# Fuel Focus

*Issue 4*
*Week ending August 15, 2006*

Fuel Focus is produced by Natural Resources Canada and is intended for a broad audience. The objective is to provide readers with regular information on the various aspects of the gasoline market in Canada and to raise awareness of the economic drivers influencing prices. Previous issues are available on our website at:

http://www.oppi.gc.ca/index_e.cfm

## National Overview

### Canadian Retail Gasoline Prices Decreased By 7 cents per Litre from Last Week

The average Canadian retail gasoline price dropped by more than 7 cents per litre for the week ending August 15th as Ontario markets recovered from lost production at the end of July, when severe thunderstorms cut off power to two refineries leading to several days of lost production. Significant decreases in Quebec and Nova Scotia also contributed to the lower Canadian average.

While wholesale prices also declined during this reporting period, the drop was not as significant as those seen at retail, indicating a narrowing of retail and marketing margins.

Crude oil prices were once again influenced by world events as threats of hurricanes, loss of some Alaskan production and renewed terrorists threats all had an impact on prices over the last two weeks.

## *Recent Developments*

- Despite higher prices for gasoline, speed limits have been raised along hundreds of kilometres of U.S. interstate highways and freeways to 70 miles per hour (113 k/h) in Michigan and to 80 miles per hour (129 k/h) in Texas. Other states are considering similar hikes. According to the Department of Energy each additional 5 mph (8 k/h) above 60 mph increases fuel costs by 20 cents per gallon (0.8 cent per litre) due to a 7 to 23% loss in fuel efficiency.

- On August 1, 2006, Prince Edward Island gasoline taxes increased from 21.8 to 22.3 cents a litre (+ 1.3) and diesel taxes increased to 21.0 from 20.8 cents a litre (+0.2). Taxes on propane remained unchanged at 17.0 cents.

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

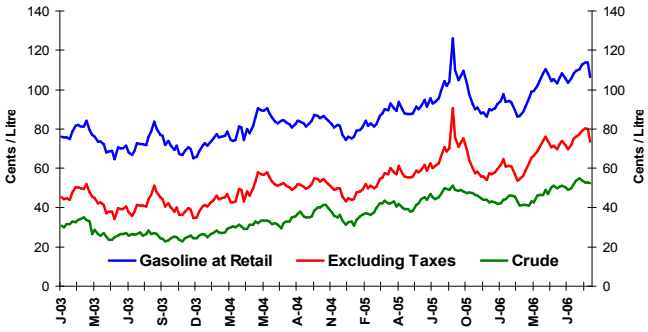
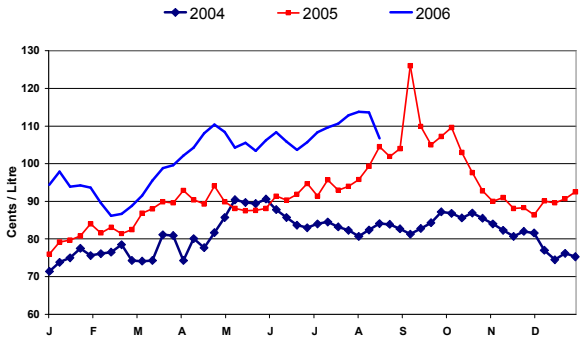



**Figure 2: Weekly Regular Gasoline Prices**




**Changes in Fuel Prices**

| | Week of: | Change from: | |
|---|---|---|---|
| ¢/L | 2006-08-15 | Previous Week | Last Year |
| Gasoline | 106.7 | -6.9 | +2.2 |
| Diesel | 107.5 | +1.2 | +12.9 |
| Furnace Oil | 86.1 | +0.6 | +4.2 |

