

# **Fuel Focus**

Understanding Gasoline Markets in Canada and Economic Drivers Influencing Prices

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# **National Overview**

#### Canadian Retail Gasoline Prices Up Less Than 1 Cent per Litre from Last Week

For the week ending February 22, 2011, Canadian average retail gasoline prices increased by less than 1 cent per litre from the previous week to \$1.15 per litre—the highest level this year. Prices are above last year's level by 12 cents per litre.

Diesel fuel prices remained almost unchanged from the previous week at \$1.18 per litre, while furnace oil prices increased by less than 1 cent, ending at \$1.04 per litre. Compared to a year ago, prices for diesel and furnace oil are 22 and 15 cents per litre higher, respectively.

The crude oil price shown in Figure 1 is the Edmonton Par, which declined for the week ending February 22, 2011. Declines were partly due to capacity constraints experienced at Cushing, Oklahoma and the large U.S. crude oil inventory.

# Recent Developments

- Shell Future Energy Scenarios: According to a report issued by Royal Dutch Shell, the world's energy system will see profound developments over the next four decades as it is entering an era of volatile transitions and intensified economic cycles. The oil and commodity price boom was interrupted by the recession, but it may return. Improvements in policy-making and strong gains in productivity have helped economies to grow without inflation in the last two decades. Shell does not believe the moderating effect of this combination of good policies, good practices, and good luck will continue into the future. (Source: Royal Dutch Shell, <a href="http://www.shell.com/home/c">http://www.shell.com/home/c</a> ontent/media/news and media releases/2011/sc enarios signals signposts 14022011.html)
- Energy Demand to Increase 35% by 2030: ExxonMobil's *Outlook for Energy: A View to 2030* released January 27, 2011, forecasts that expanding prosperity for a growing world population will drive an increase in energy demand of about 35% by 2030 versus 2005 even with significant efficiency gains and natural gas will emerge as the second-largest energy source behind oil. (Source: Global Refining and Fuels Report, February 8, 2011).
- New Motor Vehicle Sales Up 7% in 2010: The number of new motor vehicles sold rose 7% in 2010. Truck sales rose 18%, while passenger car sales fell 5%. Truck sales represented 55% of the new vehicles sold in 2010, surpassing annual passenger car sales for the first time since this series began in 1946. The number of new motor vehicles sold increased in all provinces except Nova Scotia, which reported a small decline. (Source: The Daily, <a href="http://www.statcan.gc.ca/daily-quotidien/110214/dq110214a-eng.htm">http://www.statcan.gc.ca/daily-quotidien/110214/dq110214a-eng.htm</a>)

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

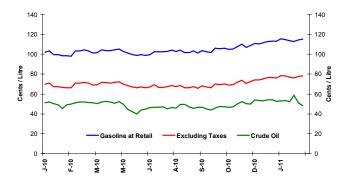
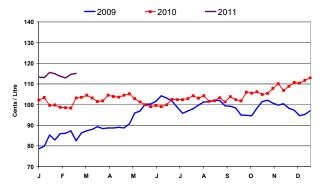


Figure 2: Weekly Regular Gasoline Prices



#### **Changes in Fuel Prices**

|             | Week of:   | Change from:     |              |  |
|-------------|------------|------------------|--------------|--|
| ¢/L         | 2011-02-22 | Previous<br>Week | Last<br>Year |  |
| Gasoline    | 115.1      | +0.5             | +11.6        |  |
| Diesel      | 118.5      | -0.1             | +22.4        |  |
| Furnace Oil | 103.6      | +0.3             | +14.5        |  |

Source: NRCan

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## **Retail Gasoline Overview**

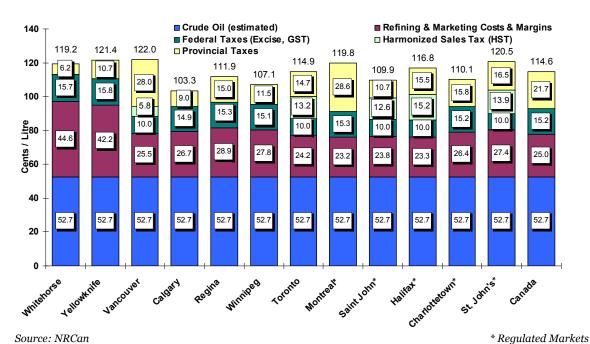
The **four-week average** regular gasoline pump price in selected cities across Canada was \$1.15 per litre for the period ending **February 22, 2011**. This is 15 cents per litre higher than prices recorded at the same time last year.

The **four-week average** crude oil price component of gasoline registered at 53 cents per litre, down by 2 cents per litre from two weeks ago. Compared to the same period in 2010, the crude oil price component of gasoline is 4 cents per litre higher.

