases in CFR stringency and rising credit prices are likely to have pushed incurred compliance costs higher. For primary suppliers that provided forecasts of compliance costs for 2026 and beyond, the estimated increase in 2026 compliance costs was an additional 2 to 4 cents per litre for both products. This finding suggests the estimated gap between current CPA levels and incurred CFR compliance costs in 2026 is likely to be roughly 6 to 9 cents per litre for both gasoline and diesel.

- Our analysis demonstrated the clear reality of CFR compliance costs for primary suppliers in Newfoundland and Labrador. It showed that the CPA was an effective methodology for establishing a proxy for these costs in 2023 and 2024, but diverged materially in 2025 and beyond. Without a more dynamic approach that adjusts the CPA amount to better track changes in incurred compliance costs and their impact on rack prices, the use of the current CPA approach is likely to result in significant erosion of total available margin for wholesalers and retailers, and, ultimately, increase the risk of issues with security of supply in the Province.

- Based on our survey and consultations with Newfoundland and Labrador's primary suppliers, it appears that the gasoline supply is largely conventional (as opposed to ethanol-blended gasoline). This trend is due to reported logistical difficulties, supply risks, and costs associated with procurement, shipping, and storage of ethanol and blendstock in Newfoundland and Labrador. In 2025, over 80 percent of the gasoline supply to Newfoundland and Labrador was conventional gasoline, and its percentage of the gasoline pool has generally increased over the evaluation period. The use of E10 (ethanol-blended gasoline) in Newfoundland and Labrador is also very regionalized: most of the Province uses exclusively conventional gasoline, while select regional facilities handle E10 where it is strategically or operationally feasible.

- The increased reliance on conventional fuels in Newfoundland and Labrador, and their relatively higher costs, are major contributors to the widening spread between their rack prices and those in Halifax and Saint John, which rely almost exclusively on E10 blends. The Board should continue to monitor fuel product composition, particularly the use of conventional vs. E10-blended gasoline, to help track and assess general disparities in gasoline rack prices between St. John's and other comparator markets such as Saint John and Halifax.

Background: Overview of Fuel Prices and Margins

UNREGULATED MARKETS – ELEMENTS OF FUEL PRICES AND MARGINS

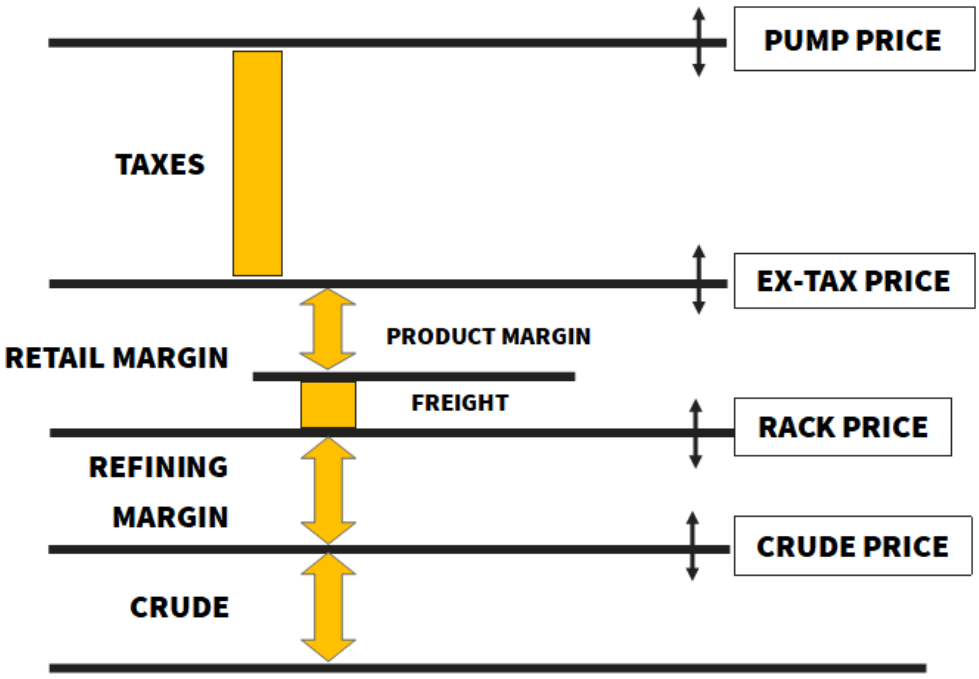
Understanding how pump prices are set and handled in regulated versus unregulated markets requires knowledge of the interrelationships among the principal stakeholders who ultimately share the revenue from fuel sales.

The interface between stakeholders in an unregulated market (Figure 1) is defined primarily by the price at which the product is transferred from each stakeholder to the next along the "value chain."

The revenue from a consumer's purchase of a petroleum product (such as gasoline) is distributed among four key sectors, each earning a share of the total revenue generated at the pump. Its prices at each transfer stage in the value chain define and quantify these margins.

In an unregulated jurisdiction, transaction prices are agreed upon by stakeholders and driven by market forces: each market (retail, wholesale, and crude) is subject to distinct competitive dynamics that result in prices and margins varying, often daily or intra-day.

Figure 1: Price and Margin Model in an Unregulated Market



The term "margin," as used in this model, refers to gross margin, which represents revenue generated from product sales. It is simply the difference between its two defining prices. For example, we defined

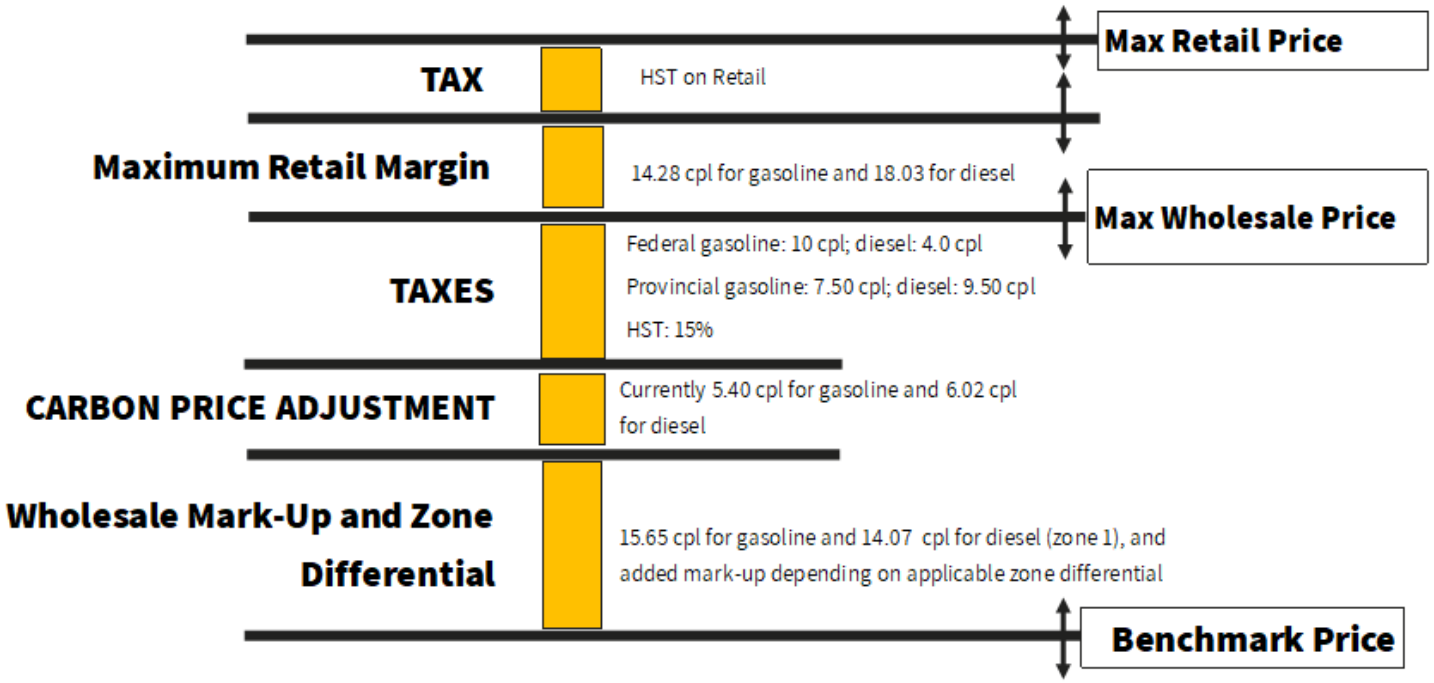
the gasoline retail margin as the ex-tax pump price minus the product's purchase price, using the "rack" wholesale price as a proxy.

REGULATED MARKETS – FUEL PRICES AND MARGINS IN NEWFOUNDLAND

Newfoundland and Labrador began regulating petroleum product prices through the Petroleum Products Pricing Commission (PPPC), established by the Petroleum Products Act in 2001. It then integrated the PPPC with the Public Utilities Board in 2004. The stated purpose of Newfoundland's fuel price regulations is to ensure consumer confidence through maximum price protections and ensure relative price stability through a regular schedule of maximum price adjustments.

The Province aims to meet its objectives by regulating the components of the retail price of motor fuels (gasoline and diesel), as shown in Figure 2[1]. This build-up establishes a regulated maximum price that sets a ceiling on retail prices, but transactional pricing can occur at any price below that ceiling.

