



# Fuel Focus

## 2015 Annual Review

The *Fuel Focus 2015 Annual Review* summarizes the events that characterized the Canadian retail gasoline market during 2015. Throughout the year, the bi-weekly *Fuel Focus* report provides readers with regular information on the various aspects of Canadian gasoline markets and the economic drivers influencing prices.

## Highlights

- The average Canadian retail gasoline price for 2015 fell by 15% or just over 19 cents per litre compared to 2014. Canadian retail prices averaged \$1.09 per litre in 2015. The lowest average prices occurred early in the year, when they reached a low of 91.3 cents in January. Average gasoline retail prices reached a peak of \$1.24 during the summer driving season.
- The average Canadian retail gasoline price in 2015 was the lowest it has been since 2010, when it was \$1.04. The annual average retail pump price in 2011 was \$1.24 and \$1.28 from 2012 to 2014.
- Canadian retail diesel prices were down by 23% or almost 25 cents per litre compared to 2014. Overall, diesel retail prices averaged \$1.09 per litre. Furnace oil prices were down by 19% or 20 cents per litre. Furnace oil prices averaged \$1.05 per litre in 2015.
- The *Fuel Focus* also tracks wholesale prices for five Canadian and U.S. cities. These prices are compared in Canadian cents per litre. Based on the Canadian cities we track, wholesale prices averaged 61.2 cents per litre, down 24% or 19 cents per litre compared to 2014. In the U.S. cities, wholesale prices averaged 58.5 cents per litre, down 26% or 21 cents per litre compared to 2014.
- The Canadian exchange rate changed significantly over the course of 2015 as the Canadian dollar weakened compared to the U.S. dollar. The Canadian dollar depreciated by 12% from an average of 82.5 U.S. cents in January, to an average of 73 U.S. cents per litre in December. The depreciating Canadian dollar means that the decline in crude oil prices expressed in Canadian dollars is less than in U.S. dollars.
- The *Fuel Focus* also tracks four crude oil benchmarks. These include Canadian Light Sweet, West Texas Intermediate (WTI), Brent and Western Canada Select (WCS). On average for 2015, Canadian Light Sweet prices were down by 47% in USD per barrel terms and 39% in CAD per m<sup>3</sup>, averaging U.S. \$45.05 / barrel (CAD \$362.33 / m<sup>3</sup>) in 2015.
  - WTI prices were down by similar amounts, 48% in USD per barrel terms and 39% in CAD per m<sup>3</sup> terms, averaging U.S. \$48.68 per barrel (CAD \$254.07 / m<sup>3</sup>).
  - Brent prices were down by 46% in USD per barrel terms, and 38% in CAD per m<sup>3</sup> terms, averaging U.S. \$53.60 per barrel, and CAD \$431.16 / m<sup>3</sup>.
  - Finally, WCS was down 52% in USD per barrel terms, and 45% in CAD per m<sup>3</sup>, averaging \$35.64 U.S. per barrel and CAD \$230.37 / m<sup>3</sup>.

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

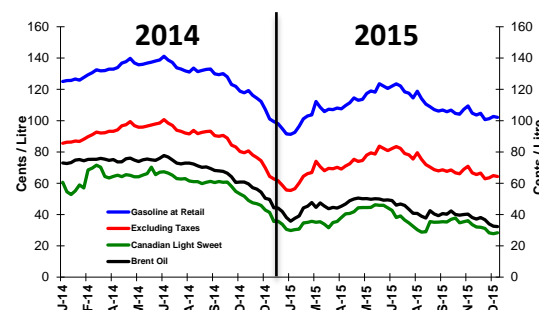
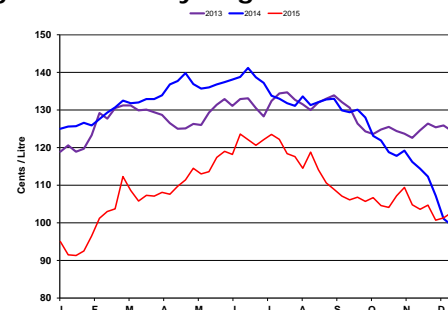


Figure 2: Weekly Regular Gasoline Prices



## Changes in Fuel Prices

¢/L	Annual (National Average)		
	2015	2014	Change
Gasoline	108.9	128.1	-19.2
Diesel	109.2	133.9	-24.7
Furnace Oil	105.1	125.1	-20.0
Natural Gas Prices in \$/GJ			
Alberta (AECO-C)	2.56	4.18	-1.62
Ontario (Dawn)	3.57	6.42	-2.85

