

## **Fuel Focus**

Understanding Gasoline Markets in Canada and Economic Drivers Influencing Prices

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### **National Overview**

Canadian Retail Gasoline Prices Increased 1 Cent per Litre from Last Week

For the week ending March 9, 2010, Canadian average retail pump prices increased from the previous week by 1 cent per litre to \$1.05 per litre—a three-week high and the highest level since mid-June 2009.

Diesel fuel prices increased by less than 1 cent per litre to 98 cents per litre compared to the previous week. This is an increase of 16 cents per litre from the same period last year. Furnace oil prices remained almost unchanged from the previous week at an average of nearly 90 cents per litre.

Overall, retail gasoline prices increased due to higher North American wholesale gasoline prices. This small change in prices reflected the narrow range in world crude oil prices. Crude oil prices have been climbing since the beginning of 2009.

### **Recent Developments**

- Canadian Crude Oil Production: Production of crude oil and equivalent hydrocarbons increased 1% to 13.8 million cubic metres in December 2009, compared to the same period in 2008. Exports rose by 6% to 10 million cubic metres. About 73% of Canada's total domestic production went to the export market, compared to 69% a year earlier. Imports increased 7% to 4.4 million cubic metres. (Statistics Canada, The Daily, <a href="http://www.statcan.gc.ca/daily-quotidien/100301/dq100301d-eng.htm">http://www.statcan.gc.ca/daily-quotidien/100301/dq100301d-eng.htm</a>)
- Sluggish Gasoline Sales: While gasoline sales were up in January from the same period a year ago, sales declined 0.2% to 3.6 billion litres in January 2010 compared to December 2009. Diesel fuel oil sales increased 9% to 2.5 billion litres in January compared to the same time in 2009, while light fuel oil (furnace oil) decreased 11% to 0.5 billion litres. (Source: Statistics Canada, 45-004)
- Inflation up in OECD Countries: Higher energy prices pushed annual inflation in OECD areas up to 2.1%. An annual increase of 10.6% in energy prices pushed overall inflation up to 2.1% in the OECD areas in the year to January 2010, compared with 1.9% in December 2009. Energy prices rose by 19.1% in the United States. (Source: OECD, <a href="http://www.oecd.org/document/52/0.3343.en">http://www.oecd.org/document/52/0.3343.en</a> 2649 33715 44665204 1 1 1 1,00.html)

Figure 1: Crude Oil and Regular Gasoline Price Comparison (National Average)

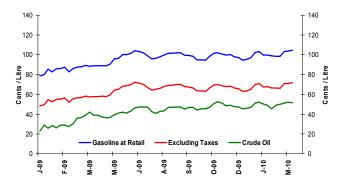
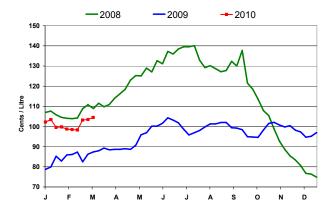


Figure 2: Weekly Regular Gasoline Prices



### **Changes in Fuel Prices**

	Week of:	Change from:			
¢/L	2010-03-09	Previous Week	Last Year		
Gasoline	104.5	+0.9	+17.0		
Diesel	98.0	+0.4	+16.4		
Furnace Oil	89.8	+0.1	+18.3		

Source: NRCan

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### **Retail Gasoline Overview**

The average Canadian pump price in selected cities for the **four-week average** ending March 9, 2010, was \$1.02 per litre—an increase of nearly 3 cents per litre from the last report on February 26, 2010. This is a 17-cent-per-litre increase from the same period in 2009.

The **four-week average** crude oil price component of gasoline registered 51 cents per litre, up by 2 cents per litre from two weeks ago. The crude oil price component of gasoline is 21 cents per litre higher than at the same time last year.

Retail gasoline prices in most Western centres— Vancouver to Winnipeg-increased by 1 cent per litre when compared to the previous report and ranged from 92 cents per litre to \$1.12 per litre. Price increases in Eastern cities-Toronto to St. John's-rose by 2 cents per litre, and ranged from 99 cents per litre to \$1.10 per litre.

At the national level, refining and marketing costs and margins remained the same at 19 cents per litre. However, they are nearly 6 cents per litre below last year's level.

140 ■ Crude Oil (estimated) ■ Refining & Marketing Costs & Margins ■ Federal Taxes (Excise, GST) ☐ Harmonized Sales Tax (HST) 118.6 120 112.9 ■ Provincial Taxes 112.1 110.1 110.1 10.7 104.2 102.4 101.9 100.3 99.6 99.4 97.8 16.5 100 15.6 26.83 24.4 91.7 15.5 10.7 15.8 17.6 15.0 11.5 14.7 Cents / Litre 11.4 12.0 14.9 10 ( 10.0 10.0 19.3 19.6 20.0 19.7 19.0 16.1 15.5 40 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 51.2 20 Charlotetour 0 Canada

Figure 3: Regular Gasoline Pump Prices in Selected Cities Four-Week Average (February 16 to March 9, 2010)

### **Petroleum Products Distribution Networks - Retail Outlets**

The marketing and retailing of gasoline is carried out by many firms, which can generally be divided into two types. The first type consists of outlets operated by the integrated refiner marketers who produce the gasoline, distribute it and market it, often through affiliate or licensed operators who own individual outlets. These companies provide gasoline to their own network and to other retailers under contract.

