

Fuel Focus

Understanding Gasoline Markets in Canada and Economic Drivers Influencing Prices

Volume 5, Issue 24

December 17, 2010



Copies of this publication may be obtained free of charge from: Natural Resources Canada Petroleum Resources Branch 580 Booth Street, 17th Floor Ottawa, Ontario K1A 0E4

Phone: (613) 992-9612

TTY Service: (613) 996-4397 (Teletype for the hearing-impaired) Fax (613) 995-1913

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 2010

ISSN 1918-3321

Aussi offert en français sous le titre Info-Carburant



National Overview

Retail Gasoline Prices Declined by Less Than 1 Cent per Litre from Last Week

For the week ending December 14, 2010, Canadian average retail gasoline prices decreased by less than 1 cent per litre to \$1.10 per litre. Retail pump prices remained almost flat despite world crude oil prices firming up around US\$90 per barrel and higher North American wholesale prices. Average gasoline pump prices are at their highest levels in more than two years.

Retail gasoline prices are not showing the usual seasonal pattern at this time of the year, compared to previous periods when demand for gasoline normally diminishes after the summer driving season, pushing prices downward. Improving economic conditions in Organization for Economic Cooperation and Development (OECD) countries and the ensuing upward push in oil demand contribute to a tightening of the international oil market balance which is reflected in petroleum product prices.

Recent Developments

- Gasoline Sales Up 12% in the First Nine Months of 2010: Preliminary data indicate that motor gasoline sales increased 12% to 38 billion litres in the first nine months of 2010 compared to the same period in 2009. Diesel fuel oil sales rose 15% to 25 billion litres, while light fuel oil (furnace oil) increased 1% to 3 billion litres in the same time period. (Source: NRCan and Statistics Canada)
- Increased 2011 Global Oil Demand Forecast:
 In its monthly Oil Market Report, the International Energy Agency (IEA) increased its 2011 global oil demand forecast by 260,000 barrels per day (b/d) to 88.8 million b/d, representing growth of 1.6% over last year. Demand growth is expected to be led by developing economies, with China accounting for more than half the growth outside of the OECD members. On the supply side, IEA's projection for non-OPEC supply in 2011 is unchanged at 53.4 million b/d, but it raised its OPEC supply estimate 100,000 b/d to 29.5 million b/d. (Source: IEA, http://omrpublic.iea.org/)
- EPA 2010 Fuel Economy Trends Report: According to the U.S. Environmental Protection Agency's (EPA's) annual fuel economy trends report released on November 17, 2010, for the sixth consecutive year, average carbon dioxide (CO2) emissions have decreased and average fuel efficiency has increased slightly for new cars and light trucks. Based on pre-model year sales estimates, the EPA projects a modest improvement in 2010 to 395 grams of CO2 per mile and 22.5 miles per gallon (mpg). (Source: EPA, http://www.epa.gov/otaq/fetrends.htm)

This is the last issue of Fuel Focus for this year. A 2010 Annual Review is planned for January 14, 2011 and the regular bi-weekly issue will resume on January 21, 2010.

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

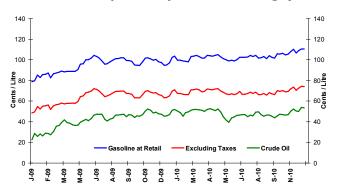
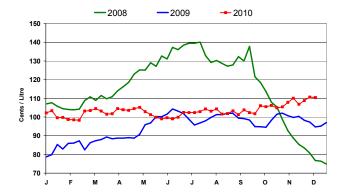


Figure 2: Weekly Regular Gasoline Prices



Changes in Fuel Prices

	Week of:	Change from:			
¢/L	2010-12-14	Previous Week	Last Year		
Gasoline	110.4	-0.3	+15.7		
Diesel	111.7	+1.2	+17.0		
Furnace Oil	96.7	+2.2	+10.4		

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

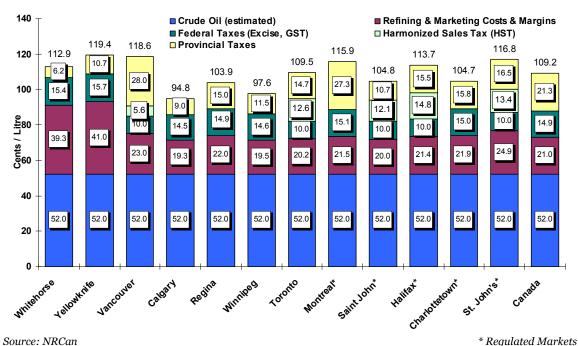
For the period ending December 14, 2010, the **four-week average** regular gasoline pump price in selected cities across Canada was \$1.09 per litre, an increase of 1 cent per litre compared to the previous report of December 3, 2010. Compared to the same period in 2009, the average Canadian pump price is 13 cents per litre higher.