Source: NRCAN, Bloomberg

## Natural Gas Prices for Vehicles

2015 average	¢/kg	¢/L gasoline equivalent	¢/L diesel equivalent
Vancouver	119.4	78.8	81.7
Edmonton	115.0	75.9	78.7
Toronto	128.4	84.7	87.8

Source: ¢/kg Kent Marketing Services Limited

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## Retail Gasoline Overview

The Canadian average gasoline retail pump price was \$1.09 in 2015. This represents a decrease of 19 cents per litre compared to 2014. The following breakdown shows how various components of the retail price changed in 2015:

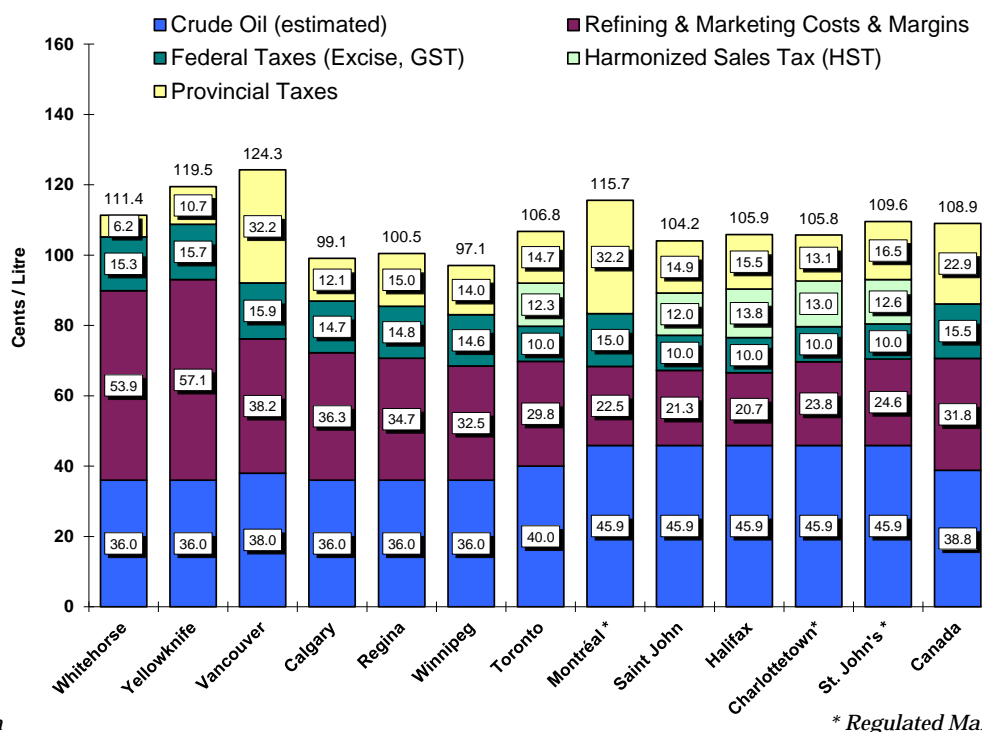
- The crude oil component averaged almost 39 cents per litre in 2015, a decrease of 24 cents when compared with the average of 63 cents per litre in 2014.
- Refining and marketing costs and margins overall were 32 cents per litre, an increase of 6 cents per litre over the 25 cents per litre in 2014.
- Taxes decrease slightly as a component of retail prices and averaged 38.4 cents.

The decline in the retail price is reflected in lower sales taxes (GST, HST and the QST) because they are based on a percentage of the price. This effect was counterbalanced by fuel tax increases in both Alberta and New Brunswick.

The decline in retail prices was not the same across Canada. For example, average retail prices decreased the most in Halifax, where they were down 25 cents per litre from 2014.

The average retail price decreased the least in Calgary, partly as a result of an increase in fuel taxes introduced on March 27, 2015. In Vancouver average retail prices decreased less than in other centres, as a result of refining and marketing margins which were 9 cents higher than the previous year.