Figure 2: Price and Margin Model for Motor Fuels under Newfoundland Regulatory Framework



[1] It should be noted that in Figure 2, under the taxes section, we refer to the federal excise taxes (10 cpl for gasoline and 4 cpl for diesel). As of April 20th 2026, the Federal government announced that it has temporarily suspended the federal fuel excise taxes to address rising fuel costs. This temporary suspension is in effect until September 7, 2026.

Benchmark Price

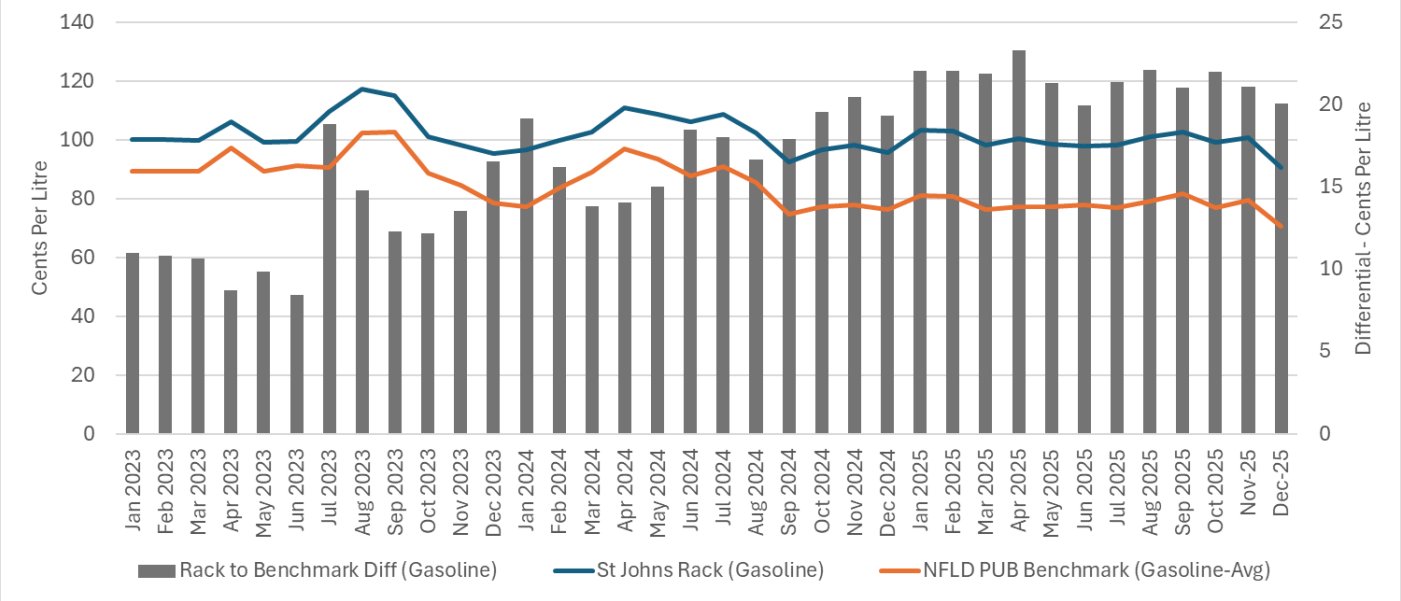
The formula used by the Board to determine the maximum retail prices is based on a benchmark price calculated as an average of the previous week's identified New York Harbor (NYH) price. Since the legislated benchmarks are US-based, the Board's benchmark prices for each fuel grade are adjusted in accordance with the Bank of Canada's daily posted exchange rates.

The benchmark price for gasoline is based on conventional gasoline using daily Argus NYH price assessments[2]. For diesel prices, the Board uses prescribed seasonal blends of ULS (ultra-low sulphur) kerosene, ULSD (ultra-low sulphur diesel).

Alternatively, the posted rack prices from St. John's or other regional markets could have served as the basis for the benchmark prices; however, the NYH prices provide a generally representative market-derived proxy based on a higher volume of wholesale transactions. Regional regulators[3] commonly viewed NYH as the more reliable benchmark for wholesale refined product prices in Atlantic Canada.

The legislated benchmarks were not historically an issue for Newfoundland's regulatory formula because, before mid-2023, regional rack prices (on average) closely tracked the New York benchmarks. The similarities in pricing across these markets were due to their relative geographic proximity and the ease and relatively low cost of transporting refined products along the Atlantic coast.

Figure 3: NYH Benchmark and St. John's Wholesale Gasoline Price Comparison

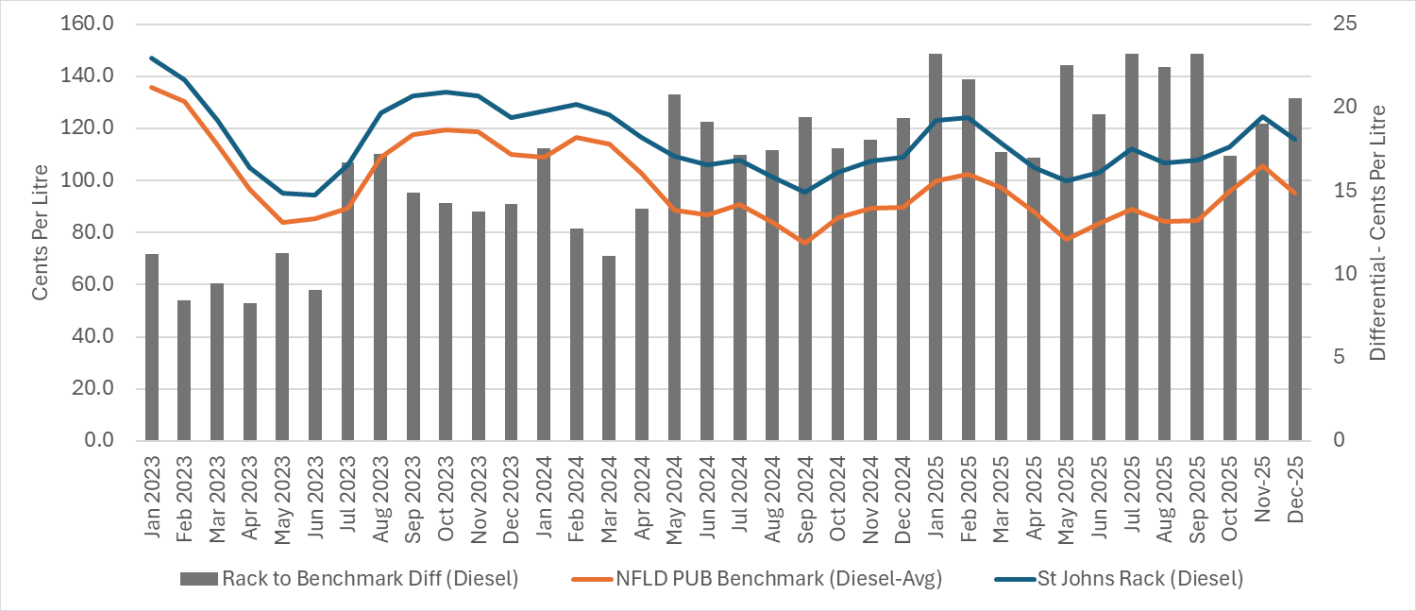


Source: PUBNL, Kalibrate Canada

[2] Specifically, using the Argus Media NYH UNL 87 price assessment.
[3] With the exception of PEI, which uses a rack-based benchmark.

However, the gap (or differential) between regional rack prices and NYH benchmark prices has widened significantly since July 2023, driven by structural dynamics that asymmetrically affected their markets. Canada's Clean Fuel Regulations and the resulting compliance costs have pushed Atlantic wholesale (rack) prices higher relative to NYH prices, while NYH markets have been unaffected by these same regulations (Figures 3 and 4).

Figure 4: NYH Benchmark and St. John's Wholesale Diesel Price Comparison



Source: PUBNL, Kalibrate Canada

The growth in the differential between the gasoline and diesel racks and their NYH equivalents is comparable in terms of timing and trend to the introduction and evolution of CFR regulations and their associated compliance costs, and the magnitude of these shifting differentials closely tracks some of the best-known proxies for these costs[4]. Additionally, we observed a change in the differential for motor fuels (gasoline and diesel), which are directly affected by CFR costs, but not for furnace/heating, which is exempt from CFR compliance.

We will further examine the impact of CFR compliance costs on rack prices and the other factors affecting the changes in the gap between racks and benchmarks later in this report.

Wholesale Margin and Retail Margins

The Board determines the maximum wholesale and retail margins applied in the Board-regulated price formula during margin reviews and hearings, based on evidence presented by market participants and other stakeholders. The regulated margins should provide sufficient revenue to cover all operating costs and yield a suitable return on capital for wholesalers and retailers. Failure to accurately account for these factors may pose a risk to the supply of petroleum products in Newfoundland and Labrador.

[4] In particular, the use of Argus Atlantic and Argus Canada CFR Compliance Cost assessments.

Supply contracts between fuel wholesalers and retailers in Newfoundland and Labrador typically use location-specific rack prices as the transactional price basis in their wholesale supply agreements. The rack price is rarely the actual transaction price; however, the transaction price is typically calculated as a discount or premium to a specified rack price under the parties' commercial arrangement. As such, the differentiation of wholesale and retail margins, in an applied manner, is considered theoretical.