*Source: NRCan*

## In this Issue



**Fuel Focus Info Tips** – This issue features the first of a 4-part series on home heating oil.

# Retail Gasoline Overview

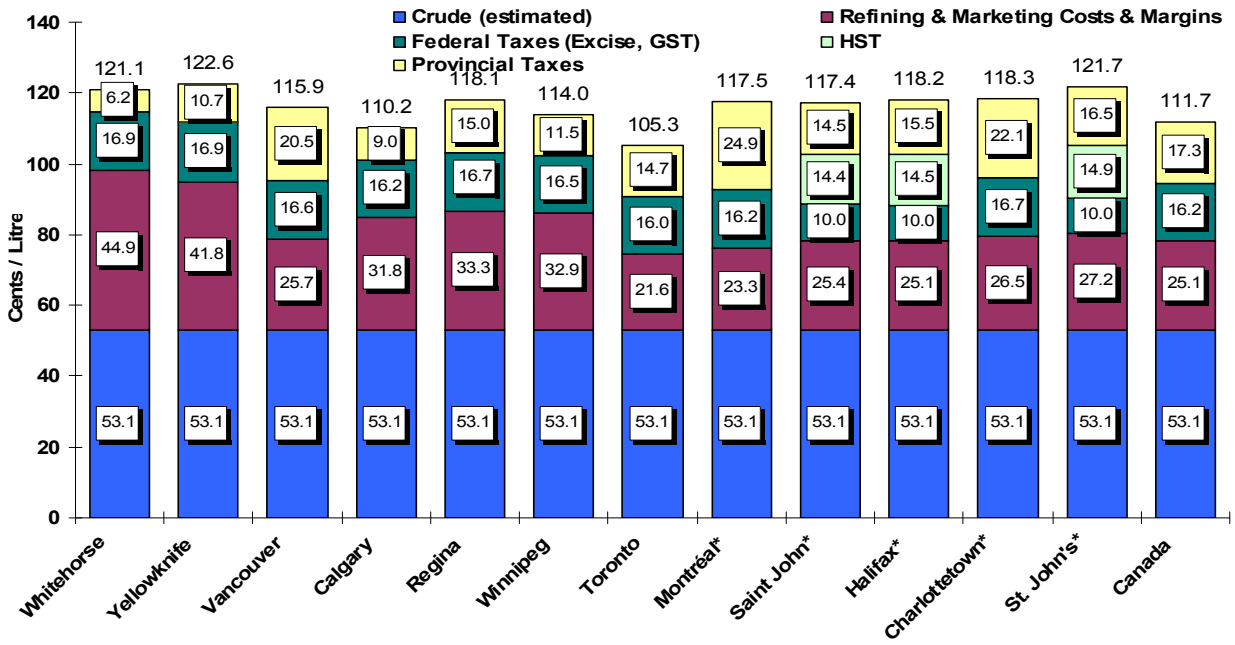
The average Canadian pump price in selected cities for the four weeks ending August 15th was $1.12 per litre, unchanged from the August 1st report but up by 13 cents from the 98.4 cents per litre recorded during the same period in 2005.

The four week average crude oil price, at 53.1 cents per litre, has fallen by 0.8 cents per litre since the last report, but remained 6.5 cents per litre higher than the same period last year.

Dramatic decreases in pump prices across many markets in Canada during the week of August 15 could be an indication that summer gasoline prices have peaked. Prices at the national level are now approaching where they were last year at this time.

Barring any further gasoline supply challenges or significant crude oil price swings, retail prices should stabilize for the remainder of the summer driving season.

**Figure 3: Regular Gasoline Pump Prices in Selected Cities**
**4 Week Average (July 25 to August 15, 2006)**




*Source: NRCan*

** Regulated Markets*

**WHAT ARE "MARKET FORCES"?**

Market forces are the interaction between the supply and the demand and the price of a good or service. By studying the buying and selling practices of market participants, economists have been able to determine that buyers and sellers will react to certain events in a predictable way. For example, buyers will be willing to purchase more of a product if the price is lower and sellers will be willing to offer more product for sale if the price is higher. These opposing market forces will be in balance when the price results in the same amount being supplied by the seller and demanded by the buyer. Therefore, the price becomes the balancing factor.

