



# **Fuel Focus**

Understanding Gasoline Markets in Canada and Economic Drivers Influencing Prices

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## **National Overview**

Canadian Retail Gasoline **Prices** Decreased 2 Cents per Litre from Last Week

Canadian retail gasoline prices for the week ending March 23, 2010, decreased by nearly 2 cents per litre to \$1.02 per litre—a four-week low. This represents a 12 cents per litre increase from last year's level at the same time. This week's decline in pump prices reflected lower North American wholesale gasoline prices, which, in turn, were due to lower crude oil prices.

Diesel fuel prices increased by 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 declined marginally by less than 1 cent per litre from the previous week to an average of 90 cents per litre.

## Recent Developments

- Shell to Divest 15% of its Refining Capacity: Royal Dutch Shell PLC forecast its production will climb 11% during the 2009 to 2012 period, saying it plans to cut costs by divesting 15% of its refining capacity and 35% of its retail markets. In Canada, the company retains options for further heavy oil expansion, with the nearer-term priority on improving operating efficiency and facilities debottlenecking. (Source: Oil & Gas Journal, March 16, 2010)
- Global Oil Demand Forecast Revised **Upward**: The International Energy Agency indicated in its latest Oil Market Report that oil demand in 2010 is expected to increase over the 2009 levels by 1.4 million barrels per day and reach 86.3 million barrels per day in 2010, with growth entirely in non-Organisation for Economic Cooperation and Development (OECD) countries.
- Canada Ranks Third in Lowest Benzene **Content:** The International Fuel Quality Center (IFQC) has ranked the top 100 countries based on gasoline benzene content standards. South Korea came in first with the earliest nationwide implementation of the lowest benzene limit - 0.7% by volume since January 2009, down from 1% by volume. Colombia followed in second and Canada was third. Benzene is found naturally in crude oil and thus passes into refined products, including transportation fuels. The U.S. Environmental Protection Agency classifies benzene as a Group A known human carcinogen. (Source: Global Refining & Fuels Report, Vol. 14, Issue 5, March 10, 2010).

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

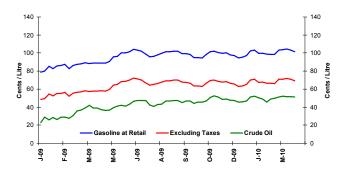


Figure 2: Weekly Regular Gasoline Prices



Changes in Fuel Prices

	Week of:	Change from:		
¢/L	2010-03-23	Previous Week	Last Year	
Gasoline	101.5	-1.7	+12.1	
Diesel	97.8	+0.6	+16.1	
Furnace Oil	89.6	-0.2	+17.6	

Source: NRCan

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## **Retail Gasoline Overview**

The average Canadian pump price in selected cities for the **four-week average** ending March 23, 2010, was \$1.03 per litre from the last report of February 12, 2010. Average four-week retail pump prices were 16 cents per litre higher than those recorded at the same time last year.

The **four-week average crude oil** price component of gasoline rose by less than 1 cent per litre to 52 cents per litre when compared to the previous report on March 12, 2010. However, crude oil prices are 16 cents per litre higher than at the same time last year.

Retail gasoline prices in Western centres increased, on average, 1 cent per litre when compared to the previous report, and ranged from 92 cents per litre to \$1.13 per litre. Prices in Eastern centres increased on average by 2 cents per litre, and ranged from \$1 to \$1.13 per litre.

Since our last report, the overall refining and marketing costs and margins component increased by 0.4 cent per litre, and are 2 cents per litre lower than last year at the same time.

140 ■ Crude Oil (estimated) ■ Refining & Marketing Costs & Margins ■ Federal Taxes (Excise, GST) ☐ Harmonized Sales Tax (HST) □ Provincial Taxes 120 112 7 113.1 1126 110.8 107.3 103.9 103.2 101.3 101.9 100.3 16.5 97.9 100 26.83 15.5 24.4 91.9 91.8 10.7 15.0 11.5 13.0 10.7 12.3 E 80 10.0 10.0 Cents/ 19.9 17.9 17.9 16.8 40 51.6 51.6 51.6 51.6 51.6 51.6 51.6 51.6 51.6 51.6 51.6 51.6 20 Canada

Figure 3: Regular Gasoline Pump Prices in Selected Cities Four-Week Average (March 2 to 23, 2010)

# Source: NRCan \* Regulated Markets

#### **Crude Costs**

Question: If the 16 Canadian refineries process about 2 million barrels per day of crude oil, at oil prices of US\$80/barrel (C\$82) how much will it cost them to buy crude oil each year?