In Newfoundland and Labrador, retailers may negotiate a pricing arrangement with their wholesaler that, in practice, operates similarly to an unregulated model, provided the retailer does not exceed the maximum retail price set out by the Board. We understand that most supply agreements between wholesalers and retailers in the Province are structured this way.

Wholesale margins have been set at 15.65 cents per litre for gasoline and 14.07 cents per litre for diesel since the beginning of the evaluation period[5].

The maximum retail margins in Newfoundland and Labrador are currently set at 14.28 cents per litre for gasoline and 18.03 cents per litre for diesel. These retail margins for motor fuels increased from 10.28 cents per litre and 14.03 cents per litre, respectively, following an amendment that was implemented in February 2025.

Tax

Taxes on fuel in Newfoundland and Labrador have both fixed and variable components. They include provincial excise taxes, calculated as a fixed rate of 7.5 cents per litre for gasoline and 9.5 cents per litre for diesel fuel. Federal excise taxes are applied at fixed rates: 10.0 cents per litre for gasoline and 4.0 cents per litre for diesel fuel[6]. Petroleum taxes include the harmonized sales tax (HST), calculated on a percentage basis (15 percent) for both products and applied after fixed taxes. Each of these tax rates has been steady over the evaluation period. The only change to tax rates over the evaluation period was the increase in the carbon tax/federal fuel charge, which rose steadily until it was cancelled and removed in April 2025. All of the outlined tax change history is accounted for in our analysis.

[5] 2023 to 2025.

[6] Again, these federal excise taxes are temporarily suspended from April 20, 2026 to September 7, 2026.

Carbon Price Adjustment

In June 2022, the Government of Canada introduced the new Clean Fuel Standards (CFR) under the Canadian Environmental Protection Act, 1999. The new CFR was designed to replace the current Renewable Fuel Regulations (RFR) on July 1, 2023. The CFR requires primary suppliers (producers and importers) of liquid fossil fuels to reduce the carbon intensity of the liquid fossil fuels they produce and import into Canada by 2.4 gCO2e/MJ in 2022 (from 2016 levels) to 12 gCO2e/MJ in 2030.

Producers and importers of gasoline and diesel in Newfoundland and Labrador can comply with the regulation by blending conventional motor fuels (gasoline or diesel) with lower-carbon-intensity renewable fuels, by investing in producing lower-carbon-intensity fuels, or by buying credits on a secondary market. Each pathway to compliance imposes a cost on producers or importers, which is reflected in the wholesale prices primary suppliers charge the market.

On June 23, 2023, Newfoundland and Labrador amended the Petroleum Products Regulations to require the Board to include a Carbon Price Adjustment (CPA) component to the maximum petroleum price build-up. The CPA is intended to mitigate the costs incurred by primary suppliers of regulated petroleum products in complying with the Clean Fuel Regulations. Under these changes, the Board established a CPA mechanism in its maximum price formula for all relevant regulated fuels.

Beginning in July 2023, this CPA component was set at 3.74 cents per litre for gasoline and 4.17 cents per litre for diesel. These amounts were increased to 5.40 and 6.02 cents per litre, respectively, at the beginning of 2024 and have been maintained at those levels since then.

Other Atlantic Provinces that regulate fuel prices and use a NYH benchmark have established similar adjustments in their approach. New Brunswick established a Cost of Carbon Adjuster (CCA), which utilized a methodology developed by Doane Grant Thornton to calculate a proxy for CFR compliance costs based on a combination of the LCFS credit price and the US D4[7] RIN price, converted the resulting credit price per litre to a credit price per tonne, and applied this result by fuel type[8]. In December 2025, the New Brunswick legislature repealed the CCA from its regulations, and the NBEUB implemented an interim adjustment while its Board conducted a review and hearing to consider alternative approaches[9].

Similarly, Nova Scotia uses a clean fuel adjustor (CFA) to adjust its pricing for CFR compliance costs. Its derivation and general methodology have been revised several times, but it is currently set at the lower of the reported Argus Atlantic CFR compliance cost and the maximum credit price established by the federal credit trading system (CATS). Generally, the market for carbon credits in Canada (CATS) is relatively immature and illiquid, potentially leading to a situation in which the CATS maximum price does not necessarily reflect the transactional value of compliance credits, which are often traded outside that federal clearance system.

Signal has found that, through our work across Atlantic Canadian price regulatory reviews[10], New Brunswick's approach to its previous CCA was the method best aligned with how actual incurred CFR

[7] Renewable Diesel

[8] Gasoline and diesel, as heating fuel is exempted.

[9] This included a potential transition to a rack-based benchmark. The NBEUB's decision in this matter (PT-005-2025) is still pending.

[10] Including work in Nova Scotia, New Brunswick, and PEI.

compliance costs have impacted wholesale pricing throughout the region[11]. New Brunswick's approach is very similar in methodology to the Argus Atlantic compliance cost price assessment, with some minor differences[12].

Regardless, it is clear that the NYH benchmark prices do not include carbon costs associated with Canadian regulations. In contrast, Canadian rack prices are likely to include an embedded CFR compliance cost. The net impact widens the differential between rack and NYH, as shown in Figures 3 and 4, and could significantly reduce wholesalers' and retailers' available margins if not adequately addressed in the regulatory approach.

The carbon adjustment component and the underlying compliance costs can exhibit significant variances over time, driven by shifts in related carbon markets and, primarily, by the scheduled annual increases in stringency in the CFR regulations. Any approach that aims to provide an accurate proxy for incurred CFR compliance costs should, at a minimum, include annual adjustments to account for changes in the stringency of CFR regulations.

Environment and Climate Change Canada's (ECCC) own assessment[13] of the CFR's impact estimated that it will increase the price of gasoline and diesel by up to 17 cents per litre by 2030. ECCC directly attributed this increase to "increasing production costs of primary suppliers (through incremental compliance and administrative costs)". ECCC also estimated that the impacts are likely to be larger in Atlantic provinces because, according to ECCC, "this reflects fewer opportunities for primary suppliers in these provinces to create credits to meet their own annual reduction requirement." Later in this report, we will take a closer look at actual reported compliance costs for primary suppliers in Newfoundland and Labrador and how that compares to PUBNL's carbon price adjustments over the evaluation period.

A summary of the current regulated price components for gasoline and diesel is shown in Table 1, as applied to a recently published PUBNL price schedule.

[11] This was shown through a detailed analysis of incurred CFR compliance costs in PT-005-2025.

[12] Mainly, the NBEUB's added assumption that up to ten percent of CFR compliance will be achieved through contributions to the compliance fund in periods in which the proxy credit price is greater than the cost of contributing to the fund.

[13] As reported in the Parliamentary Budget Officer report from May 2023, "A Distributional Analysis of the Clean Fuel Regulations."

Table 1: Price Schedule - PUBNL Petroleum Product Pricing Breakdown (Self-Serve/Zone 1 – January 23, 2026)

	Max		Max
Gasoline	**cpl**	**Diesel**	**cpl**
Benchmark Price	**70.40**	*Benchmark Price*	**96.70**
Wholesale Margin	15.65	Wholesale Margin	14.07
Carbon Price Adjustment	5.40	Carbon Price Adjustment	6.02
Zone Differential	0.00	Zone Differential	0.00
Max Retail Margin	14.28	Max Retail Margin	18.03
All taxes	35.98	All taxes	35.75
Max Price with Tax (ss)	**141.7**	**Max Price with Tax**	**170.6**

A jurisdictional review of Atlantic Canadian gasoline[14] fuel price regulation is presented in Table 2.

Table 2 contrasts the relative simplicity of a rack-based benchmark approach with that of an NYH-based benchmark. No carbon adjustments are necessary under a rack-based benchmark, because the costs associated with CFR compliance are embedded in the rack price. In addition, product formulation issues[15] and the relevance of specific reporting agencies' price assessments do not need to be considered or adjusted for in PEI because the rack price benchmark always reflects the cost for "on-spec" product, and potential disparities between the rack and specific NYH price assessments occur outside of a regulatory framework that builds up prices from a rack-based benchmark.

[14] We chose to present gasoline only for brevity, but beyond minor differences in margin levels, the key aspects of other fuels' price regulations are similar to those of gasoline.

[15] Specifically, those related to seasonal blending of distillate products.