# Wholesale Gasoline Prices

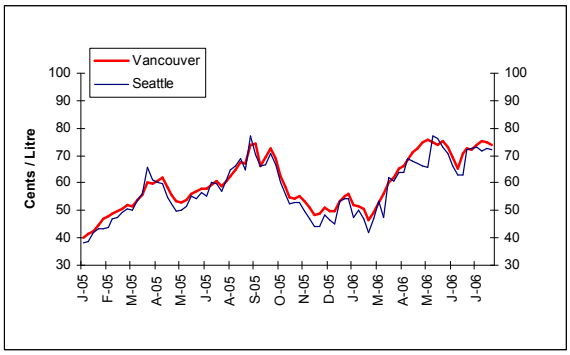
Eastern Canadian prices spiked by approximately 5 cent per litre across all markets the week ending August 3rd to reach highs only surpassed by prices following hurricane Katrina last September. By the following week prices had dropped back down by 8 cents per litre. Western Canadian prices remained fairly stable.

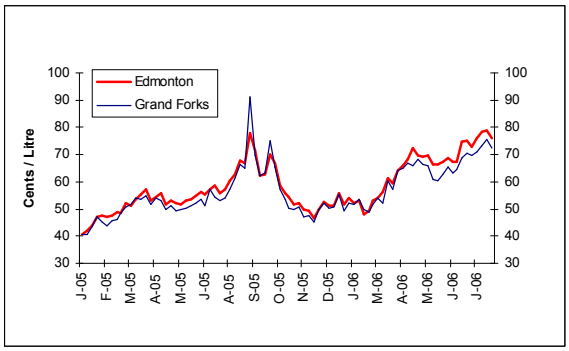
The increase in wholesale prices in Eastern Canada can be attributed to the loss of power by two refineries following a major thunderstorm at the end of July. These refineries both lost multiple days of production which led to a supply disruption in this region, resulting in an increase in wholesale prices in an effort to curb demand. As gasoline production returned to normal, prices in Eastern Canada dropped to reflect the increased supply. This spike was mirrored slightly in the Northeastern United States.

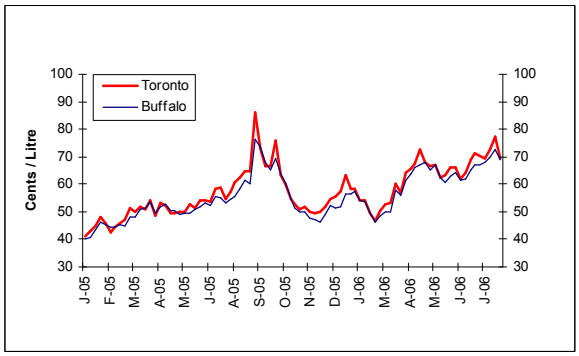
With the price drop the week ending August 11th, the Halifax-Boston spread has also decreased, which indicates that issues encountered in Boston's transition from methyl tertiary butyl ether (MTBE) to ethanol as an additive in reformulated gasoline have started to be resolved.

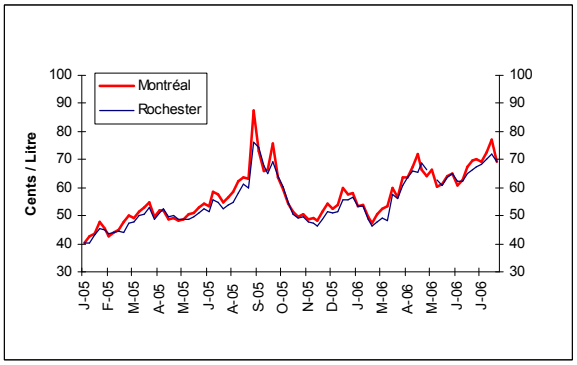
**Figure 4: Wholesale Gasoline Prices**

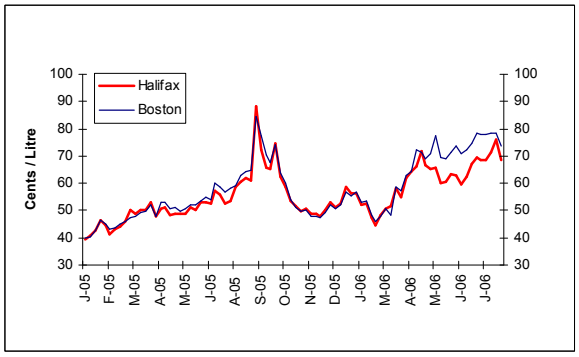
Rack Terminals Prices for Selected Cities on August 10th (Can ¢/L)




