

Natural Resources Ressources naturelles Canada



# **Fuel Focus**

Understanding Gasoline Markets in Canada and Economic Drivers Influencing Prices

Volume 7, Issue 5

March 23, 2012



Copies of this publication may be obtained free of charge from: Natural Resources Canada Petroleum Resources Branch 580 Booth Street, 17<sup>th</sup> Floor Ottawa, Ontario K1A 0E4 Phone: (613) 992-9612 TTY Service: (613) 996-4397 (Teletype for the hearing-impaired) Fax (613) 992-0614 Email: prb.drp@nrcan-rncan.gc.ca Web site: http://nrcan.gc.ca/eneene/focinf-eng.php

© Her Majesty the Queen in Right of Canada 2012

ISSN 1918-3321

Aussi offert en français sous le titre Info-Carburant

### **National Overview**

#### Canadian Retail Gasoline Prices Up 2 Cents per Litre from Last Week

Canadian retail gasoline prices for the week ending March 20, 2012, increased by nearly 2 cents per litre to \$1.33 per litre—the highest level since mid-2008. This represents an increase of 11 cents per litre from last year's level at the same time. This week's increase in pump prices reflected higher North American wholesale gasoline prices.

Diesel fuel prices increased by nearly 1 cent per litre to \$1.30 per litre compared to the previous week. This is an increase of 3 cents per litre from the same period last year. Furnace oil prices remained unchanged at \$1.21 per litre from the previous week.

### **Recent Developments**

- New Motor Vehicle Sales Rose 15% in January 2012: The number of new motor vehicles sold in January rose 15.4% to 153,623 units. A significant factor in January's growth was the increase in sales for certain models of passenger cars. New motor vehicle sales were up in every province in January. Ontario (+23.7%) reported the largest increase in the number of new motor vehicles sold—the fifth increase in six months. Sales of new motor vehicles in Quebec (+9.8%) grew for the fifth consecutive month. Preliminary industry data indicate that the number of new motor vehicles sold in February fell 7%. (Source: The Daily, <u>http://www.statcan.ca/dailyquotidien/120314/dq120314b-eng.htm</u>)
- The Major Players in the Oil Supply Market: The world oil market is complicated. Private companies are often thought of as the primary actors in this market, but governments play a large role as well. Although international oil companies, such as ExxonMobil, Chevron, and ConocoPhillips, are often thought of as those most responsible for world oil production, it is national oil companies, such as Saudi Aramco, National Iranian Oil Company, and PdVSA (Venezuela) that actually control the majority of proven oil reserves (85% in 2010) and current production (at least 55% in 2010). In 2010, 100 companies produced 87% of the world's oil. Of the total volume of oil produced by these 100 companies, national oil companies accounted for 55% of production. (Source: EIA)

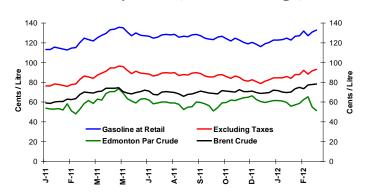
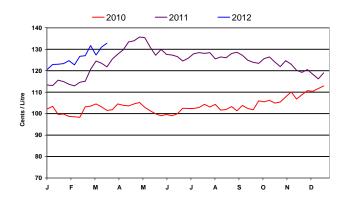


Figure 1: Crude Oil and Regular Gasoline

Price Comparison (National Average)

Figure 2: Weekly Regular Gasoline Prices



	Week of:	Change from:		
¢/L	2012-03-20	Previous Week	Last Year	
Gasoline	132.8	+1.8	+11.0	
Diesel	130.0	+0.6	+2.9	
Furnace Oil	121.3	0.0	-0.4	

**Changes in Fuel Prices** 

Source: NRCan

In this Issue	page
National Overview	1
Recent Developments	1
Retail Gasoline Overview	2
Wholesale Prices	3
Refining and Marketing Margins	4
Crude Oil Overview	5





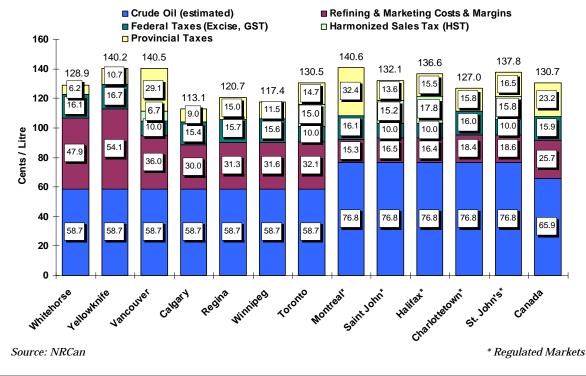


### **Retail Gasoline Overview**

The average Canadian pump price in selected cities for the **four-week average** ending March 20, 2012, was \$1.31 per litre. Average four-week retail pump prices were 12 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 10 cents per litre to 66 cents per litre when compared to the previous report on March 9, 2012. Crude oil prices are nearly 8 cents per litre higher than at the same time last year. Retail gasoline prices in Western centres increased, on average, by 4 cents per litre when compared to the previous report, and ranged from \$1.13 to \$1.41 per litre. Prices in Eastern centres increased on average by 2 cents per litre, and ranged from \$1.17 to \$1.41 per litre.