**Figure 3: Regular Gasoline Pump Prices in Selected Cities**  
Annual Average for 2015



Source: NRCan

**Regular Gasoline Pump Price Components in Selected Cities**

Change in Annual Average for 2015 over 2014 (cents per litre)

Cities	WH	YK	VA	CY	RE	WG	TO	ML	SJ	HX	CH	SJ's	CA
Provincial Taxes	0.0	0.0	0.0	3.1	0.0	0.0	0.0	-1.4	1.3	0.0	-0.7	0.0	-0.6
HST							-2.4		-2.6	-3.3	-0.5	-2.3	
Fed. Taxes (Includes GST)	-1.1	-1.0	-0.6	-0.7	-0.9	-1.1	0.0	-1.0	0.0	0.0	0.0	0.0	-0.3
R & M Costs and Margins	0.0	2.6	7.9	6.4	3.8	0.3	-0.3	5.1	2.9	2.6	2.2	6.5	6.4
Crude Oil	-22.3	-22.3	-20.3	-22.3	-22.3	-22.3	-18.3	-24.4	-24.4	-24.4	-24.4	-24.4	-24.3
Retail Price	-23.3	-20.7	-12.9	-13.4	-19.3	-23.0	-20.9	-22.0	-22.7	-25.1	-23.4	-20.2	-19.0

Note: An estimate of crude oil transportation costs is included in the crude oil estimates for 2015, but not for the 2014 estimates. This affects the following cities: Vancouver (2 cents per litre), Toronto, (4 cents per litre), and Atlantic Canada and Quebec (3 cents per litre).



## Wholesale Gasoline Prices

In 2015, wholesale gasoline prices in Canada and the U.S. followed similar trends. These are plotted below in Canadian cents per litre. The annual average wholesale price in Canada was 61.2 cents per litre, 2.7 cents per litre higher than the 58.5 cents per litre average for the American cities.

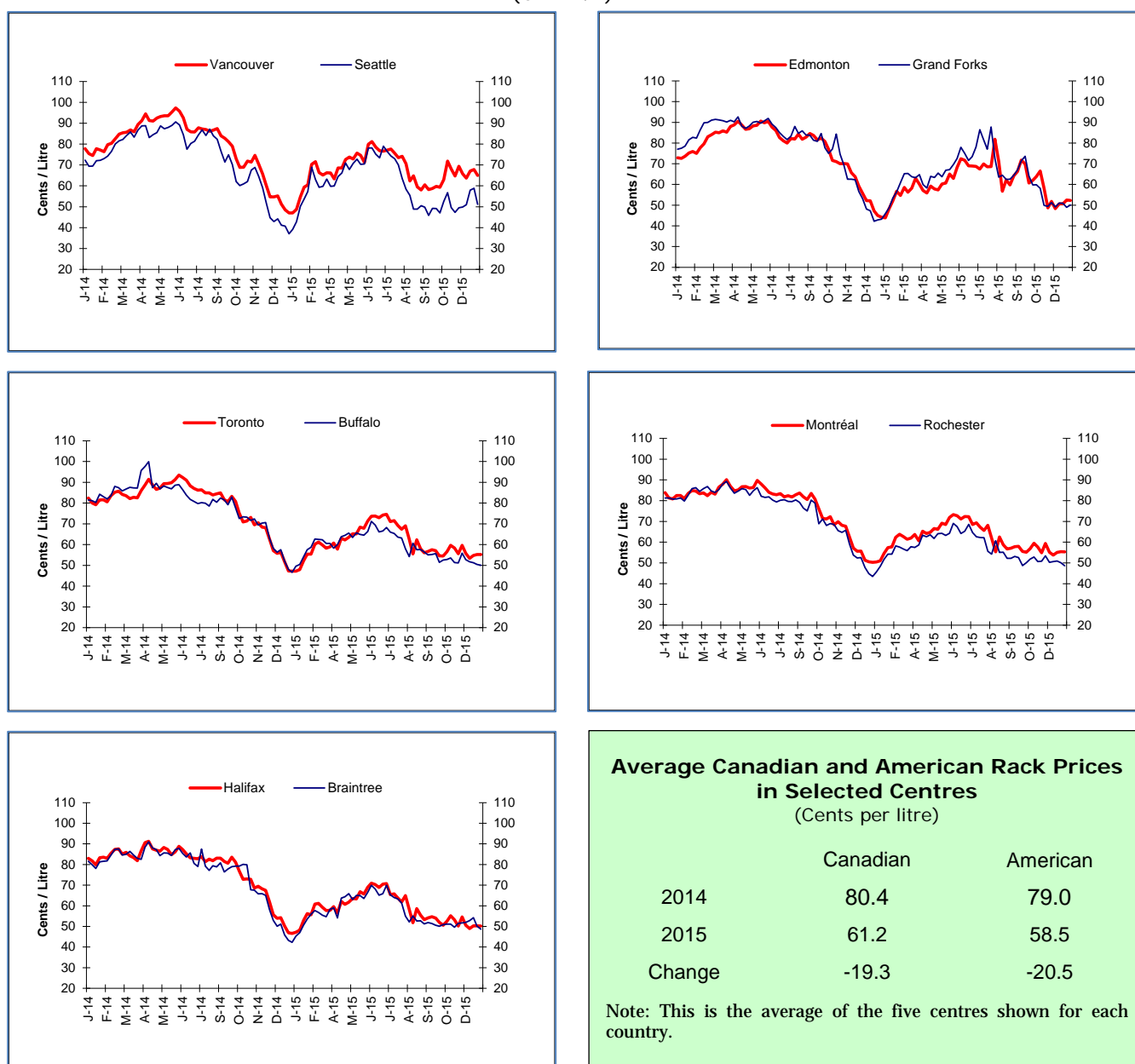
Overall, Canadian and American wholesale gasoline prices followed each other closely. Looking at the average of the Canadian cities below, prices ranged between 47 and 75 Canadian cents per litre. In the American cities below, average prices ranged between 43 and 73 Canadian cents per litre.

