## Fuel Focus

Understanding Gasoline Markets in Canada and Economic Drivers Influencing Prices

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## National Overview

## Overall Pump Prices Drop 2.6 Cents per Litre from Last Week

Canadian retail pump prices, for the week ending June 25, 2013, decreased by nearly 3 cents per litre to \$1.31 per litre-a six-week low. Average retail pump prices declined despite higher wholesale gasoline prices in some regions, reflecting upward crude oil prices buoyed by tensions in the Middle-East. Compared to last year at this time, gasoline prices are nearly 7 cents per litre higher.
Diesel fuel and furnace oil prices remained unchanged at $\$ 1.24$ and $\$ 1.18$ per litre, respectively. Both diesel and furnace oil prices are almost 6 cents per litre higher than a year ago.

## Recent Developments

- Sales of Domestic Refined Products: Motor gasoline sales decreased by 82 million litres (-0.5\%) to nearly 18 billion litres from J anuary to May 2013 compared to the same period in 2012. Diesel fuel sales increased by 546 million litres ( $+4.8 \%$ ) to 12 billion litres, while light fuel oil (furnace oil) sales decreased by 114 million litres (-7.9\%) to 1.3 billion litres in the same time period. (Source: Statistics Canada and NRCan)
- Imperial Oil Converting Dartmouth Refinery into A Terminal: Imperial Oil is closing its refinery in Dartmouth and converting it into a marine terminal. The company said it could not find a buyer for its facility near Woodside to continue operating as a refinery. Vice-president Gilles Courtemanche told reporters there is too much oil on the market and the facility is too small. About 400 people have work ties to the refinery, which has operated for the past 95 years. About 80 employees will either retire or stay on and the rest will be offered work elsewhere in Canada. The refinery produces most of the gasoline sold in Nova Scotia. (Source: CBC News, June 19, 2013)
- Inflation Increase in May: The Consumer Price Index (CPI) rose $0.7 \%$ in the 12 months to May, following a $0.4 \%$ increase in April. The year-overyear rise in the May CPI was led by higher shelter costs, notably natural gas. Transportation prices fell $0.5 \%$ in May compared with the same month a year earlier, following a 2.1\% decrease in April. The smaller decline in the transportation index was led by gasoline prices, which fell less in the 12 months to May ( $-1.5 \%$ ) compared with April (-6.0\%). Prices for the purchase of passenger vehicles also decreased year over year in May. (Source: The Daily, Statistics Canada)

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: |  |
| :--- | :---: | :---: | :---: |
| $\Phi / \mathrm{L}$ | $2013-06-25$ | Previous <br> Week | Last Year |
| Gasoline | 130.5 | -2.6 | +6.8 |
| Diesel | 123.8 | 0.0 | +5.8 |
| Furnace Oil | 117.5 | 0.0 | +5.6 |

Source: NRCan

## Natural Gas Prices for Vehicles

| 2013-06-25 | ¢/kilogram | $\Phi / L$ gasoline <br> equivalent | $\Phi / L$ diesel <br> equivalent |
| :--- | :---: | :---: | :---: |
| Vancouver | 119.4 | 78.8 | 81.7 |
| Edmonton | 115.1 | 75.9 | 78.7 |
| Toronto | 110.6 | 73.0 | 75.6 |

Source: $\Phi / \mathrm{kg}$ Kent Marketing Services Limited
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## Retail Gasoline Overview

The average Canadian pump price in selected cities for the four-week average ending J une 25, 2013, was $\$ 1.32$ per litre-a decrease of less than 1 cent per litre from the last report on J une 14, 2013. This represents a 6 cent-per-litre increase compared to the same period in 2012.

Overall, compared to two weeks ago, the four-week average crude oil prices declined by less than 1 cent per litre to 61 cents per litre.

Retail gasoline prices in Eastern centres increased, on average, 1 cent per litre, and ranged from $\$ 1.28$ per litre to $\$ 1.38$ per litre. Prices in some Western centres declined by 1 cent per litre and ranged from a high of $\$ 1.43$ to a low of $\$ 1.27$ per litre.
At the national level, refining and marketing costs and margins increased by less than 1 cent per litre to 31 cents per litre from the previous report two weeks ago. This is 1 cent per litre lower than the same period last year.