Ranging from \$1.03 per litre to \$1.22 per litre, retail gasoline prices in most Western centres increased, on average, by 1 cent per litre when compared to two weeks ago. Prices in Eastern centres increased on average by less than 1 cent per litre, and ranged from \$1.10 per litre to \$1.21 per litre.

At the national level, refining and marketing costs and margins increased by 2 cents per litre from two weeks ago, and are 6 cents per litre higher than last year at this time.

Figure 3: Regular Gasoline Pump Prices in Selected Cities Four-Week Average (February 1 to 22, 2011)



#### **Inventory Levels in the Canadian Petroleum Industry**

To provide added flexibility to the distribution of petroleum products, refiners and marketers maintain inventories of the various products in strategic locations throughout the distribution chain. If supplies of imported or domestic crude oil were interrupted for any reason, or if the product distribution system failed, companies would rely on commercial inventories to meet short-term needs while alternate arrangements were being made.

Refiners also build up inventories of all products in advance of scheduled refinery maintenance (called turnarounds). Turnarounds can vary in frequency from annually to once every few years and sometimes require the refinery to be completely shut down for a period of several weeks. Refiners anticipate this by building up product stocks that can be used during the turnaround.

Refiners' crude oil inventories fluctuate over a very narrow band and are less seasonal than product stocks. There are significant regional variations in crude oil stocks, with refiners in the West, who run domestic crude oil maintaining about 5-7 days of oil, and refiners in eastern Canada who run imported crude oil averaging 15-20 days. For more information on the Canadian downstream petroleum industry, please consult NRCan's report at: <a href="http://www.nrcan.gc.ca/eneene/sources/petpet/reprap/2005-07/ovevue/index-eng.php">http://www.nrcan.gc.ca/eneene/sources/petpet/reprap/2005-07/ovevue/index-eng.php</a>







# **Wholesale Gasoline Prices**

Wholesale gasoline prices increased in seven of the ten centres for the **week of February 17, 2011,** compared to the previous week. Price changes ranged from a decline of 1 cent per litre to an increase of 2 cents per litre.

For the Eastern markets in Canada and the United States, wholesale gasoline prices fluctuated between an increase of almost 1 cent per litre to a decrease of nearly 1 cent per litre when compared to the previous week, and ended the period in the 69 to 72 cent per litre range.

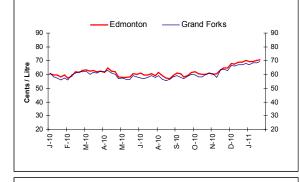
Wholesale prices in Canadian and U.S. Western centres increased by 1 to 2 cents per litre, ending the period in the 69 to 73 cents per litre range.

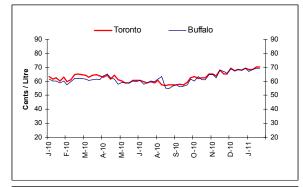
In the last **four weeks**, wholesale prices in the selected Canadian and American centres have increased from less than 1 cent per litre to nearly 4 cents per litre.

Overall, compared to a year ago, prices in all selected centres are higher by 9 to 13 cents per litre.

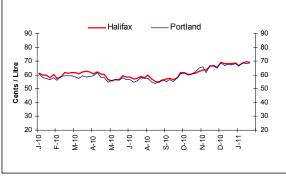
Figure 4: Wholesale Gasoline Prices
Rack Terminal Prices for Selected Canadian and American Cities Ending February 17, 2011
(Can  $\varphi$ /L)









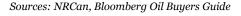


# Fuel-Saving Gadgets for Cars: Are They Worthwhile? Gadgets that help reduce the amount of fuel

consumed by cars are becoming increasingly common in new models. But are these 'in-car feedback instruments' easy to use? Aren't they distracting for drivers? And can they really generate significant energy savings?

A transport expert at the International Energy Agency (IEA) went for a test-drive to weigh the pros and cons of these devices and explains why they are being introduced in new cars, and offers an assessment on their merit.

Source: IEA, <a href="http://iea.org/index\_info.asp?id=1813">http://iea.org/index\_info.asp?id=1813</a>





# **Gasoline Refining and Marketing Margins**

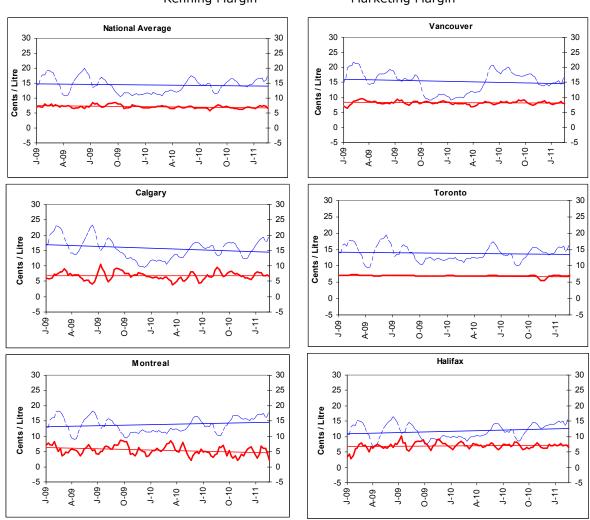
Four-week rolling averages are used for gasoline refining and marketing margins.