The second type consists of the independent marketers. Independent marketers are those who do not own a refinery but either buy their product from Canadian refiners or import the gasoline. They tend to operate small numbers of outlets in specific locales, but some large networks exist. Some of the larger networks of independent stations include Wilson Fuels, Couche-Tard, OLCO, Canadian Tire, Cango, and Domo. Generally, the large independents have a 15-25% share of the sales volume in urban markets.

Source: NRCan, <a href="http://nrcan.gc.ca/eneene/sources/infinf/netres-eng.php">http://nrcan.gc.ca/eneene/sources/infinf/netres-eng.php</a>



Source: NRCan



\* Regulated Markets



### **Wholesale Gasoline Prices**

Compared to the previous week, **wholesale gasoline prices** declined in six of the ten selected centres for the week of **March 4**, **2010**. Overall, price changes ranged from a drop of 1 cent per litre to an increase of 1 cent per litre.

Changes in wholesale gasoline prices in the Eastern markets of both Canada and the United States, compared to the previous week, ranged from a decrease of less than 1 cent per litre to an increase of less than 1 cent per litre and ended the period in the 59-to-65 cent-per-litre range.

Ending at between 61 to 63 cents per litre, Western wholesale gasoline price changes also ranged from a

decline of 1 cent per litre to an increase of 1 cent per litre.

In the last **four weeks**, wholesale prices in both Canadian and American selected centres have increased in the range of 1 to 5 cents per litre.

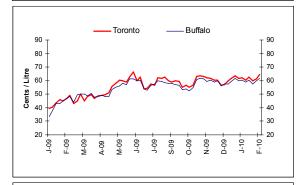
Wholesale gasoline prices continue moving upward in both Canadian and American centres as refineries in North America are starting their seasonal maintenance in preparation for the higher demand in the spring. These maintenance operations generally result in a temporary curtailment of gasoline production and other petroleum products which, in turn, put upward pressure on prices.

Figure 4: Wholesale Gasoline Prices

Rack Terminal Prices for Selected Canadian and American Cities Ending March 4, 2010

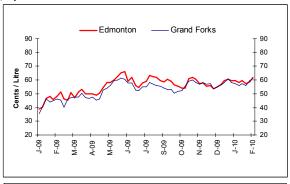
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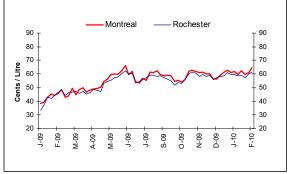












### Why does the price of crude oil affect the price of fuels such as gasoline?

Crude oil is purchased in U.S. dollars and the price is set in the global marketplace. Crude oil is the raw material used to make fuels such as gasoline. An increase or decrease in the cost of oil determines how much refiners pay to buy and refine the oil into gasoline. Refiners sell their products to marketers and distributors who, in turn, pass on the higher or lower prices to consumers at the pumps.



### **Gasoline Refining and Marketing Margins**

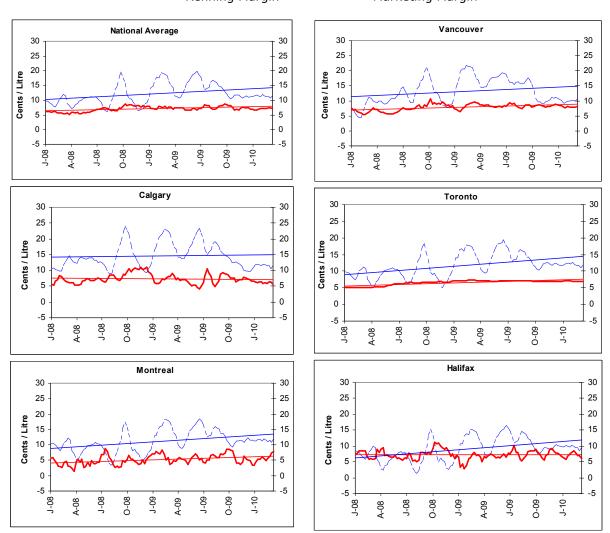
**Four-week rolling averages** are used for gasoline refining and marketing margins.

The relatively low volatility in refining margins observed since last October reflects the adequate supply of gasoline in North America's distribution systems. These margins tend to be volatile mainly due to seasonal fluctuations such as higher demand for gasoline in the summer driving season or events that constrain supplies such as weather-related events. Other types of constraints such as scheduled or unscheduled refinery shutdowns can also impact this margin.