**Driving Tips That Save on Fuel**

- Don't drive aggressively – quick starts, hard stops and aggressive driving can increase fuel consumption by up to 37%.
- Drive at the posted speed limit – increasing your cruising speed from 100 km/h to 120 km/h will increase fuel consumption by about 20%.

*Sources: NRCan, Bloomberg*

# Refining and Marketing Margins

The graphs in Figure 5 illustrate three facts about refining margins:

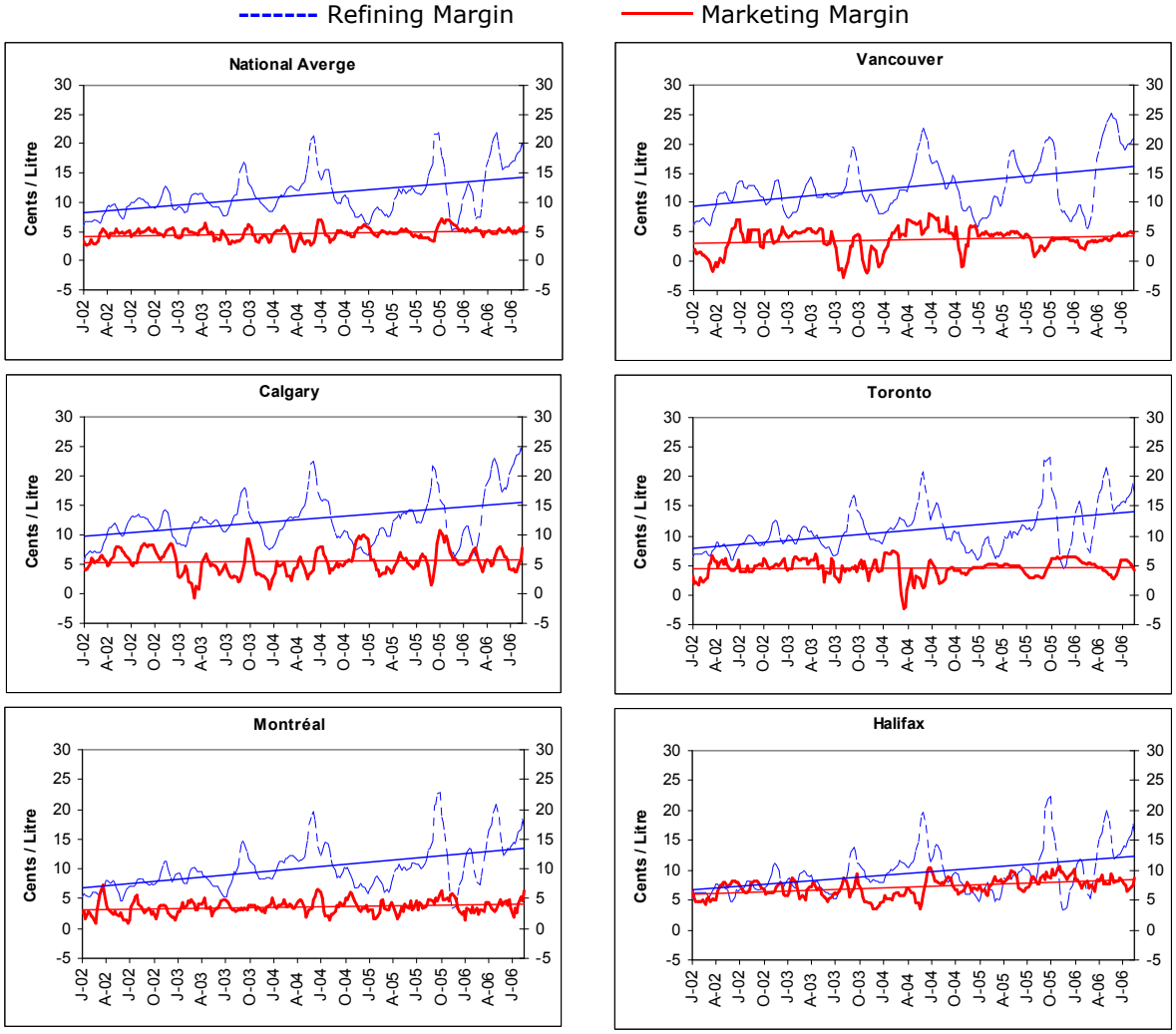
- they are seasonal, rising in the summer and dropping in the winter
- they are volatile and move frequently in response to specific market conditions
- they have been increasing in recent years as supplies of gasoline have tightened and refinery costs have increased.