The **four-week average** crude component was 52 cents per litre, an increase of 1 cent compared to two

weeks ago. The crude oil price component of gasoline is 6 cents per litre higher than at the same time last year and accounted for nearly half of the pump price.

At the national level, refining and marketing costs and margins decreased by 1 cent per litre to 21 cents per litre from the previous report two weeks ago. This is 3 cents per litre higher compared to the same period last year.

Figure 3: Regular Gasoline Pump Prices in Selected Cities Four-Week Average (November 23 to December 14, 2010)



ree: NACun Regulated Markets

U.S. EIA Short-Term Energy Outlook

According to the U.S. Energy Information Administration (EIA) *Short-Term Energy Outlook* released on December 7, 2010, the price of West Texas Intermediate (WTI) crude oil may average around \$84 per barrel this winter (October 1, 2010 to March 31, 2011), more than \$6 higher than the average price last winter. Projected WTI prices rise to \$89 per barrel by the end of 2011, a \$2 per barrel increase from last month's Outlook, as U.S. and global economic conditions improve. EIA's forecast assumes U.S. real gross domestic product (GDP) grows 2.7 percent in 2010 and 2.1 percent in 2011, while world real GDP (weighted by oil consumption) grows by 4.0 percent and 3.2 percent, in 2010 and 2011, respectively.

EIA expects regular-grade motor gasoline retail prices to average \$2.88 per gallon this winter, 22 cents per gallon higher than last winter. Projected retail diesel fuel prices average \$3.14 per gallon this winter, an increase of 35 cents per gallon over last winter, while residential heating oil prices average \$3.17 per gallon this winter. In 2011, higher crude oil prices combined with higher refiner margins push annual average prices for motor gasoline and diesel fuel to \$3.00 and \$3.23 per gallon, respectively.

Source: U.S. EIA, http://www.eia.doe.gov/emeu/steo/pub/contents.html







Wholesale Gasoline Prices

For the **week of December 9, 2010,** wholesale gasoline prices ranged from 63 to 67 cents per litre in selected centres. Overall, compared to the previous week, Canadian and American centres recorded price decreases in six of the ten centres. Price changes ranged from a decrease of less than 3 cents per litre to an increase of 2 cents per litre.

Compared to **two weeks** ago, wholesale prices in all the selected centres are higher on average by less than

1 and 6 cents per litre in both Canadian and American centres, respectively.

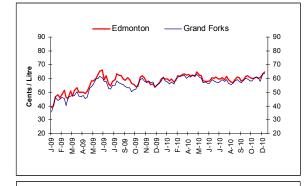
In the last **four weeks**, wholesale prices in most Canadian and American selected centres have increased in the range of 1 to 4 cents per litre.

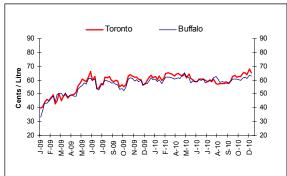
Overall, compared to the same period last year, prices in most selected centres are well above last year's level with increases ranging from 7 to 13 cents per litre.

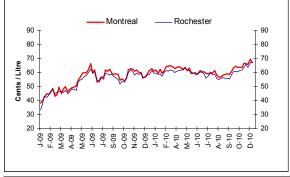
Figure 4: Wholesale Gasoline Prices

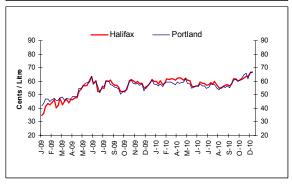
Rack Terminal Prices for Selected Canadian and American Cities Ending December 9, 2010 (Can ϕ/L)











Home Heating System Cost Calculator

Natural Resources Canada's Office of Energy Efficiency (OEE) calculator lets you compare the costs of your current home heating system with the savings offered by newer equipment and other sources of energy. It is for homes using one heating source: electricity, natural gas, propane or oil. The results should be used only as a guide. For a detailed evaluation, consult a heating contractor or other qualified professional.