Table 2: Overview of Gasoline (Self-Serve) Price Regulatory Approach by Province (Atlantic Canada – as of December 2025)

	New Brunswick	Prince Edward Island	Nova Scotia	Newfoundland & Labrador
General Structure	Price Ceiling	Price Ceiling and Floor	Price Ceiling and Floor	Price Ceiling
Price Adjustment Frequency	Weekly	Weekly	Weekly	Weekly
Benchmark	NYH	Charlottetown Rack	NYH	NYH
Interrupter Clause	Yes	Yes	Yes	Yes
Cost of Carbon Adjustment	N/A [16]	N/A – cost embedded in rack	5.46 cpl	5.4 cpl
Wholesale Margin	17.41 cpl[17]	5 cpl	13.84 cpl[18]	15.65 cpl
Retail Margin	10.66 cpl	7 – 8 cpl	5.4 – 7.4 cpl	14.28 cpl
Transportation Adjustment	Actual to max of 4.75 cpl	N/A	0.6 cpl[19]	0.0 cpl[20]
Other Adjustments	Market Adjustor	Forward AVG	Forward AVG and mark-up adj	N/A
Federal and Provincial Fuel Taxes[21]	20.87 cpl	18.47 cpl	25.5 cpl	17.5 cpl
HST/GST	15%	15%	14%	15%

[16] Removed as of December 1st, 2025, but as per the Hearing Order delivered on November 28, 2025, the Board ordered an interim adjustment to the wholesale margin equivalent to the CCA on this date and left in place until a final decision is rendered in Matter PT-005-2025.
[17] Base margin of 9.51 cpl plus the CCA interim adjustment of 7.9 cents per litre based on the interim order in PT-005-2025.
[18] Based on a temporary order, this was reduced to 10.84 cpl on January 9, 2026, with a corresponding change to the clean fuel adjustor methodology.
[19] For Zone 1, but this amount varies by Zone.
[20] For the base zone, but this amount varies considerably by zone.
[21] The federal excise portion of these taxes is temporarily suspended from April 20, 2026 to September 7, 2026.

Overview of Total Available Margin

Figure 5 illustrates the fundamentals of available margin for fuel wholesalers and retailers in Newfoundland and Labrador.

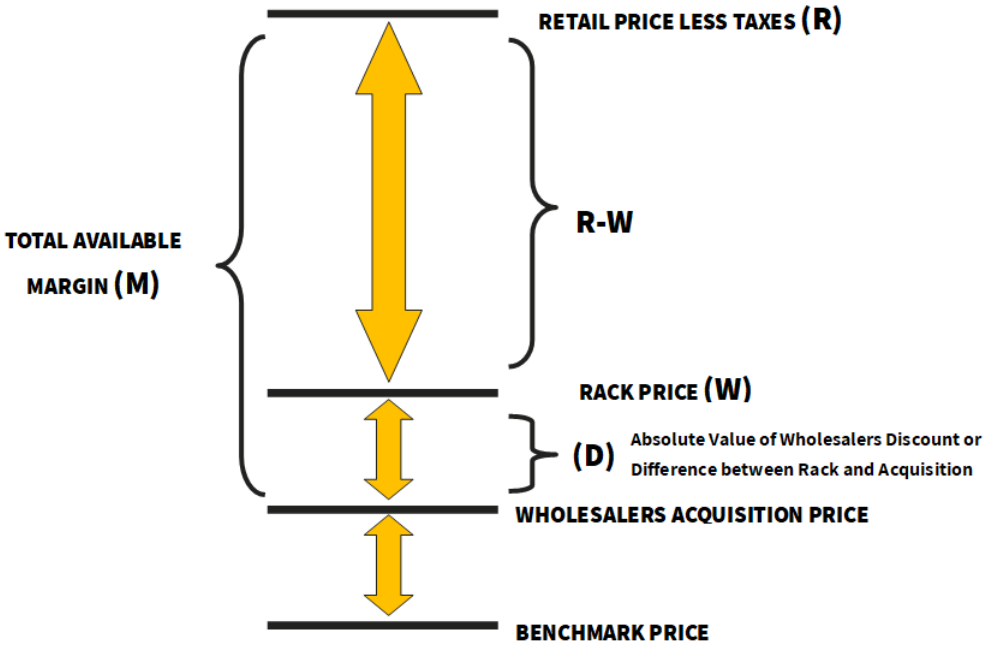
Although the Board sets wholesale and retail margins separately, the actual (realized) wholesale and retail margins in Newfoundland and Labrador are determined by individual stakeholder agreements. Typically, a wholesaler buys a product from a primary supplier (such as a refiner) at a contracted discount (or premium) to the locally posted rack price. In this scenario, the total available margin for both wholesalers and retailers could be represented by the following equation:

$$M = (R - W) + D$$

In this equation, M represents the total available margin, R represents the maximum retail price (without taxes), W represents the posted rack price for that product, and D represents the value of the wholesaler's discount to the rack price (or the difference between rack and actual acquisition cost). For integrated or primary suppliers, D represents the difference between the rack and their actual realized acquisition cost of the fuel.

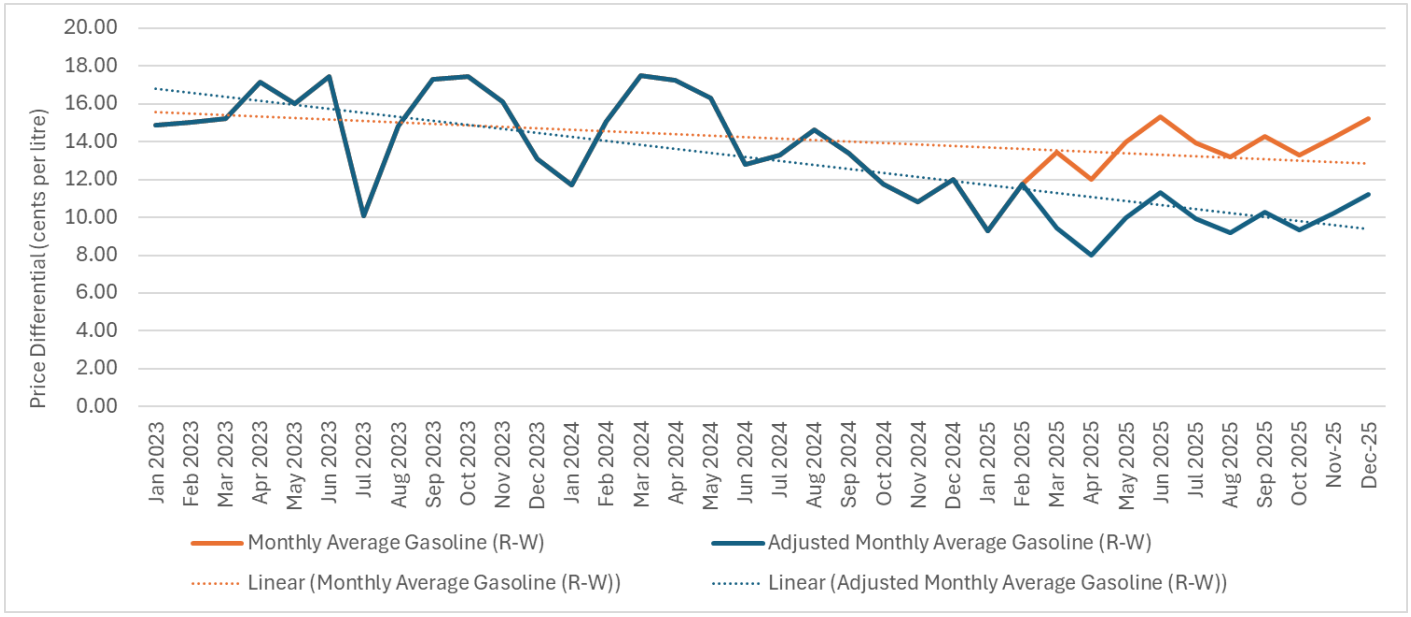
The total available margin (M) is the sum of two key components: the difference between maximum retail prices (less taxes) and wholesale prices (R-W), and the difference between rack and their actual/realized acquisition cost (D).

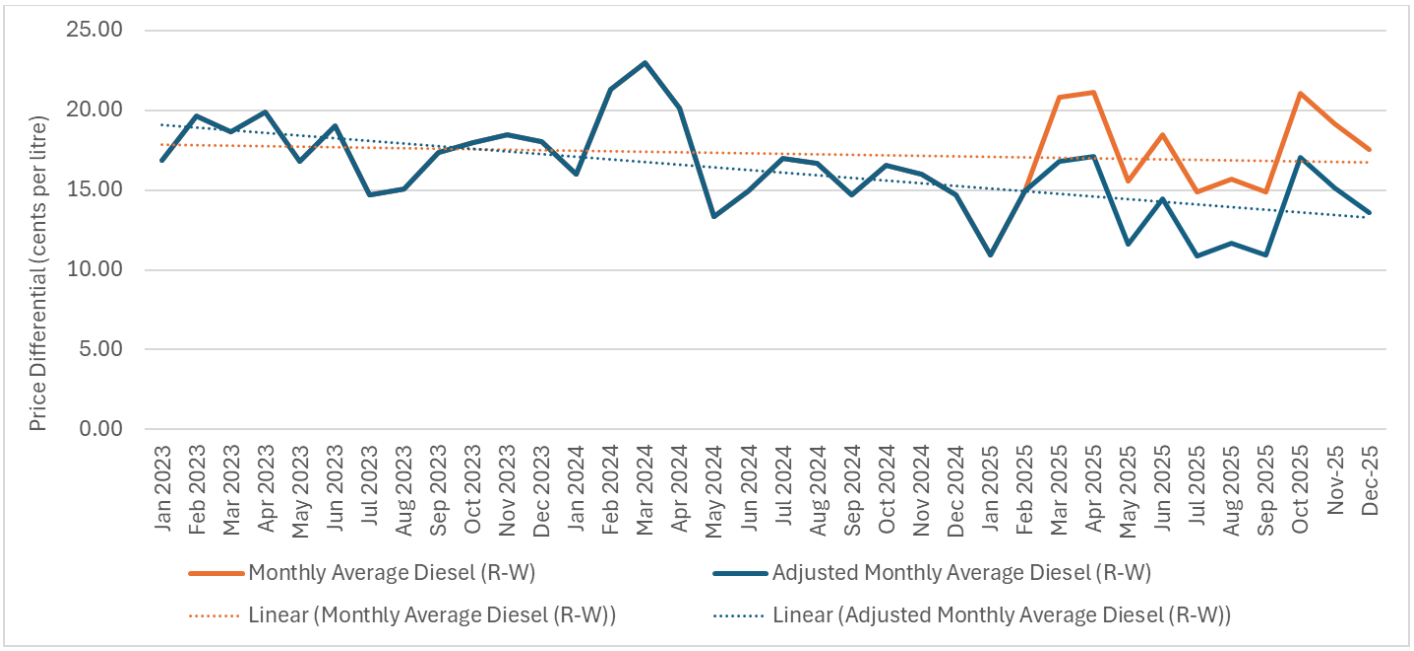
Figure 5: Breakdown of the Concept of Total Available Margin



Overall, the net change in the unadjusted R-W component for gasoline and diesel between 2023 and 2025 was relatively flat (Figure 6). However, changes in regulated margin components (such as retail margins)[22] over this period contributed to these outcomes and potentially masked a decline in "real" margin. After adjusting for these changes[23], the adjusted R-W component provides a better proxy for the relative change in the margins available to generate returns over this period.