In Western Cities, wholesale prices in 2015 averaged between 59 and 66 cents, and were between 15 and 19 cents less than they averaged in 2014. The largest decrease was in Edmonton, where prices were 19 cents lower than in 2014.

In Eastern cities, wholesale prices in 2015 averaged between 58 and 61 cents, which was between 18 and 23 cents less than they averaged in 2014. The largest decrease was in Halifax and in Braintree (Boston), where prices declined by almost 23 cents.

**Figure 4: Wholesale Gasoline Prices (Weekly Average)**

Rack Terminal Prices for Selected Canadian and American Cities – 2014 and 2015  
(CAN ¢/L)





## Gasoline Refining and Marketing Margins

**Average annual national refining margins for gasoline** ranged from a weekly low of 13 cents per litre to a high of 37 cents per litre in 2015. In comparison, margins fluctuated in the range of 11 to 22 cents per litre in 2014. Overall, the average national refining margin in 2015 was 23 cents per litre, 6 cents per litre above the 2014 average of 17 cents.

**Refinery margins** refer to the difference between the price of crude oil and the wholesale price at which the refiner can sell gasoline. The margin includes the cost associated with refining the product as well as a profit for the refiner. These margins fluctuated throughout the year and were above 30 cents per litre towards the end of the summer.

**Marketing margins** represent the difference between the wholesale and retail prices of gasoline. This margin pays for the costs associated with operating a service station and profit for the operator.

These margins fluctuated within a more narrow range and were more stable than refining margins. Nationally, the average margin increased from last year by 0.6 cent per litre to 9 cents per litre.