The relatively low volatility and downward trend in refining margins observed in the last few months reflect the adequate supply of gasoline in North America's distribution systems. The recent upward movement is in part due to the price decline in the Edmonton Par crude, which is used in our methodology to calculate the refining margins. As shown in Figure 6,

Edmonton Par has dropped more significantly than WTI and Brent. Because wholesale gasoline prices in Canada are influenced by the North American markets, they have not dropped as significantly as crude prices have. As a result, refining margins increased.

For the week ending February 22, 2011, marketing margins ranged from 2 to 8 cents per litre. Compared to two weeks ago, marketing margins have decreased from 1 to 4 cents per litre.

Figure 5: Gasoline Refining and Marketing Margins Four-Week Rolling Average Ending February 22, 2011 ----- Refining Margin Marketing Margin



Source: NRCan



# **Crude Oil Overview**

#### Middle East Tensions Buoy Brent while WTI and Edmonton Par Prices Down

For the week ending February 18, 2011, prices for the three marker crudes averaged between \$484/m³ and \$634/m³ (US\$78 to US\$102 per barrel). This is a decrease of \$12 to \$33/m³ for WTI and Edmonton Par compared to the previous week, while Brent increased by \$6/m³— to reach its highest level in more than two years. The price differential between Brent and WTI stood at a record high of \$105/m³ (US\$17 per barrel).

The WTI and Edmonton Par crude price spread to Brent reflect the fact that there is more crude oil flowing to the major U.S. trading centre in Cushing, Oklahoma, than the refinery system can handle, resulting in a growth in U.S. inventories which, in turn, pushed prices down for these two marker crudes (WTI and Edmonton Par). According to Deutsche Bank Securities the WTI trading discount to Brent is likely to

remain until more pipeline capacity is built out of Cushing.

This was another tumultuous week for crude oil traders and investors concerned that political upheaval in the Middle East could spread and disrupt crude supplies. The Suez Canal, an important transit route for the crude oil traffic, is located in a region where people have witnessed anti-government street protests which toppled rulers in Tunisia and Egypt.

These events have, in turn, helped spark demonstrations in Iran, Algeria, Jordan, Bahrain and Libya, but also have the potential to create significant volatility in the energy markets. Iran is the world's fourth-largest oil producer while Algeria and Libya are also important crude oil suppliers.

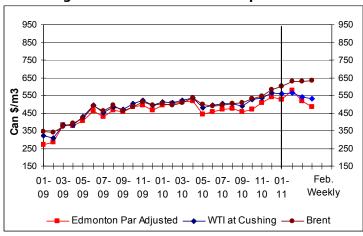


Figure 6: Crude Oil Price Comparisons

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

| Crude Oil Types | Week Ending: 2011-02-18  |              | Change From:  |              |              |              |
|-----------------|--------------------------|--------------|---------------|--------------|--------------|--------------|
|                 |                          |              | Previous Week |              | Last Year    |              |
|                 | \$Can/<br>m <sup>3</sup> | \$US/<br>bbl | \$Can/<br>m³  | \$US/<br>bbl | \$Can/<br>m³ | \$US/<br>bbl |
| Edmonton Par    | 484.47                   | 78.12        | -32.67        | -4.77        | -23.57       | +0.80        |
| WTI             | 529.20                   | 85.34        | -11.67        | -1.35        | +15.09       | +7.03        |
| Brent           | 633.61                   | 102.17       | +6.11         | +1.60        | +132.34      | +25.82       |

Source: NRCan

### Canada's Oil Emergency Preparedness

According to the International Energy Agency's (IEA) Oil Supply Emergencies 2010 Update, Canada is a significant net oil exporter and is the only IEA member country with growing indigenous oil production. This places Canada in a unique position as an IEA member country, in the role of a stable and growing supplier of oil, contributing to the collective security of all IEA member countries.

Total Canadian oil reserves are estimated at over 174 billion barrels, making Canada the world's third largest resource-holder after Saudi Arabia and Venezuela; some 97% of this Canadian oil is located in the Alberta oil sands.

At the same time, Canada is not immune to the risks of a supply disruption. Despite increases in Newfoundland off-shore production, refiners in the country's eastern provinces rely on imported crude oil, just as many refiners in other IEA countries do. In the case of an IEA collective action in an emergency, Canada would resort primarily to demand restraint, since, as a net exporter, Canada is not obliged to hold oil emergency stocks.

Source: IEA, http://iea.org/publications/free new \_Desc.asp?PUBS ID=2344