Figure 3: Regular Gasoline Pump Prices in Selected Cities
Four-Week Average (J une 4 to 25, 2013)
$\square$ Crude Oil (estimated)
$\square$ Refining \& Marketing Costs \& Margins
Federal Taxes (Excise, GST)
$\square$ Provincial Taxes


Source: NRCan
$\square$ Harmonized Sales Tax (HST)





* Regulated Markets


## Retail Gasoline Stations in Canada

According to the 2012 National Retail Petroleum Site Census, researched and published by MJ Ervin \& Associates, there were 12,285 retail gasoline stations operating in Canada; 3.5 outlets for every 10,000 persons. The per capita number of outlets varies significantly from one province to another; and this has a strong relationship to "throughput efficiency" by province, which in turn has significant implications with the level of retail markup in each province's markets.
Fourteen percent of all gas stations come under the price control of one of the three "major" oil companies (Suncor, Esso or Shell). Twenty-three percent of all gas stations come under the price control of one of the nine refiner-marketers in Canada. The remaining 77 percent of all gas stations in Canada are price-controlled by individual outlet proprietors or non-refiner marketers, a diverse genre of petroleum marketers, whose importance and influence is growing, particularly among two sub-types: Regional Distributors and Big Box marketers. The latter in particular have an influence on the retail petroleum market- particularly in terms of price competitiveness- that is far out of proportion to their relatively small numbers of outlets.
The survey highlights how the increasing number of outlets with the provision of goods or services other than gasoline is of vital importance to the competitiveness and viability of retail gasoline outlets, since the gross margin on gasoline itself is generally not sufficient to provide for the operating costs and reasonable return on the operation of these facilities.
Source: MJ Ervin \&Associates, Executive Summary of the Report.

## Wholesale Gasoline Prices

For the week of J une 20, 2013, and compared to the previous week, prices in both Canadian and U.S. markets registered decreases ranging from 3 cents a litre to increases of more than 2 cents per litre and ended the period in the 77-to-88 cent-per-litre range.
Wholesale gasoline prices in Eastern markets in both Canada and the United States registered decreases of 1 cent per litre to increases of 2 cents per litre, compared to the previous week, and ended the period in the 77-to- 82 cent-per-litre range.

Wholesale gasoline prices in Western centres ranged from a decrease of 4 cents per litre to an increase of 2 cents per litre and ended the period between 77 and 88 cents per litre.

Overall, compared to the same period last year, prices registered increases ranging from 4 cents a litre to 12 cents per litre.

Figure 4: Wholesale Gasoline Prices
Rack Terminal Prices for Selected Canadian and American Cities Ending June 20, 2013
(Can $\downarrow /$ L)






Sources: NRCan, Bloomberg Oil Buyers Guide

## Gasoline Refining and Marketing Margins

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

These margins represent the difference between the cost of the crude oil and the wholesale price at which a refiner can sell gasoline. The decline in refining margins in the last few weeks is an indication that the increase in wholesale gasoline prices is weaker than the increase in crude oil prices. It also reflects an adequate supply in the North American distribution system.

At the national level, the refining margin was around 22 cents per litre- 1 cent lower than two weeks ago.

Overall, marketing margins remain much less volatile than refining margins and fluctuate over a much narrower range. Nationally, marketing margins hovered at 8.7 cents per litre.

Figure 5: Gasoline Refining and Marketing Margins
Four-Week Rolling Average Ending J une 25, 2013
------ Refining Margin Marketing Margin







Source: NRCan

## Crude Oil Overview

## Non-Fundamental Factors Keep Oil Prices Buoyant

For the week ending June 21, 2013, prices for the three marker crudes averaged between $\$ 578 / \mathrm{m}^{3}$ and $\$ 674 / \mathrm{m}^{3}$, (US $\$ 89$ to US $\$ 104$ per barrel). This is an increase of $\$ 6$ to $\$ 9 / \mathrm{m}^{3}$ compared to the previous week. Compared to last year at the same time prices are higher ranging from $\$ 71 / \mathrm{m}^{3}$ to $\$ 102 / \mathrm{m}^{3}$, (US $\$ 11$ to US $\$ 15$ per barrel). The price differential between Brent and WTI hovered at $\$ 48 / \mathrm{m}^{3}$ (US $\$ 7$ per barrel).

Generally the main economic drivers of crude oil prices are supply and demand factors. But the North American situation is characterized by a growing oversupply of oil and sluggish oil consumption. Meanwhile global oil prices continue to fluctuate within a narrow margin as non-fundamental factors continue to dominate the price movements.

This asymmetry between oversupply, a diminished demand in North America, and buoyant global oil prices can be partly explained by the political risk premium stemming from oil-producing countries in the Middle-East. The Syrian crisis raises concerns as the Russian President opposed President Obama's proposal to end the current Syrian regime at the summit meeting of the Group of 8 . The fear is that the violence could extend to attacks in Europe, adding a premium to prices.

Another concern in oil-producing regions is the ongoing negotiations, and perhaps lack of progress, relating to Iran's nuclear program and the possible lifting of sanctions. In the end, these issues create an upward pressure on global oil prices unrelated to more typical oil fundamentals.