Figure 6: Adjusted and Unadjusted Retail Price (ex-tax) less St. John's rack (R-W) cents per litre (gasoline and diesel)





Source: PUBNL, Kalibrate Canada

[22] Particularly, those changes implemented in response to demonstrated cost increases.

[23] By removing the incremental margin changes.

The rationale for using an adjusted R-W figure is that a demonstrated cost increase that leads to a change in the regulated margin (effectively increasing the nominal R-W measurement) does not necessarily mean more margin is available to a wholesaler to generate a return[24]. Accordingly, a material and sustained decrease in these adjusted R-W figures can indicate a disconnect between the current regulatory framework and the market, ultimately reducing available margin and limiting market participants' ability to generate a return on investment.

Using the adjusted figures[25], between 2023 and 2025, the R-W component for gasoline and diesel was generally below historical norms (Figure 6) and roughly 4 to 5 cents per litre below where they were at the start of the evaluation period. This finding is what one would expect if some aspect of the regulated approach were not aligned with the market reality. One such potential issue is the carbon price adjustment and whether it is an accurate proxy for how CFR compliance costs are manifesting in regional rack prices. If the CPA is understating the actual impact of CFR compliance costs on rack prices, it would show up as a decline in the R-W measurement, as the changes in maximum retail prices based on the regulated price build-up would under-adjust for market-based changes in rack prices.

While the issues around the cost of carbon, CFR compliance, and our understanding of its precise impacts on wholesale pricing are still evolving, there is evidence of a real and identifiable cost associated with compliance activities that has manifested in rack prices for gasoline and diesel. The CPA is intended to serve as a tool to capture and offset those additional costs. If the CPA is not accurately reflecting the impact of these incurred costs on rack prices, it can negatively impact the margins available to both wholesalers and retailers of regulated products in Newfoundland and Labrador.

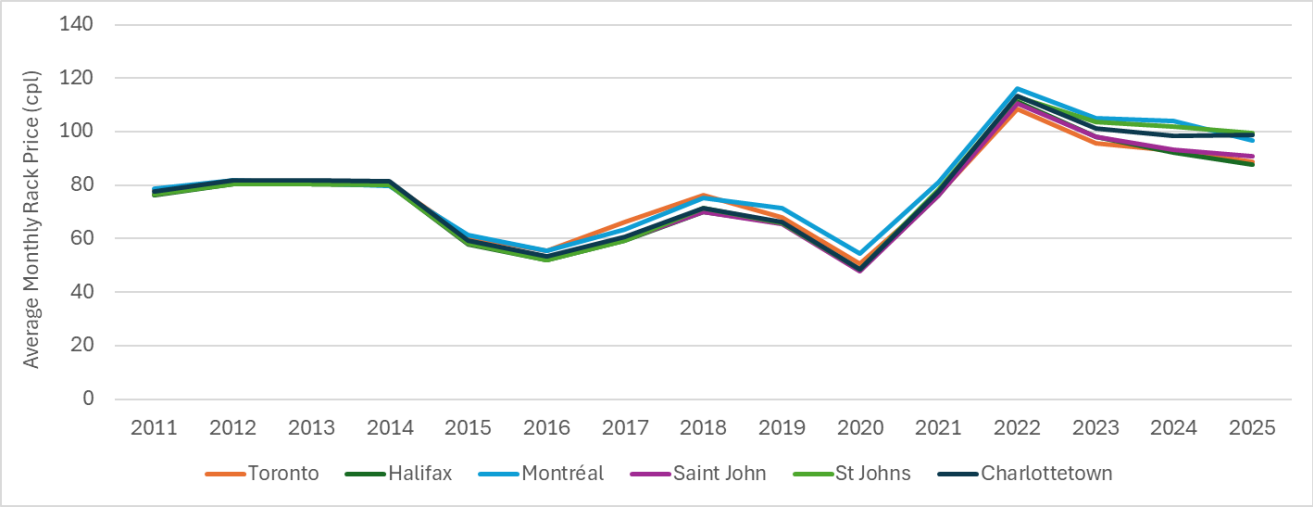
[24] Only that more margin is available to offset demonstrated cost increases.

[25] Adjusted by removing any incremental average changes in regulated retail margin over this period.

Rack Price and Margin Analysis

Whether in regulated or unregulated markets, rack prices in Canada tend to move similarly when they are within or influenced by a shared "supply orbit," as comparable market dynamics likely affect their prices. Small changes in the relationships between a price-regulated market (like those in Newfoundland and Labrador) and other similar markets can sometimes signal issues with a regulator's ability to adapt to market realities. Figure 7 shows the average monthly gasoline rack prices in St. John's compared to other regional markets (both regulated and unregulated)[26]. Again, this figure indicates that rack prices across these markets generally follow similar trends and trade within a relatively narrow price range over time. A closer look at the movement of these prices, expressed as differentials relative to the St. John's price, can sometimes highlight shifting relationships driven by market dynamics or other factors.

Figure 7: Average Gasoline Rack Prices in St. John's and Comparable Canadian Markets



Source: Kalibrate Canada

Figure 8 shows that the St. John's gasoline rack differentials relative to comparable markets were relatively small until 2014, when a gap began to open up with both Toronto and Montreal. This emerging gap was driven primarily by the introduction of cap-and-trade regulations in those two provinces. Quebec's persistent cap-and-trade regulations sustained that differential throughout most of the evaluation period. In contrast, Ontario's elimination of cap and trade led to an abatement and reversal of the gap between rack prices in Toronto and St. John's. Starting in 2021, gaps began to emerge and grow between St. John's rack prices and those of comparators such as Halifax, Saint John, and Toronto. Effectively, this gap was related to responses to changes in Newfoundland's fuel supply and related regulatory responses[27], and to higher costs of bringing products to the Island and a greater reliance on conventional fuels[28]. St. John's rack prices (and those in comparable markets)

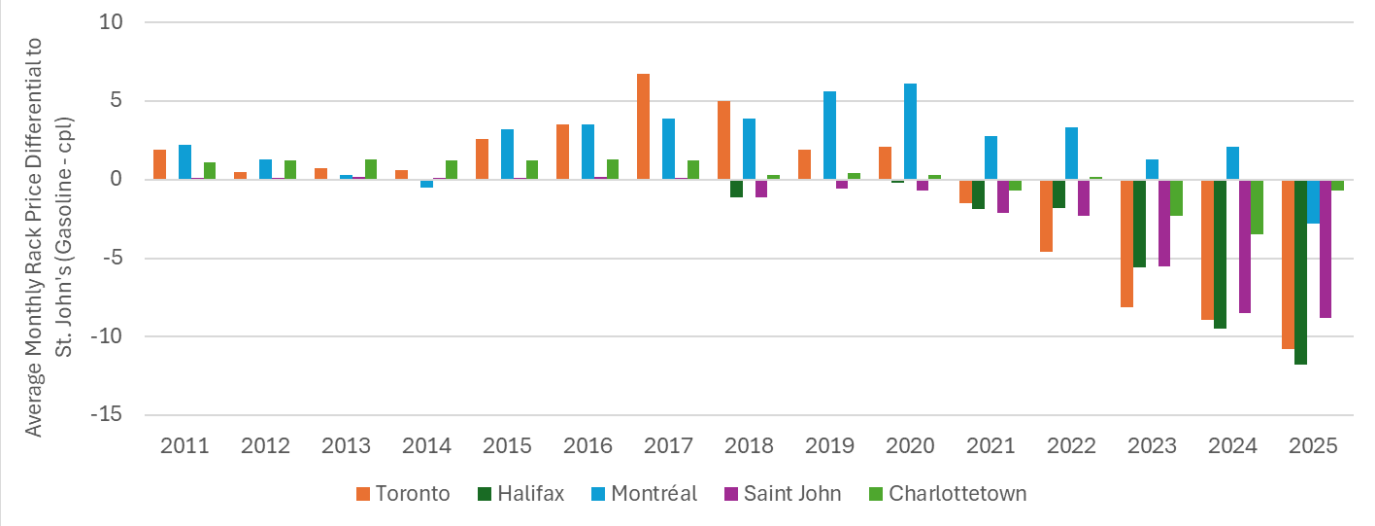
[26] The chosen comparator markets are Halifax, Saint John, Montreal, Charlottetown, and Toronto.