Nationally, the marketing margins continue to hover around an average of 7 cents a litre. However, as outlets compete for market shares, the marketing margins can be volatile—as shown in the individual centres.

Figure 5: Gasoline Refining and Marketing Margins

Four-Week Rolling Average Ending March 9, 2010
----- Refining Margin — Marketing Margin









### **Crude Oil Overview**

### World Crude Oil Prices Fluctuate in a Narrow Range

For the week ending March 5, 2010, prices for the three marker crudes averaged between  $507/m^3$  and  $521/m^3$ , (US\$78 to US\$80 per barrel). This is a decrease of \$1 to  $5/m^3$  compared to the previous week. During this week, the WTI saw the largest decline.

Markets have been in a holding pattern. Driven mainly by higher than normal inventories and softening demand in the U.S., world crude oil prices continue to hover much in the same way they have over the last four months. While markets are becoming more optimistic about the international economic outlook, the U.S. inventories of crude oil and gasoline are still high, therefore keeping both crude and gasoline prices from rising very much.

The rise in crude oil inventories may be compounded by the normal refinery turnaround in preparation for the peak of the driving season. Because refiners usually shut down for maintenance before the gasoline demand season, there is less demand for crude oil. This could soften crude oil prices.

Conversely, as refiners begin this maintenance to prepare for the summer driving season, gasoline production may be constrained pushing prices upward.

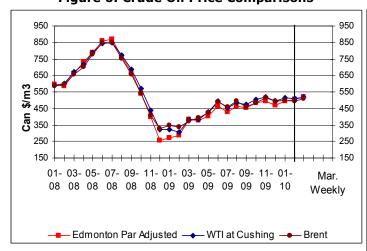


Figure 6: Crude Oil Price Comparisons

#### **Changes in Crude Oil Prices**

Crude Oil Types	Week Ending: 2010-03-05		Change From:			
			Previous Week		Last Year	
	\$Can/ m³	\$US/ bbl	\$Can/ m³	\$US/ bbl	\$Can/ m³	\$US/ bbl
Edmonton Par	518.45	79.82	-1.20	+1.43	+163.59	+35.97
WTI	520.81	80.19	-4.55	+0.94	+170.74	+36.93
Brent	507.18	78.09	-2.01	+1.28	+149.89	+33.94

Source: NRCan

### New Factors Contributing to Oil Price Volatility

As we noted in Issue 2 of the February 12, 2010, edition of *Fuel Focus*, crude oil prices have been traditionally affected by a number of factors such as supply, demand, inventories, and OPEC spare capacity levels. In the last five years, **new emerging factors have had a growing influence on crude oil prices**.

Changes in U.S. legislation, such as the repeal of the *Glass-Stegall Act* in November 1999, allowed non-institutional investors (banks, hedge funds) to participate in crude oil futures markets, and this had significant impacts on crude oil prices and price volatility.

A new hypersensitivity to geopolitical events has also slowly developed. This is partly due to the monopolistic oil supply situation. National oil companies control about 52% of the global oil production. This tends to encourage hypersensitivity to geopolitical events, and contributes to crude oil price volatility as commodity investors are more concerned about the timely development of required oil crude supply.

The declining value of the U.S. dollar, particularly against the Euro, accounts for some of the increase in the price of oil (World crude oil prices is quoted in U.S. dollars). The decline in the purchasing power of the U.S. dollar of the last decade offers a key explanation as to why OPEC has pushed for higher crude oil prices in U.S. dollar terms.

A more detailed report of these factors will be available on our website in the near future.

Source: Natural Resources Canada





### **World Average Gasoline Prices**

Canadian retail gasoline prices in 2009 were relatively less volatile compared to 2008 when crude oil prices reached record highs. Gasoline prices tend to be influenced by a number of factors, such as higher demand in the spring as the summer driving season nears or as a result of unpredictable weather events or unplanned refinery outages. Invariably, during periods of fluctuations, consumers are concerned about gasoline prices and at times inquire as to how Canadian gasoline prices rank compared to other countries.

The following graph illustrates the retail pump prices with taxes, and excluding taxes, of six Western European countries and the Unites States. Average retail gasoline prices for the year 2009 ranged from a low of 70 cents per litre in the U.S. to a high of nearly \$2 per litre in Germany. Canada ranked second with the lowest average retail price of 95 cents per litre in 2009.

Excluding taxes, all countries show relatively little variation in retail gasoline prices. Prices without taxes ranged between 57 cents per litre (United Kingdom) to 73 cents per litre (Italy). However, taxes accounted for more than 50% of the pump price per litre in the selected European countries. In comparison, Canada's tax component accounted for 33% of the total gasoline retail price while the U.S. showed the lowest rate at 17% of the total pump price.

# International Retail Gasoline Price Comparison Annual 2009 (Canadian cents/litre)