Figure 6: Crude Oil Price Comparisons


Changes in Crude Oil Prices

| Crude Oil Types | Week Ending: <br> 2013-06-21 |  | Change From: |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \$Can/ <br> $\mathrm{m}^{3}$ | \$US/ <br> bbl | \$Can/ <br> $\mathrm{m}^{3}$ | \$US/ <br> bbl | \$Can/ <br> $\mathrm{m}^{3}$ |
| Edmonton Par | 577.91 | 89.33 | +9.13 | \$US/ <br> bbl |  |  |
| WTI | 625.20 | 96.66 | +8.17 | +0.34 | +71.13 | +10.57 |
| Brent | 673.60 | 104.14 | +5.69 | -0.12 | +78.56 | +11.66 |

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## U.S. Short-Term Energy Outlook

According to the U.S. Energy Information Administration's (EIA) Short-Term Energy Outlook released June 11, 2013, after increasing to $\$ 119$ per barrel in early February 2013, the Brent crude oil spot price fell to a low of $\$ 97$ per barrel in midApril and then recovered to an average of $\$ 103$ per barrel in May. EIA expects that the Brent crude oil spot price will average $\$ 102$ per barrel over the second half of 2013, and \$100 per barrel in 2014.

EIA expects the price of regular gasoline will average $\$ 3.53$ per gallon over the summer driving season (April through September). The annual average regular gasoline retail price is projected to decline from $\$ 3.63$ per gallon in 2012 to $\$ 3.49$ per gallon in 2013 and to $\$ 3.37$ per gallon in 2014. Energy price forecasts are highly uncertain, and the current values of futures and options contracts suggest that prices could differ significantly from projected levels.
In April 2013, estimated total liquid fuels consumption in non-OECD (Organization for Economic Cooperation and Development) countries reached 44.5 million barrels per day (bbl/d), which was higher than consumption in OECD countries ( 44.3 million $\mathrm{bbl} / \mathrm{d}$ ) for the first time in history.
Source: EIA, http:// www.eia.gov/ forecasts /steo/index.cfm
1 U.S. gallon $=3.785$ litres . 1 barrel $=0.15898$ cubic metres.

Supplement

## Cost of Operating a Vehicle

The increases in gasoline prices do not appear to have much impact on the cost of operating a vehicle. One reason is that fuel cost represents a decreasing portion of the total cost of driving a vehicle.

According to surveys conducted for the Canadian Automobile Association, the total cost of driving a car has doubled in the last 26 years from 20.1 cents per kilometre driven in 1985 to 39.7 cents per kilometre in 2011.

Even with the average price of gasoline going from 54.3 cents per litre in 1985 to $\$ 1.24$ per litre in $2011(+44 \%)$, the fuel component of the total operating cost dropped from $28 \%$ to $22 \%$.

Variable costs, which include fuel, maintenance and tires, accounted for about $48 \%$ of the total operating cost in 2011, compared to $53 \%$ in 1985. However, while the fuel portion made up $81 \%$ of the variable costs in 1985, fuel was only $69 \%$ in 2011. Maintenance and tire costs remained more stable from 2005 to 2011, partly offsetting the rise in fuel prices.

Cost of Operating a Vehicle
(Compact car driven 24,000 km per year)

|  | $\underline{1985}$ | $\underline{1995}$ | $\underline{2005}$ | $\underline{2011}$ |
| :---: | :---: | :---: | :---: | :---: |
| Average Price of Gasoline (cents per litre) ${ }^{1}$ | 54.3 | 54.1 | 86.9 | 124.0 |
| Variable Costs (cents per km driven) |  |  |  |  |
| Fuel | 5.66 | 5.59 | 8.58 | 8.88 |
| Maintenance | 0.76 | 1.95 | 2.48 | 2.18 |
| Tires | 0.57 | 0.86 | 1.79 | 1.84 |
| Total | 6.99 | 8.40 | 12.85 | 12.9 |
| Fixed Costs (dollars per year) |  |  |  |  |
| Insurance | 716 | 1102 | 1777 | 2467 |
| Licence \& Registration | 52 | 106 | 117 | 124 |
| Depreciation | 1733 | 3287 | 4436 | 3024 |
| Financing | 643 | 831 | 809 | 824 |
| Total | 3144 | 5326 | 7139 | 6439 |
| Annual Total (cents per km driven) | 20.1 | 30.6 | 42.6 | 39.7 |
| Fuel as a Percentage of Annual Total | 28\% | 18\% | 20\% | 22\% |

[^1]
[^0]:    Source: NRCan

[^1]:    Source: Canadian Automobile Association and Natural Resources Canada
    ${ }^{1}$ Natural Resources Canada, Fuel Focus