Since the last report, the overall refining and marketing costs and margins component increased by 3 cents per litre, and are 3 cents per litre higher than last year at the same time.



#### Figure 3: Regular Gasoline Pump Prices in Selected Cities Four-Week Average (February 28 to March 20, 2012)

Why Gasoline Prices Vary Across Canada

Various factors can affect gasoline prices from one region or area to another. As noted in the Fuel Focus issue of March 9, 2012, crude oil feedstocks costs drive a major difference in gasoline prices in eastern Canada versus western Canada. Studies have also shown that average throughput, or sales per outlet in a particular market, can also have a large impact. An outlet with lower sale volumes may have to charge a higher price to generate sufficient revenue to cover the outlet's fixed operating costs. Because the retailer with the lowest marginal cost often sets the price for a particular market, the average throughput helps to explain why outlets in small communities tend to have higher prices than retail outlets in large centres.

The number of outlets for a given population size can also be very important in determining the size of the retail margin in a particular market. More people visiting a retail outlet provide an opportunity to sell more ancillary products. In fact, big box retailers such as Costco view low cost gasoline retailing as a way to attract customers to their stores and increase their ancillary sales. The emergence of these retailers has reduced the retail margin on gasoline in several Canadian cities. Other prevailing conditions in a marketplace include the availability and proximity of supply, the different costs of operation and consumer demand and preferences. These are also important factors in establishing the price at the pump.







### Wholesale Gasoline Prices

When compared to the previous week, wholesale gasoline prices for the **week of March 15, 2012**, increased in most selected Canadian and American centres. Overall, wholesale gasoline prices ranged between decreases of nearly 2 cents per litre to increases of almost 5 cents per litre.

Wholesale gasoline prices in the Western centres fluctuated with prices ranging between an increase of 5 cents per litre and a decrease of 2 cents per litre while prices in the Eastern centres ranged between decreases of less than 1 cent per litre to increases of nearly 4 cents per litre.

In the last four weeks, wholesale prices in all Canadian and American selected centres have increased in the range of less than 1 cent per litre to 10 cents per litre.

Overall, prices in all selected centres are above last year's level with increases ranging from 6 to 11 cents per litre, compared to the same period last year.

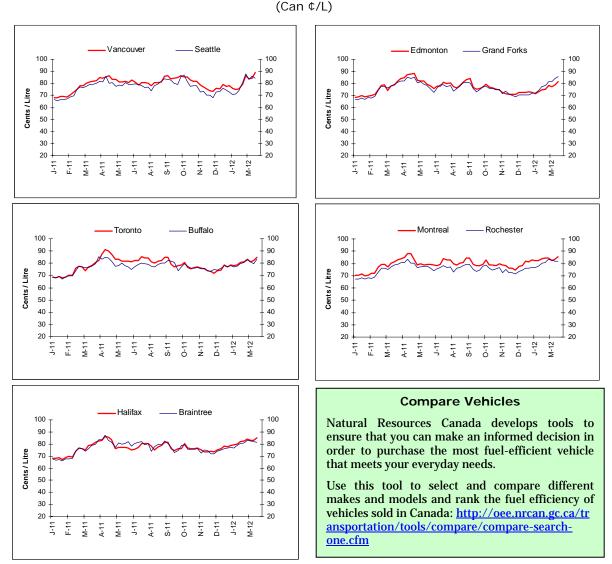


Figure 4: Wholesale Gasoline Prices Rack Terminal Prices for Selected Canadian and American Cities Ending March 15, 2012

Sources: NRCan, Bloomberg Oil Buyers Guide







## **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 gain and ended the week at 18 cents per litre. The March – April period can often present challenges for refiners. If the early spring is colder than expected, heating oil demand will remain strong at a time when refiners are trying to convert their operations away from distillate production toward more gasoline production. Refiners need to build gasoline inventories through the spring in anticipation of the higher summer demand. This is also a time of the year that many refiners perform maintenance on equipment, which often requires short-term closures of specific units or even the whole refinery for a few days or a few weeks. All of these conditions can limit the available supply of products and put upward pressure on prices, thereby increasing refining margins.

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 6 cents per litre to a high of 8 cents per litre.