This year's seasonal spikes have been consistent with those in recent years and have begun to show signs of reversing in the last few weeks.

Some of the costs associated with retailing gasoline vary with the volume of gasoline sold. Other costs are fixed regardless of the volume of business. Urban outlets with higher sales volumes will have a lower cost per unit sold than smaller markets with lower sales per outlet. These smaller outlets will need a higher margin to cover their retailing costs.

Marketing margins can be as high as 30 cents per litre in communities like Whitehorse or Yellowknife and can actually be negative when price competition drives retail pump prices below costs. As Figure 5 shows, the 4-week rolling averages in the selected markets generally fluctuate around a 5 cent per litre trend line.

**Figure 5: Refining and Marketing Margins**




*Source: NRCan*

# Crude Oil Overview

## Major World Events Continue to Impact Crude Oil Prices

Crude oil traders have had lots to make them jittery these days and markets continue to reflect the pressure.

Since the last issue of Fuel Focus, crude oil prices rose by several dollars per barrel on the news that about 400 thousand barrels per day of Alaskan crude oil would be shut in while BP repairs corrosion on the gathering lines between the production wells and the Trans-Alaskan pipeline.

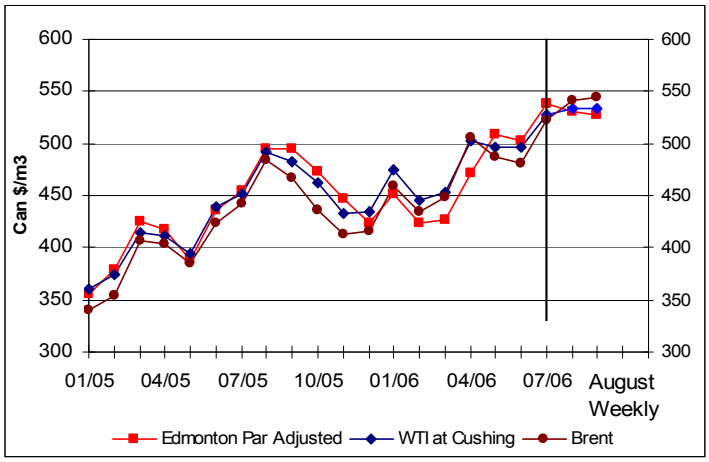
The next week, oil prices declined by almost as much when air traffic and jet fuel demand were curtailed by news of a foiled terrorist attack. This led to heightened airline security around the world and a number of cancelled flights.

The net result of this activity over the last two weeks was an increase of about $3.00 per barrel for Brent and changes of less than $1.00 per barrel for West Texas Intermediate and Canadian Par Crude.

Growth in world oil demand continues to outpace supply additions and any short-term spare production capacity is now almost exclusively in the Middle East. Add to this mix, the on-going political unrest in the Middle East and the uncertainty surrounding another hurricane season in the US Gulf Coast, and crude oil markets can be expected to remain in flux for some time to come.