[27] This refers to the closure of the North Atlantic Refinery and the added costs associated with importing more conventional product into Newfoundland. Following the closure, the Newfoundland PUB adjusted margins, citing higher import costs into Newfoundland and Labrador.

[28] Ethanol supply to island markets such as Newfoundland or PEI can be price-prohibitive; therefore, they rely primarily on unblended conventional gasoline, which is generally more expensive. The price gap between conventional gasoline and E10-blended gasoline has widened steadily since 2021.

appeared to respond predictably to shifting market dynamics over the evaluation period[29]. Regional rack prices exhibited signs of a broadly competitive market despite the observed pricing variances.

Figure 8: Average Gasoline Rack Price as a differential to St. John's (Market less St. John's)



Source: Kalibrate Canada

Figures 9 and 10 show the gasoline and diesel rack-to-retail[30] margins for the same comparator markets over the evaluation period. These margins between St. John's and other regulated and unregulated comparator markets show some relative consistency over the evaluation period, with all markets exhibiting comparable trends and remaining within a relatively narrow range for most of it. St. John's margins have fluctuated during the evaluation period, which differs (at times) from some comparable markets but is not completely misaligned with other regional regulated markets over the longer term.

While Newfoundland's margins are higher than those of the other markets, this does not necessarily imply an issue with the regulated margin levels. Many factors influence "margin need" among wholesalers and retailers across markets, including average throughputs and other revenue streams (such as non-petroleum revenue)[31].

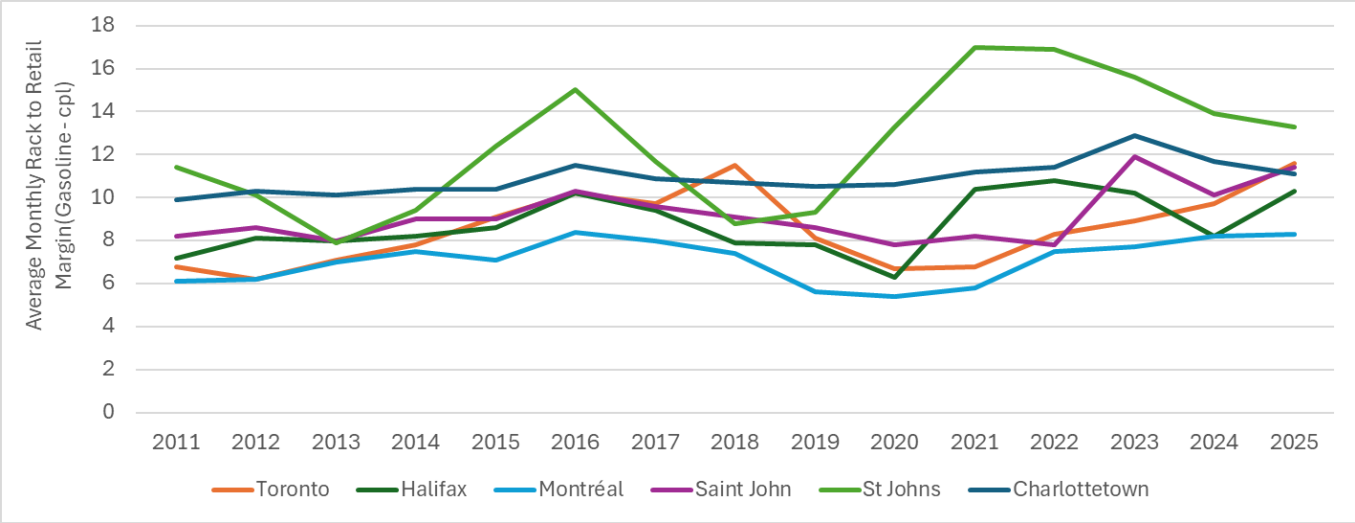
Despite all of the markets shown in Figures 9 and 10 operating under a diverse set of regulatory regimes, from unregulated (Toronto and Montreal), price ceilings and floors (Halifax and Charlottetown), and only price ceilings (Saint John and St. John's), their rack-to-retail margins suggest that each of the markets navigated broad changes in the industry (like the introduction of CFR) with at least moderate consistency in terms margin impact.

[29] For brevity, we did not include a similar analysis of diesel over this same period, but that analysis showed comparable results to those of gasoline.

[30] Simply calculated as the difference between the rack price and the ex-tax pump price for that market, based on Kalibrate Canada data.

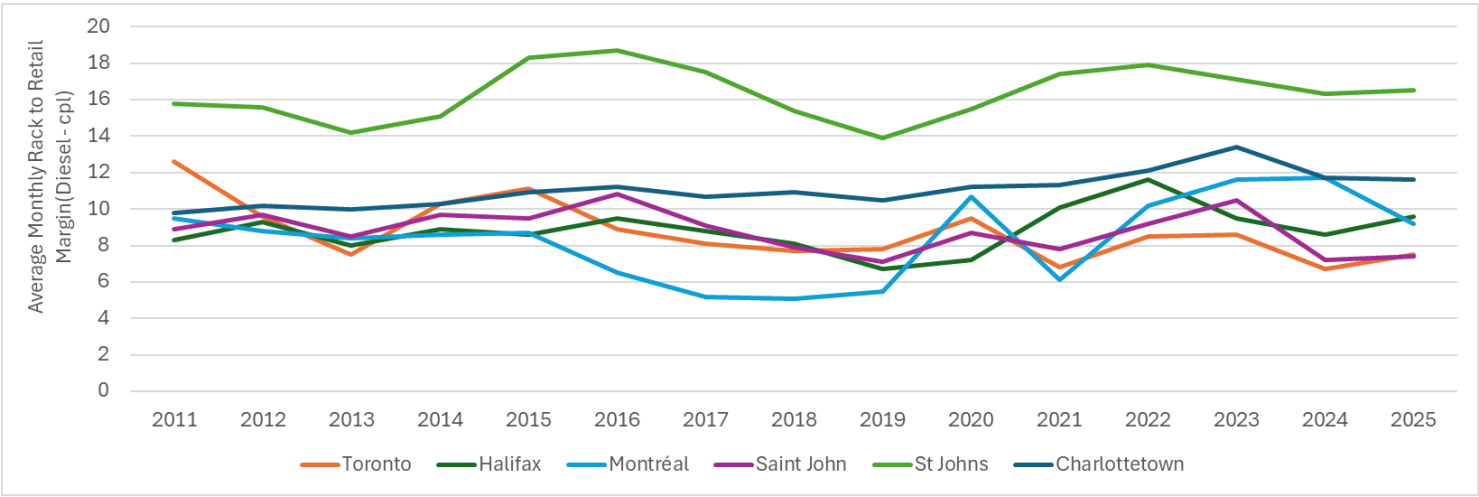
[31] Lower average site throughput and lower non-petroleum revenue (either C-store or other tertiary offering) usually result in a higher fuel margin needed to offset costs and provide a return.

Figure 9: Average Gasoline Rack-to-Retail Margins for St. John's and Comparable Markets



Source: Kalibrate Canada

Figure 10: Average Diesel Rack-to-Retail Margins for St. John's and Comparable Markets



Source: Kalibrate Canada

In unregulated markets, the costs associated with CFR compliance get embedded in rack prices, which then flow through to retail pricing, helping keep rack-to-retail margins relatively stable when other aspects of those markets are stable. In the Atlantic provinces that regulate fuel prices, the introduction of the carbon pricing adjustments has been critical to maintaining this consistency since the CFR's introduction, because while those exact compliance costs also get embedded into rack prices similarly to unregulated markets, these costs can't necessarily flow through to retail prices if the regulations do not capture all relevant costs and margin levels in their build up from the benchmark price.

As a result, any issues or disconnects between a carbon price adjustment and the impact of CFR compliance costs on rack pricing may manifest as changes in rack-to-retail margins. There was an

observable dip in rack-to-retail margins for motor fuels in St. John's between 2022[32] and 2025, which, in our view, requires a closer look to understand whether this may be related to any issues or disconnects between the carbon price adjustments and the impact of CFR compliance costs on rack price in Newfoundland and Labrador.

It is Signal's view that there are clear and identifiable CFR compliance costs embedded in rack prices for gasoline and diesel in Newfoundland and Labrador (and across Canada), and that the CPA should serve as an effective tool to capture and compensate for those additional costs within the PUBNL framework. If this proxy were found to be inaccurate or ineffective, it could negatively affect the margins available to both wholesalers and retailers of regulated products in Newfoundland and Labrador and increase risks to the security of supply.

[32] The last full year before the introduction of CFR.

