## Fuel Focus

Understanding Gasoline Markets in Canada and Economic Drivers Influencing Prices

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## National Overview

National Retail Pump Prices Increased 1 Cent per Litre from Last Week

For the week ending July 24, 2012, the average Canadian retail gasoline price was $\$ 1.29$ per litre. Higher world crude oil and North American wholesale prices helped push up the Canadian average retail gasoline price by 1 cent from the previous week-a two-month high. This represents an increase of 1 cent per litre compared to a year ago.

Diesel prices declined nearly 1 cent per litre from the previous week to $\$ 1.18$ per litre. This represents a decrease of 6 cents per litre compared to the same period last year.

## Recent Developments

- Economic Slump to Trim Global Oil Demand in 2012: According to the International Energy Agency (IEA) Oil Market Report economic troubles in Europe and rebound effects elsewhere will trim total global oil demand this year by about 100,000 barrels per day (b/d), compared with what the IEA had forecast in May 2012. (Source: Global Refining \&Fuels Report, J une 26, 2012)
- Gasoline Demand in J apan Falling: Demand for gasoline in J apan continues to fall due to the widespread popularity of fuel-efficient vehicles. This trend will continue, with the result that gasoline consumption in 2030 is expected to be 60\% below gasoline demand in fiscal 2010. J apan's Agency for Natural Resources found in a recent report that the next-generation of fuel-efficient cars will account for $56 \%$ of all automobiles in J apan in fiscal-2030, leading to sharp reductions in gasoline demand. (Source: Global Refining \& Fuels Report, J uly 24, 2012)
- Workhorse of the Oil and Gas Industry: Oilfield services firms are the unsung workhorses of the oil industry. They are far less well-known than the oil firms that hire them, but immensely lucrative. Oilfield service companies do most of the heavy lifting involved in finding and extracting oil and gas. A technique called "directional drilling" has transformed the energy business. Fifteen years ago the best drillers could force a well-shaft into a gentle arc. Now shafts can be drilled vertically to a depth of several kilometers-then made to turn sharply and continue horizontally for up to 12 kilometers. (Source: The Economist, http:// ww w.economist.com/node/21559358?fsrc $=\mathrm{scn} / \mathrm{tw} /$ te Lar/ unsungmasteroftheoilindustry )

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: |  |
| :--- | :---: | :---: | :---: |
| $\Phi / L$ | $2012-07-24$ | Previous <br> Week | Last <br> Year |
| Gasoline | 129.2 | +1.2 | +1.1 |
| Diesel | 118.3 | -0.8 | -6.0 |
| Furnace Oil | 111.7 | +0.3 | -1.4 |

Source: NRCan
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## Retail Gasoline Overview

The four-week average Canadian pump price in selected cities across Canada was $\$ 1.27$ per litre for the period ending July 24, 2012. This is an increase of 2 cents per litre from the last report on July 13, 2012, and a decline of 1 cent per litre compared to the same period in 2011.

For the period ending J uly 24, 2012, the four-week average crude oil price component of gasoline registered nearly 55 cents per litre. This represents a 9 cent-per-litre decrease compared to the same period in 2011.

Retail prices in Eastern centres increased, on average, by 2 cents per litre compared to the last report two weeks ago and ranged from $\$ 1.16$ to $\$ 1.35$ per litre. Prices in Western centres decreased, on average, by less than 1 cent per litre and ranged from $\$ 1.13$ to $\$ 1.38$ per litre.
At the national level, refining and marketing costs rose by less than 2 cents per litre from the previous report of two weeks ago to 33 cents per litre. This is 8 cents per litre higher from this time last year.

Figure 3: Regular Gasoline Pump Prices in Selected Cities Four-Week Average (July 3 to 24, 2012)


## Regional Retail Gasoline Prices

Historically, the crude oil prices for Edmonton Par, WTI and Brent were closely linked, and price differences (or differentials) between these crudes were minimal. Since 2011, the price difference between WTI and Brent, in particular, has increased significantly. This is important as refineries in Western Canada and some in Ontario process crude oil closely linked to Edmonton Par prices, while other refineries in Ontario and, all refineries in Quebec and the Atlantic Provinces, purchase mainly imported crude oil at higher prices (Brent type prices). The average price differential between WTI and Brent since the beginning of the year is $\$ 99 / \mathrm{m}^{3}$ (Cdn\$16 per barrel).

Given the price divergence between Brent, WTI and Edmonton Par, one might expect to see fuels refined from the lower priced "landlocked" crude oils in Western Canada to sell at lower prices than those refined from pricier "waterborne" crudes. This has largely not been the case however: wholesale commodities such as gasoline are not priced on a "cost-plus" basis. If they were, the consequent lower-priced gasoline would be in very high demand in the currently more expensive eastern markets, which would leave western markets with distressed inventories. The market-driven high fuel prices in the west are the assurance of a continuity of supply to those markets.
Sources: Natural Resources Canada; MJ Ervin \& Associates, Rising Retail Fuel Prices: An Analysis, April 2012, http:// www.kentmarketingservices.com/dnn/ Default.aspx?tabid=145

## Wholesale Gasoline Prices

Compared to the previous week, wholesale gasoline prices for the week ending J uly 19, 2012 increased in all selected Canadian and American centres.

Wholesale gasoline price rose from less than 1 cent per litre to more than 3 cents per litre. Prices finished the period in the 78- to 83-cent-per-litre range.