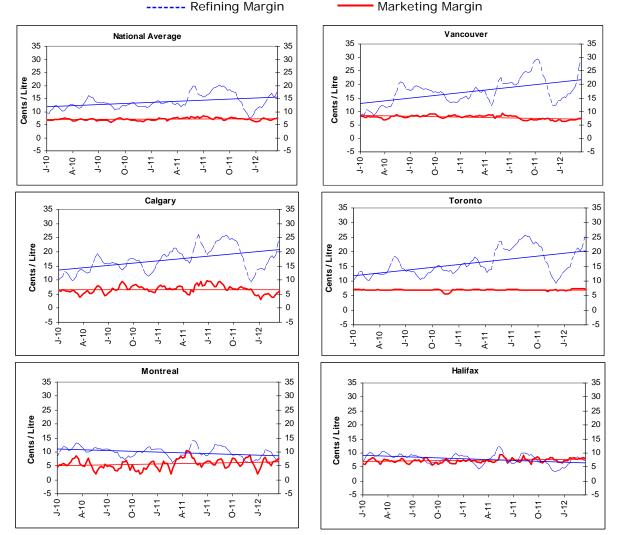


Figure 5: Gasoline Refining and Marketing Margins Four-Week Rolling Average Ending March 20, 2012

Source: NRCan



Canada



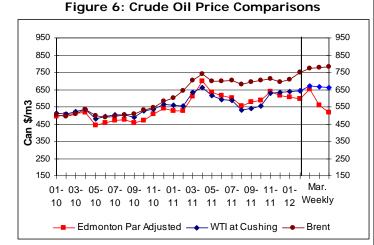
### **Crude Oil Overview**

#### Weekly Edmonton Par Crude Oil Prices Drop Significantly

For the week ending March 16, 2012, prices for the three marker crudes averaged between  $5517/m^3$  and  $5782/m^3$ , (US\$83 to US\$125 per barrel). This is a decrease of  $42/m^3$  (US\$6 per barrel) for Edmonton Par and an increase of  $22/m^3$  (US\$1 per barrel) for Brent from the previous week. For the week ending March 16, 2012, the differential between Brent and Edmonton Par stood at  $265/m^3$  (US\$42 per barrel).

In short, Canadian crude oil prices appear to be disconnecting from WTI and global prices to some extent. Some market analysts indicate the reason for this is inadequate pipeline capacity exiting western Canada.

Brent and WTI crude oil prices continue to fluctuate within a narrow range as uncertainties remain at the global economic and geopolitical level. U.S. crude oil inventories are in the upper range of their five-year



#### Changes in Crude Oil Prices

Crude Oil Types	Week Ending: 2012-03-16		Change From:			
			Previous Week		Last Year	
	\$Can/ m³	\$US/ bbl	\$Can/ m³	\$US/ bbl	\$Can/ m³	\$US/ bbl
Edmonton Par	516.91	82.85	-41.73	-6.39	-76.43	-12.96
WTI	662.19	106.13	-3.28	-0.18	+44.26	+6.36
Brent	781.77	125.30	+2.38	+0.78	+87.39	+13.19

Source: NRCan

historical levels, reflecting the oversupply of oil at Cushing, Oklahoma.

The Canadian crude Edmonton Par prices moved downward partly due to the supply glut in the U.S. mid-west and the lack of pipeline capacity from Canada to other markets. Unable to reach other higher-priced markets, crude oil prices for Edmonton Par remain depressed compared to other crude oil benchmarks (see box below for further explanations).

There are concerns about the high level of planned maintenance in the U.S. mid-west which could put constraints on the level of petroleum product output. Current plans are to have 186,000 barrels per day offline for 2012 compared to 85,000 barrels per day last year. The constraints have the potential to create upward pressure on finished oil products in both the U.S. and Canada.

#### Oil Trade in Canada

Canada is a net exporter of both crude oil and petroleum products. Yet, at times, product imports can play a significant role in satisfying petroleum product demand. The availability of both crude oil and petroleum product imports in every region hinges on geography and infrastructure constraints. Each region of Canada has its own natural features and this creates some unique situations.

Some regions are better suited than others to import products. Because of their connection via major waterways, Atlantic Canada and Quebec have good access to supplies from the northeastern United States and Europe. Because of their easy access to water for both importing crude oil feedstocks and for exporting petroleum products, Atlantic Canada has two large refineries that send large portions of their output for export to the U.S. eastern seaboard. When economic conditions are favourable, East Coast Canadian refiners can send products to markets as far away as California.

The current disconnect between Brent, WTI and Canadian crude oil prices is also having major implications for Canadian oil and product trade. As noted in previous issues of Fuel Focus, Brent prices are currently highest, WTI considerably lower, and Canadian crudes lower yet. While all Canadian refineries purchase varying proportions of light and heavy crude feedstocks, and pay varying prices for crudes of different qualities, there are some overarching trends. All Canadian refineries from Montreal eastward purchase crude feedstock at prices influenced by Brent prices, while refineries west of Montreal are mainly paying for oil feedstock at prices more closely linked to Edmonton Par prices. This situation is generating considerable interest in the possibility of moving more Canadian crude further east. This could improve the economics of eastern Canadian refining and put pressure on eastern Canada gasoline prices. Enbridge has already proposed to move more Canadian oil further east, to reach the Nanticoke refinery in Ontario. The above situation is expected to have eventual impacts on crude oil trade in Canada.