Oil Industry Order of Magnitude Exercise

Answer: Two million barrels of oil at \$82 per barrel equals \$164 million per day or \$60 billion per year.

#### **Yield Losses**

Question: If a typical refinery loses about 0.5% of its feedstock in flares, spills, downgrades, etc. what does this cost Canadian refineries in a year?

Answer: At current crude oil prices of \$82/barrel, 0.5% of \$164 million is \$820,000 per day or \$299 million per year.

Source: Natural Resources Canada







## **Wholesale Gasoline Prices**

When compared to the previous week, wholesale gasoline prices in the **week of March 18, 2010**, decreased in most selected Canadian and American centres. Overall, wholesale gasoline prices ranged between decreases of 1 cent per litre to a marginal increase of less than 1 cent per litre.

Wholesale gasoline prices in the Western centres fluctuated with prices ranging between an increase of 0.2 cent per litre and a decrease of 0.3 cent per litre while prices in the Eastern centres were down between 0.1 and 0.7 cent per litre.

In the last four weeks, wholesale prices in all Canadian and American selected centres have ranged between increases in the range of more than 1 cent per litre to a decrease of 2 cents per litre.

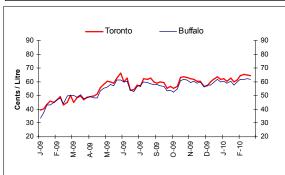
The relatively low fluctuation in wholesale gasoline prices in recent weeks reflects the softening in demand, higher than normal gasoline inventory levels in the U.S., and lower North American refinery activity due to seasonal maintenance operations in anticipation of higher demand for gasoline in the spring.

Figure 4: Wholesale Gasoline Prices

Rack Terminal Prices for Selected Canadian and American Cities Ending March 18, 2010

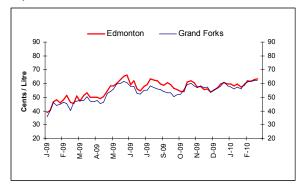
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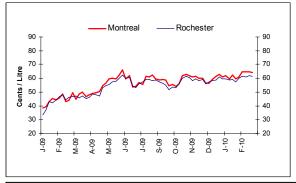






Sources: NRCan, Bloomberg Oil Buyers Guide





#### Why do fuel prices need to be tracked?

When oil and gasoline prices rise, Canadians have to pay more to operate their vehicles and heat their homes and businesses. A variety of factors influence energy prices, including supply and demand, international conflicts, and natural disasters. Canadians want to understand the oil market and the factors affecting it. NRCan's website helps Canadians track changes in petroleum prices, access information on how the oil markets work, and find important links to topics such as energy efficiency. This information will help Canadians to make decisions about their fuel use.

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





## **Gasoline Refining and Marketing Margins**

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

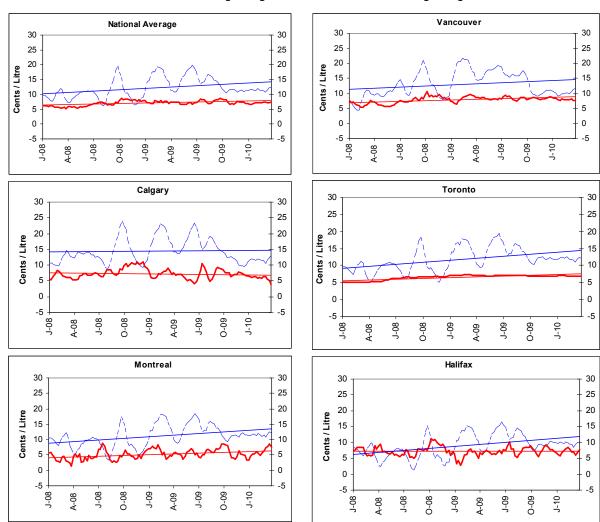
Gasoline refining margins in the last two weeks have shown a slight gain and ended the week at 12 cents per litre. Overall, these margins have remained relatively stable since October 2009. This reflects a soft demand for gasoline and an adequate supply in the North American distribution system. In addition, strong U.S. gasoline and crude oil inventories create a downward pressure on prices which, in turn, moderate refining margins.