**Figure 6: Crude Oil Price Comparisons**

(NRCan data on crude oil prices available on August 11th)




**Changes in Crude Oil Prices**

| Crude Oil Prices ($Can) | Week ending: 2006-08-11 | | Change from: | | | |
|---|---|---|---|---|---|---|
| | | | Previous Week | | Last Year | |
| | $/m3 | $/bbl | $/m3 | $/bbl | $/m3 | $/bbl |
| Edmonton Par | 527.84 | 83.92 | -2.36 | -0.37 | +32.55 | +5.17 |
| WTI | 533.33 | 84.79 | +0.50 | +0.08 | +40.41 | +6.42 |
| Brent | 544.15 | 86.51 | +3.30 | +0.52 | +56.93 | +9.05 |

*Source: NRCan*

**The Role of Speculation and Crude Oil Prices**

How much of an impact speculation has had on crude oil prices is impossible to quantify. Crude oil prices are set in the global marketplace and determined in commodity futures markets like the New York Mercantile Exchange (NYMEX) and the International Petroleum Exchange. These two exchanges trade approximately 200 million barrels a day, more than double the actual oil produced. Only about 5% of the oil traded on the NYMEX results in physical delivery of oil, since positions are usually closed out before the contracts expire.

Who are the players? In the futures markets the buyers and sellers can be real producers and users of oil (refiners, utilities and airline or trucking companies), or commodity traders who buy and sell contracts as a long-term investment or a short-term speculative opportunity. Commercial traders are producers and users of the oil who use the futures market to protect themselves against fluctuating crude oil prices and reduce their risk by holding off-setting positions in the physical and commodity markets. The oil producers lock in prices on the futures market to protect against price decreases and refiners hedge against price increases. Non-commercial traders (investment banks, hedge funds and other market participants) are neither producers not users of oil and do not hold offsetting positions in the physical market. They invest in the commodities market in an effort to capitalize on the price volatility. They are willing to assume the risk of significant losses in order to earn potential profit. For the commodity markets to work effectively, both types of traders are needed in the market.

Fuel Focus Info Tip

# HOME HEATING OIL – Part One

## Introduction

The annual cost to heat a home using oil (or natural gas) is dependent on the weather. Average heating costs are usually calculated based on normal weather for the location in question. If the weather is colder or warmer than normal, the quantity of fuel consumed and, therefore, the cost, will change. Heating oil prices are also seasonal, increasing gradually by a few cents per litre through the winter as demand rises and decreasing when demand begins to fall in the Spring. However, if demand is lower or higher than normal because of unusual weather, prices can move counter to the normal seasonal movements.

Heating oil prices are not as transparent as gasoline prices because they are not posted on large roadside signs. In addition, there are a number of discounts available, depending on the supplier. Some suppliers will offer discounts to groups who can guarantee a certain number of customers. Others will reward long-standing customers with loyalty programs or discounts from their posted prices. In some cases, add-ons such as annual furnace servicing will be provided at no extra charge as a type of discount. Consumer prices are contract-specific and can vary from customer to customer, even with the same supplier, depending on the buyer's negotiating skills.

Heating oil is generally purchased in large quantities periodically throughout the heating season. The average capacity of a household oil tank is about 1000 litres so even half a tank full can cost $400- $500 per delivery. Although these expenses are only incurred for a few months, some homeowners can find it difficult to make the payments. Most heating oil suppliers offer a number of payment options to help consumers manage their heating costs.

The next few issues of Fuel Focus will examine some of the payment options available to home heating oil users.

Other parts of this Series:

| | |
|---|---|
| Part 2 – September 15, 2006 | Fixed Price contracts and Capped Price contracts |
| Part 3 – September 29, 2006 | Equal Billing Payments |
| Part 4 – October 13, 2006 | Impact on consumers of higher heating oil prices |

Related Links:

Heating Cost Calculator
http://oee.nrcan.gc.ca/equipment/english/page31.cfm?attr=4