Evidence From Primary Suppliers

As part of our review, Signal requested that primary suppliers in Newfoundland and Labrador provide data from 2023 to 2025 (inclusive) on CFR compliance costs and wholesaling information related to the sale of regulated motor fuels in the Province. Specifically, we asked that primary suppliers provide:

1. Sales volumes by year, separated by product type (gasoline, diesel, etc.) for Newfoundland and Western Labrador.
2. A detailed breakout of annual costs related to compliance with the Federal Clean Fuels Regulations for Newfoundland and Western Labrador.
3. A detailed overview of compliance efforts/strategy, how this has evolved between 2023 and 2025 (and its impact on costs).
4. A detailed breakout of the product formulation of all gasoline supplied into the Newfoundland and Labrador market (whether conventional fuel, blended E10, or other blends).
5. Any other information that you may deem relevant to this analysis.

In all, Signal identified five primary suppliers operating in Newfoundland and Labrador that could provide the requested information. We contacted all relevant suppliers, and four provided data to Signal, likely representing most of the primary supply of regulated motor fuels in the Province[33]. The data used in our analysis were deemed broadly representative of primary suppliers in Newfoundland and Labrador. The focus of this analysis is on identifying, measuring, and better understanding the range of CFR compliance strategies, the compliance costs incurred by primary suppliers, and the relationship between those costs and changes in regional rack pricing.

As stated, four participants submitted detailed data from the evaluation period. A summary of the information provided includes:

- Submissions provided detailed quantitative data, along with additional qualitative commentary on specific strategies/approaches, cost assumptions, and the evolution of costs over the evaluation period. All of the information was considered in our assessment and analysis.

- All four participants submitted information on incurred costs related to CFR compliance over the evaluation period, and all provided the product volume data necessary to convert those costs into a per-litre measurement.

- Some of the information was provided monthly over the evaluation period; others could only offer annual breakdowns, so all the data was consolidated to an annualized measure to align the minimum reported frequency and enable comparisons.

Our process of assessing and analyzing the submitted data began with evaluating data quality and identifying any apparent anomalies. We followed up with data providers to clarify any issues we

[33] This assessment is based on the reported primary supplier volumes compared to per-capita motor fuel consumption rates reported in the Newfoundland and Labrador Energy Profile generated by the Canada Energy Regulator (2022/2023).

identified and to deepen our understanding of the information provided. We generally relied on our knowledge of the primary supply business and market to determine the reasonableness and applicability of the submitted data. We detected no material data quality issues, and all submissions were ultimately deemed suitable for use in our analysis. Our assessment of the data indicated that the industry's information represented reasonable and reliable results.

ANALYSIS OF CFR COMPLIANCE COSTS

Accurately measuring and reporting CFR compliance costs, and matching those reported compliance costs with their impact on rack pricing, can be complicated by several factors inherent to CFR regulations and the range of compliance options available to obligated parties, including:

- CFR is a Federal regulation with obligations and compliance strategies applied at a national level (not at a provincial level), meaning per-litre compliance costs can vary depending on how (or where) a primary supplier approaches compliance at a regional level, typically based on what is economical or operationally feasible. These regionally incurred costs are often allocated across national compliance obligations under the regulations.

- The broad range of compliance pathways and related options available to obligated parties can affect the variability of these costs in the short and long term.

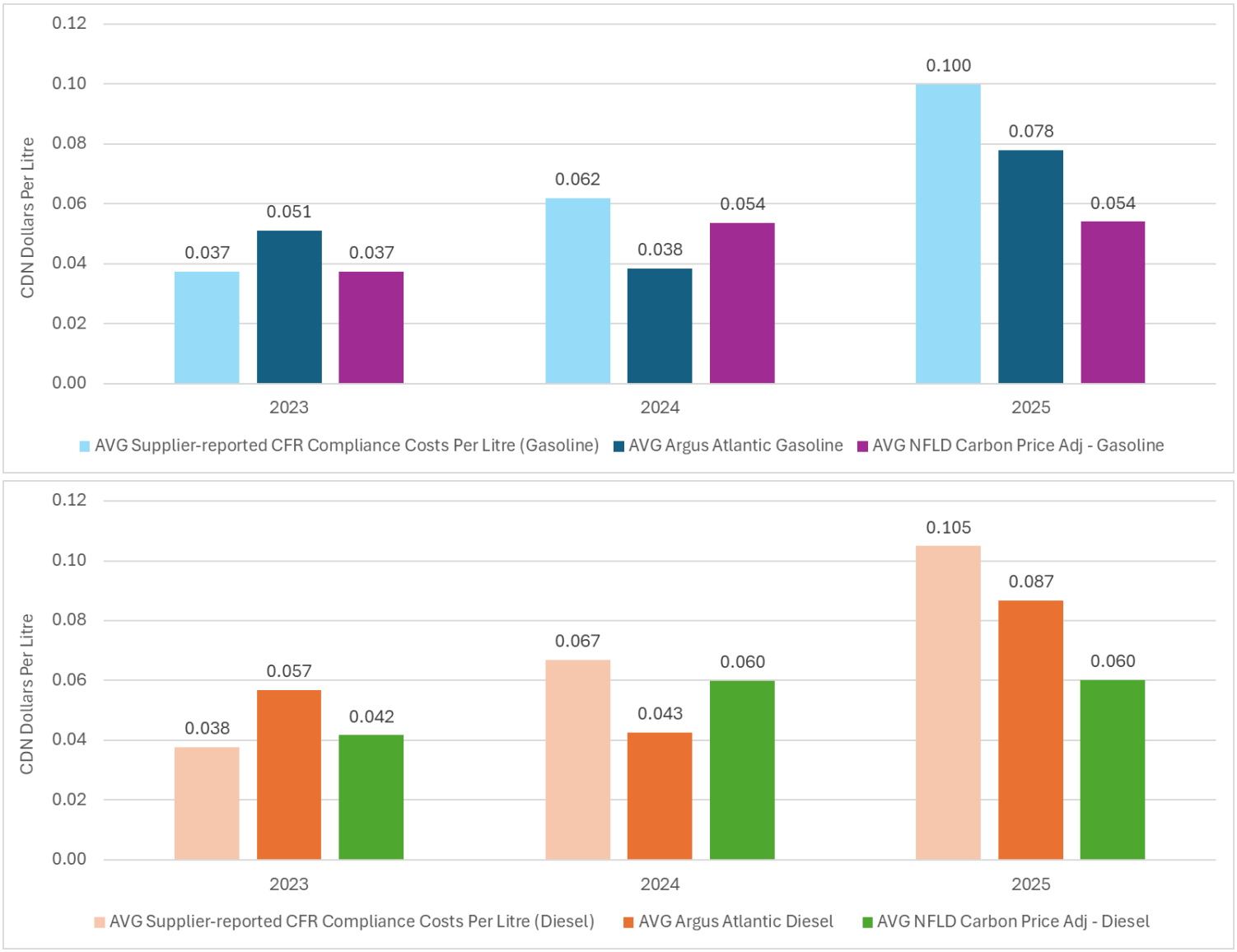
- Annual increases in the stringency of the CFR can have a significant impact on credit markets, increasing demand for credits and further depleting inventoried or surplus credits, generally pushing compliance costs higher at an accelerating rate over time.

- There are often issues with the timing of incurring compliance costs and their eventual integration into a market- and competition-driven wholesale rack price. There is considerable variance in the timing of specific investments in CFR-compliant projects and their resulting credit generation, in the reliability of credit availability through the credit clearance mechanism (CCM or CATS), and in the timing and pricing of credit market purchases. These differences, along with variances in general credit inventories and the drawdown of credit surpluses, can affect the range of reported compliance costs and potentially complicate the direct capture or pass-through of those costs into rack pricing.

Given all of the potential factors that can lead to variability in reported compliance costs and their capture in regional rack pricing, there was a notable degree of consistency in the reported CFR compliance costs from Newfoundland and Labrador's primary suppliers. Their volume-weighted average compliance costs were, for 2023 and 2024, generally consistent with PUBNL's average CPA amounts[34]. In addition, the average reported compliance costs were consistent with the overall increases in the gap observed between the rack and NYH benchmarks since 2023. Figure 11 shows the weighted-average per-litre reported compliance costs for gasoline and diesel relative to the Board's average CPA components and Argus Atlantic compliance cost assessments, on an annual basis from 2023 to 2025.

[34] However, there were some material divergences in 2025 as the static CPA amounts were not adjusted for the impact of annual increases in CFR stringency.

Figure 11: Annual volume-weighted average CFR compliance costs relative to the annual average CPA component and Argus Atlantic CFR



Sources: Industry data, Signal Calculations, PUBNL Data

In 2025, there was a clear and material gap between the reported average compliance costs and the PUBNL's carbon price adjustments. Reported compliance costs were 4 to 5 cents per litre higher than the carbon price adjustments in 2025 for both products, representing a significant shortfall. The PUBNL's current carbon price adjustment levels are likely to have contributed to a real erosion of available margin for wholesalers and retailers with operations in the Province. It should also be noted that the shortfall of CPA in 2025 (relative to incurred costs) is roughly equivalent to the decline in total available margins demonstrated in Figure 6.

This gap has likely expanded further in 2026, as annual increases in stringency and rising credit prices are likely to have pushed incurred compliance costs higher. For primary suppliers that provided forecasts of compliance costs for 2026 and beyond, the estimated increase in 2026 compliance costs was an additional 2 to 4 cents per litre for both products. This finding suggests the estimated gap between current CPA levels and incurred CFR compliance costs in 2026 is likely to be roughly 6 to 9 cents per litre for gasoline and diesel.