Source: NRCan, OEE, http://oee.nrcan-rncan.gc.ca/residential/personal/tools/calculators/heatingcalc/index.cfm?attr=4

Sources: NRCan, Bloomberg Oil Buyers Guide



Gasoline Refining and Marketing Margins

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

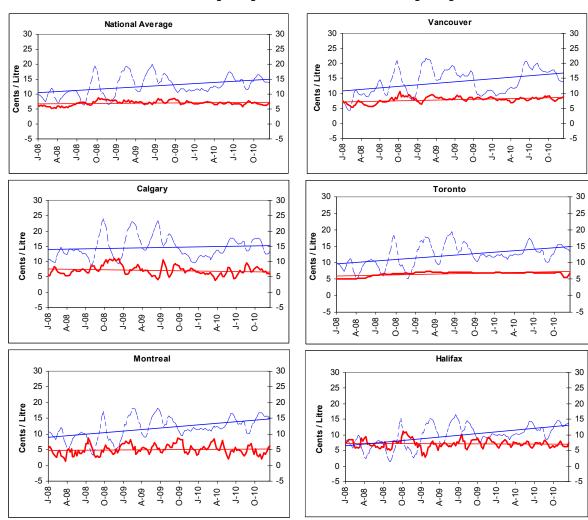
On average, refining margins this week declined by less than 1 cent per litre to 14 cents per litre at the national level compared to the last report on December 3, 2010.

In general, both refining and marketing margins are influenced by specific market conditions, mainly due to changes in product supply and demand balances.

Nationally, the marketing margin rose to 7 cents per litre, less than 1 cent per litre higher than for the same period last year.

This margin, which tends to fluctuate depending on local market conditions, represents the difference between the pump price and the price paid by the retailer to purchase the gasoline and also serves to pay for the costs associated with operating a service station.

Figure 5: Gasoline Refining and Marketing Margins
Four-Week Rolling Average Ending December 14, 2010
----- Refining Margin
Marketing Margin









Crude Oil Overview

World Crude Oil Prices Continue to Recover, but Caution Remains

For the week ending December 10, 2010, prices for the three marker crudes averaged between $\$536/m^3$ and $\$575/m^3$, (US\\$84 to US\\$91 per barrel). WTI and Brent increased \\$8 and \\$11/m^3, respectively, compared to the previous week, while Edmonton Par declined slightly.

World crude oil prices hovered around US\$90 per barrel, the highest level in more than two years, reflecting higher demand in emerging economies. After a year of mild volatility in prices subsequent to the global economic downturn, crude oil prices are now resurging on expected growth in petroleum product demand at a time when usual seasonal demand for finished products declines.

U.S. economic indicators seem to point towards an economic recovery with an expected increase in oil demand for 2011. According to the Organization of Petroleum Exporting Countries (OPEC) the U.S. economy is forecast to grow by 2.4% in 2011. At their meeting on December 13, 2010, in Quito, Ecuador OPEC ministers made no production quota changes, which translates into more stable prices. In addition, U.S. and global crude oil and gasoline inventories remain significant, helping moderate prices.

The International Energy Agency increased its 2011 global oil demand forecast by 260,000 b/d to 88.8 million b/d, representing 1.6% growth over 2010.

950 950 850 850 750 750 650 650 550 450 550 450 350 350 250 250 150 01-03-05-07-09-11-01-03-05-07-09-11- Dec. 08 08 08 08 08 08 09 09 09 09 09 10 10 10 10 10 10 Weekly ■ Edmonton Par Adjusted → WTI at Cushing → Brent

Figure 6: Crude Oil Price Comparisons

Changes in Crude Oil Prices

Crude Oil Types	Week Ending: 2010-12-10		Change From:			
			Previous Week		Last Year	
	\$Can/ m ³	\$US/ bbl	\$Can/ m³	\$US/ bbl	\$Can/ m ³	\$US/ bbl
Edmonton Par	535.87	84.45	-3.60	-0.05	+77.43	+15.39
WTI	561.58	88.50	+7.72	+1.75	+87.56	+17.10
Brent	574.82	90.59	+11.50	+2.35	+88.31	+17.30

Source: NRCan

Crude Oil Benchmarks

The key market for establishing Canadian crude oil prices is the Chicago area, where western Canadian oil competes with U.S. and foreign supplies. The most widely quoted North American crude type is West Texas Intermediate (WTI). Due to daily futures trading on financial markets such as the New York Mercantile Exchange, WTI has become one of the world's benchmark crudes for determining the prices of specific grades of oil at various locations. Its price reflects worldwide oil supply and demand as well as the conditions in the North American market.

The price of North Sea Brent crude is another benchmark used in international crude oil marketing. In Canada, domestic crude oil prices, such as Edmonton Par price, are largely determined by the price of competing crude oils in the Chicago market.

An important component of the crude price is the transportation cost. Ocean-going oil tankers are the cheapest form of long distance energy transportation, while the crude oil pipeline is the second cheapest. The relatively low cost of moving crude oil between regions and continents explains why oil prices are similar around the world.

Source: Canadian Centre for Energy Information 2009.