In the Eastern markets of Canada and the United States, wholesale gasoline prices, compared to the previous week, registered increases ranging from 1 to

3 cents per litre. Prices for the period ended in the 78to 83-cent-per-litre range.

Western wholesale gasoline prices ended in the range of 79 to 83 cents per litre, with prices increasing in the range of less than 1 up to 3 cents per litre.

Prices in the American and Canadian centres are ranging from a decrease of nearly 2 cents per litre to an increase of almost 3 cents per litre compared to the same period in 2011.

Figure 4: Wholesale Gasoline Prices
Rack Terminal Prices for Selected Canadian and American Cities Ending July 19, 2012
(Can $4 / \mathrm{L}$ )



Sources: NRCan, Bloomberg Oil Buyers Guide

## Petroleum Product Flow

The value of Canadian petroleum product exports to the United States amounted to $\$ 13.5$ billion in 2010, and consisted primarily of gasoline shipped from the Atlantic provinces.
Canada imported $\$ 4.6$ billion worth of petroleum products from the United States in 2010, 33\% of which entered through Québec and $31 \%$ through the western provinces.

Source: Centre for Energy, http:// www.centreforen ergy.com/ Documents/ EnergyMaps/ Canada.pdf

## Gasoline Refining and Marketing Margins

Four-week rolling averages are used for the gasoline refining and marketing margins. Figure 5 shows the trends for the period endingJ uly 24, 2012.

Gasoline refining margins have been trending higher reaching their peak of last April. This reflects the fact that wholesale prices have been increasing faster than crude oil prices. Compared to last year, margins in Canada are currently 9 cents a litre higher.

Nationally, the marketing margins continue to hover around an average of 7 cents a litre. However, as outlets compete for market share, the marketing margins can be volatile-as shown in the individual centres. For the five centres, the marketing margins ranged from a low of 5 cents in Toronto to a high of nearly 8 cents in Montreal. The marketing margins have to cover all costs associated with operating a service station.

Figure 5: Gasoline Refining and Marketing Margins
Four-Week Rolling Average Ending July 24, 2012
------- Refining Margin
—— Marketing Margin







Source: NRCan

## Crude Oil Overview

## World Crude Oil Prices Return to Upward Trend

For the week ending J uly 20, 2012, prices for the three marker crudes averaged between $\$ 476 / \mathrm{m}^{3}$ and $\$ 677 / \mathrm{m}^{3}$, (US\$75 to US\$106 per barrel). This is an increase for all benchmarks in the range of $\$ 16$ to $\$ 34 / \mathrm{m}^{3}$ (US\$3 to US\$6 per barrel) compared to the previous week.

World crude oil prices pushed upward for the week ending July 20, 2012, on concerns over potential supply constraints as tensions increased between Iran, the US and European countries over Iran's nuclear program.

Iran threatened to interrupt oil traffic in the Strait of Hormuz while a US navy ship fired on a fishing boat. These events contributed to heightened tensions in the major oil producing region.

While the supply threat pushed oil prices up, the European debt crisis and lackluster US economic performance continue to depress demand growth for petroleum products. To some degree, this is helping to moderate the rise in world oil prices.

Figure 6: Crude Oil Price Comparisons


Changes in Crude Oil Prices

| Crude Oil Types | $\begin{array}{c}\text { Week Ending: } \\ \text { 2012-07-20 }\end{array}$ |  | Change From: |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{c}\text { \$Can/ } \\ \mathrm{m}^{3}\end{array}$ |  | $\begin{array}{c}\text { \$US/ } \\ \mathrm{bbl}\end{array}$ | $\begin{array}{c}\text { \$Can/ } \\ \mathrm{m}^{3}\end{array}$ | $\begin{array}{c}\text { \$US/ } \\ \mathrm{bbl}\end{array}$ | $\begin{array}{c}\text { \$Can/ } \\ \mathrm{m}^{3}\end{array}$ |
| Edmonton Par | 476.17 | 74.81 | +15.80 | +3.02 | -118.30 | -24.57 |
| bbl |  |  |  |  |  |  |$]$

[^0]
## U.S. Petroleum Product Prices Outlook

After a sharp increase in gasoline prices earlier this year, reaching a monthly average of $\$ 3.90$ per gallon in April 2012, gasoline prices have fallen for the second consecutive month, averaging $\$ 3.54$ per gallon in June 2012. Due to the sharp decline in crude oil prices throughout May and June, the Energy Information Administration (EIA) expects regular gasoline retail prices to average $\$ 3.39$ per gallon during the third quarter of 2012, compared with $\$ 3.51$ per gallon in last month's Short-Term Energy Outlook, and $\$ 3.63$ per gallon during the same period last year. EIA projects that crude oil prices will remain near their current lower levels through 2013, resulting in regular gasoline retail prices averaging $\$ 3.49$ per gallon in 2012 and $\$ 3.28$ per gallon in 2013.
EIA expects that on-highway diesel fuel retail prices, which averaged $\$ 3.84$ per gallon in 2011, will average $\$ 3.79$ per gallon in 2012, down 11 cents per gallon from last month's Outlook. In 2013, diesel fuel retail prices are projected to decline another 21 cents to an average of $\$ 3.58$ per gallon.
Source: US Energy Information Administration, http:// www.eia.gov/ forecasts / steo/ report/ us oil.cfm
Note: 1 US gallon $=3.785$ litres.


[^0]:    Source: NRCan