This data, again, demonstrates the clear reality of CFR compliance costs for primary suppliers in Newfoundland and Labrador and shows that the CPA was an effective methodology for establishing a proxy for these costs in 2023 and 2024. Still, without a more dynamic approach that adjusts the CPA amount to better track changes in incurred compliance costs and their impact on rack prices, the CPA levels in 2025 and beyond are likely to result in significant erosion of total available margin for wholesalers and retailers, and, ultimately, increase the risk of issues with security of supply in the Province.

The Board has several options to amend its CPA approach to make it more dynamic and to better track changes in actual CFR compliance costs. The Board could:

- Implement an annual adjustment (e.g., every January) for the CPA that incorporates scheduled changes in CFR stringency and their expected general impact on compliance costs.

- Replace the "static" CPA with a more dynamic, index-based approach using a proxy for CFR compliance costs, such as Argus Canada or Argus Atlantic CFR compliance cost price assessments. While these price assessments are unlikely to perfectly reflect incurred compliance costs and their impact on rack prices, they have proven to be relatively effective proxies for the impact of CFR compliance costs on rack prices[35] , and they are much better at accounting for how these costs have evolved.

- Another way to obviate the need for any CPA adjustment is to transition to a rack-based benchmark, where the effects of these costs are upstream of the benchmark price. This approach is currently used in PEI and was the recommended solution in New Brunswick's recent review of its government's cancellation of its CCA[36].

Primary suppliers expressed significant concern about the expected evolution and inevitable rise in CFR compliance costs due to increasingly onerous stringency standards. They also reported a tightening balance between supply and demand for credits in the market, a lack of availability of credits on the CCM, and the potential costs of additional investments required to meet the rising standards. These concerns were amplified by the shortfall in PUBNL's current CPA levels and its general reluctance to adopt a more dynamic approach to its setting. Without additional action by the Board to address this shortfall, the industry expects significant and escalating erosion of available margin, which could pose a direct threat to the security of supply in Newfoundland and Labrador.

[35] In the context of their usage in other provincial fuel price regulations, such as Nova Scotia and New Brunswick.
[36] PT-005-2025. This reflects the recommendations of the Board's expert (Signal) in its report, but the Board has yet to issue a ruling on its preferred approach.

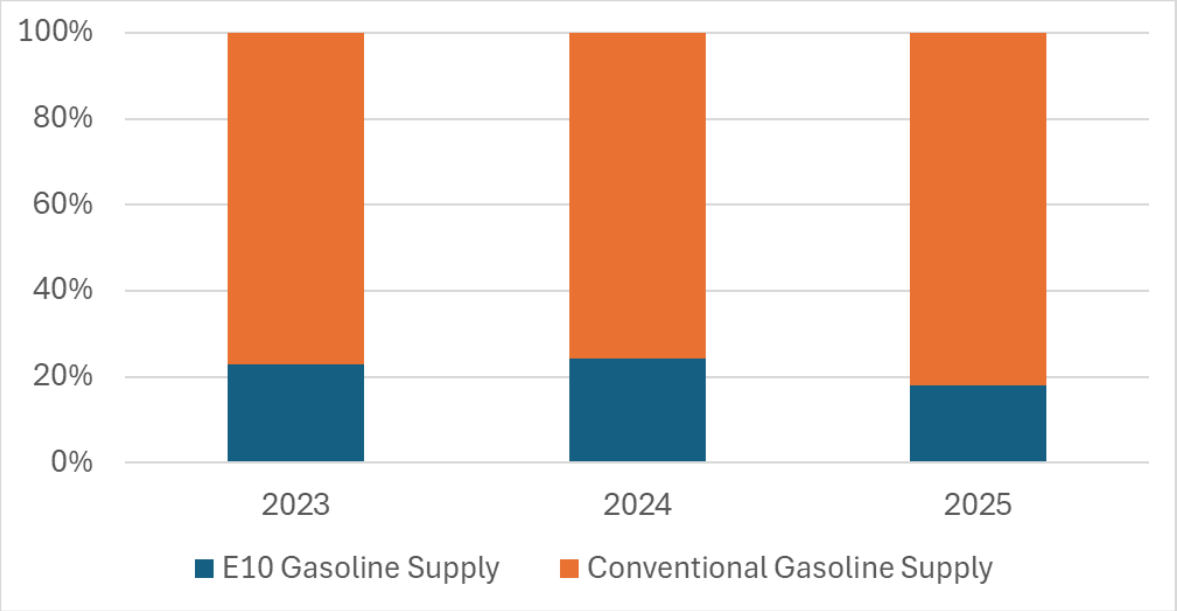
Fuel Product Composition in Newfoundland and Labrador

Generally, conventional gasoline has become increasingly costly in North American fuel markets relative to E10-blended gasoline. This is primarily because conventional gasoline production has declined and E10 use has increased, driven by biofuel regulations in both the US and Canada that have generally diminished the market for conventional gasoline throughout most of the continent.

Ethanol production is primarily located in the Midwest/Central parts of North America, and its supply logistics are generally limited to rail, truck, and, sometimes, barge/ship, which can be price-prohibitive when moving the product from production points in the mid-continent to an island in the Atlantic region. This reality differs from markets like Saint John and Halifax, which benefit from infrastructure (such as rail) that facilitates the relatively cost-effective and strategic use of E10.

Based on our survey and consultations with Newfoundland and Labrador's primary suppliers, it appears that gasoline supply (and pricing) is largely (if not exclusively) based on conventional gasoline supply. This trend is due to reported logistical difficulties, supply risks, and costs associated with procurement, shipping, and storage of ethanol and blendstock in Newfoundland and Labrador. A breakdown of the gasoline composition, based on data from primary suppliers in this review, is shown in Figure 12.

Figure 12: Gasoline Composition of Reported Primary Gasoline Supply to Newfoundland and Labrador



In 2025, over 80 percent of the gasoline supply to Newfoundland and Labrador was conventional gasoline, and its percentage of the gasoline pool has generally increased over the evaluation period. The use of E10 in Newfoundland and Labrador is also very regionalized: most of the Province uses exclusively conventional gasoline, while select regional facilities handle E10 where it is strategically or operationally feasible.

The increased reliance on conventional fuels in Newfoundland and Labrador is a major contributor to the widening spread between its rack prices and those in Halifax and Saint John, which rely almost exclusively on E10 blends. Additionally, our survey and consultation evidence suggest limited blending of biodiesel in Newfoundland and Labrador for similar reasons to the use of conventional gasoline rather than E10 blends.

The Board should continue to monitor fuel product composition, particularly the use of conventional vs. E10-blended gasoline, to help track and assess general disparities in gasoline rack prices between St. John's and other comparator markets such as Saint John and Halifax.

APPENDIX A – Jason Parent CV and Qualifications

Jason Parent is the President and Founder of Signal Energy Consulting, with nearly 25 years of experience in the downstream petroleum industry, beginning as a consultant and later as Managing Director of the Kent Group (now Kalibrate Canada). Jason's functional expertise includes energy pricing, economics/markets, price regulation, and supply chain, with a primary focus on the Canadian downstream petroleum industry. Over the last 25 years, Jason has developed extensive knowledge in upstream and downstream petroleum market fundamentals, retail fuel markets and competition, price and margin analysis, price regulation, macroeconomic forecasting, refining, renewable fuels, and investment analysis within the petroleum industry.

- Jason is a specialist covering the entire petroleum industry value chain, primarily focusing on downstream and retail petroleum.

- Jason's extensive experience in petroleum market analysis and regulatory work has helped him build a strong knowledge base, develop a trusted network of experts, and earn a reputation among stakeholders for his impartial, data-driven approach.

PROFESSIONAL EXPERIENCE

SIGNAL ENERGY CONSULTING, LONDON, ON
Founder and President, January 2022 - Present

- Primary consultant on various projects focused on energy markets, pricing dynamics/modelling, price regulation, and retail competitive insights.

KENT GROUP LTD/KALIBRATE CANADA, LONDON, ON
Managing Director, April 2019 – December 2021

- Managed Canadian operations, product development, sales, marketing, HR/admin, client services, and consulting business.
- Responsible for Kent's overall strategy, product delivery, and managing Kent's client relationships.
- Functioned as the Director of Kent's Board and participated in all Board activities.
- Directed through the post-acquisition transition and integration into Kalibrate's business.

KENT GROUP LTD, LONDON, ON
Vice President, Consulting, April 2002 – April 2019

- Lead consultant on 100+ projects for clients across the downstream petroleum industry, provincial/federal government agencies, and biofuels.

- Served as a presenter/speaker at several industry events and conferences and provided frequent commentary to the media on various topics related to the downstream petroleum industry.
- Developed and instructed a two-day course, "Introduction to the Downstream Petroleum Industry," delivered to 50+ clients, including NRCAN, Statistics Canada, ECCC, Canadian Fuels Association, US EPA, and many other petroleum industry participants in Canada and the US.
- Functional areas of expertise include petroleum markets and price analysis, regulatory analysis, petroleum supply chain and logistics infrastructure, strategic planning, forecasting, performance benchmarking, biofuels and alternative energy.

EDUCATION

UNIVERSITY OF WINDSOR, WINDSOR, ON

- Bachelor of Commerce (B.Com.), Finance (1997-2001)
- Graduated with Distinction.