This margin is very much a function of the gasoline supply situation and the local market conditions. In turn, the local market conditions can have a considerable impact on short-term wholesale gasoline prices.

The marketing margins continue to fluctuate in specific centres as these movements are influenced by local market conditions. Nationally, the trend line indicates that marketing margins remain around 7 cents per litre. Marketing margins in the following five centres ranged from a low of 4 cents per litre to a high of 8 cents per litre.

Figure 5: Gasoline Refining and Marketing Margins

Four-Week Rolling Average Ending March 23, 2010
----- Refining Margin Marketing Margin









## **Crude Oil Overview**

### Slight Decline in Crude Oil Prices from the Previous Week

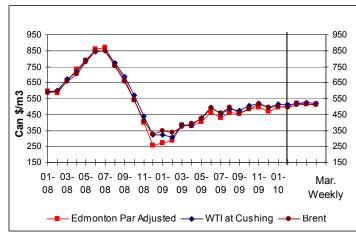
For the week ending March 19, 2010, prices for the three marker crudes averaged between \$509/m³ and \$520/m³, (US\$80 to US\$81 per barrel). This is a decrease of \$3 to \$7/m³ compared to the previous week.

Based on the three marker crudes in Figure 6, oil prices averaged \$515/m³—their highest level since October 2008. Recent world crude oil prices were partly buoyed by the decision of the U.S. Federal Reserve to keep its interest rates to near zero in an effort to encourage economic growth. While U.S. crude oil inventories increased slightly, gasoline and distillate inventories declined, but, as of March 17, 2010, remained well above the 5-year historical average range and further moderated prices.

Meanwhile, at a meeting in Vienna on March 17, 2010, ministers of the Organisation of Petroleum Exporting Countries—no doubt influenced by the global surplus in oil and petroleum products—decided to keep their official production target unchanged, which helped to further moderate prices.

An important development for Canadian consumers is the rise in the value of the Canadian dollar against that of the U.S. As crude oil is valued in U.S. dollars, the relative value of the Canadian dollar has a significant impact on the price that consumers will pay for petroleum products such as gasoline and diesel fuel. Since less Canadian dollars are needed to purchase goods valued in U.S. dollars, a rise in value of the Canadian dollar partly shields Canadians against the impact of rising crude and gasoline prices.

**Figure 6: Crude Oil Price Comparisons** 



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

Crude Oil Types	Week Ending: 2010-03-19		Change From:			
			Previous Week		Last Year	
	\$Can/ m³	\$US/ bbl	\$Can/ m³	\$US/ bbl	\$Can/ m³	\$US/ bbl
Edmonton Par	512.31	80.21	-3.27	+0.21	+125.45	+31.26
WTI	520.28	81.46	-6.66	-0.30	+129.32	+32.00
Brent	508.84	79.67	-3.71	+0.14	+133.25	+32.15

Source: NRCan

#### Oil and Gas Capital Expenditure Forecast for 2010

According to Statistics Canada's latest annual survey of *Public and Private Investments for 2010*, upstream oil and gas industries are planning to invest \$39.6 billion in 2010. While this is higher than the amount of \$35.9 billion spent in 2009, it remains much lower than the peak of \$55.9 billion recorded in 2008.

The conventional extraction industry continues to be responsible for the largest share of the spending by upstream oil and gas industries. Intentions for 2010 amount to \$21.4 billion. This is lower than the amounts spent every year between 2004 and 2008, and will likely be reflected in lower drilling completions—especially for natural gas.

The non-conventional extraction industry—the oil sands—increased its capital spending at a fast pace during the mid-2000s. Intentions for 2010 amount to \$15 billion, a sizable amount despite being lower than the \$20.7 billion achieved in 2008.

The support activities for mining and oil and gas extraction industry, whose main activity is well drilling and servicing on a contact basis, plans to invest \$3.2 billion in 2010. As for the conventional and non-conventional extraction industries, this amount is slightly higher than 2009 but still lower than 2008.

Source: Statistics Canada, <a href="http://www.statcan.g">http://www.statcan.g</a> c.ca/daily-quotidien/100226/tdq100226-