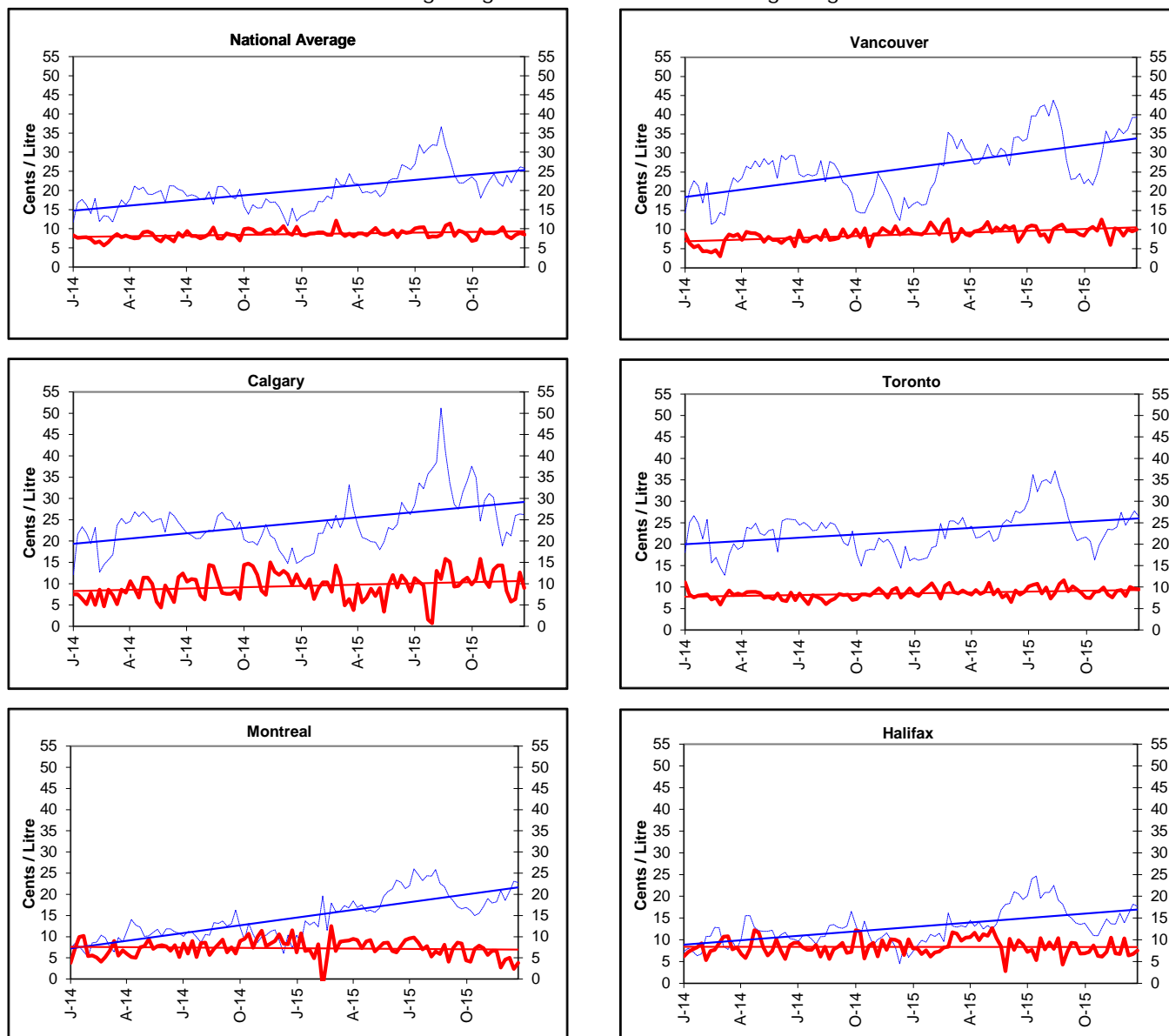
Among the five cities tracked below, Calgary ended the year with the highest annual average marketing margins at nearly 10 cents per litre, slightly higher than in 2014. Montreal ended the year with the lowest average marketing margins at 6.9 cents per litre, down slightly from 7.6 cents per litre in 2014.

**Figure 5: Gasoline Refining and Marketing Margins**

Weekly Margins for 2015

----- Refining Margin

----- Marketing Margin



Source: NRCan



## Crude Oil Overview

Over the course of 2015, the Canadian dollar weakened against the U.S. dollar. The Canadian dollar depreciated by 12% from an average of 82.5 U.S. cents in January, to an average of 73 U.S. cents per litre in December. The depreciating Canadian dollar meant that the decline in crude oil prices expressed in Canadian dollars is less than in U.S. dollars.

The *Fuel Focus* tracks four crude oil benchmarks, Canadian Light Sweet, West Texas Intermediate (WTI), Brent and Western Canada Select (WCS).

On average for 2015, Canadian Light Sweet prices were down by 47% in USD per barrel terms and 39% in CAD per m<sup>3</sup>, averaging U.S. \$45.05 / barrel (CAD \$362.33 / m<sup>3</sup>) in 2015. WTI prices were down by similar amounts, 48% in USD per barrel terms and 39% in CAD per m<sup>3</sup> terms, averaging U.S. \$48.68 per barrel (CAD \$254.07 / m<sup>3</sup>). Brent prices were down by 46% in USD per barrel terms, and 38% in CAD per m<sup>3</sup> terms, averaging U.S. \$53.60 per barrel, and CAD \$431.16 / m<sup>3</sup>. Finally, WCS was down 52% in USD per barrel terms, and 45% in CAD per m<sup>3</sup>, averaging \$35.64 U.S. per barrel and CAD \$230.37 / m<sup>3</sup>.

Global oil prices are 70% off their July 2014 peak, with the three light benchmarks ending the year in the U.S. \$34 to \$39 per barrel range (CAD \$293/m<sup>3</sup> to CAD \$336/m<sup>3</sup>). WCS ended the year at nearly U.S. \$24 (\$206 CAD / m<sup>3</sup>) per barrel.

The price differentials between Canadian benchmarks and their international counterparts narrowed over the course of 2015, compared to 2014. In 2015, the discount for Canadian Light Sweet compared to Brent ranged between U.S. \$5 and \$14 per barrel (CAD 42.4 and 110.8 / m<sup>3</sup>) with an annual average of U.S. \$8.50 per barrel (CAD \$68.8 / m<sup>3</sup>).

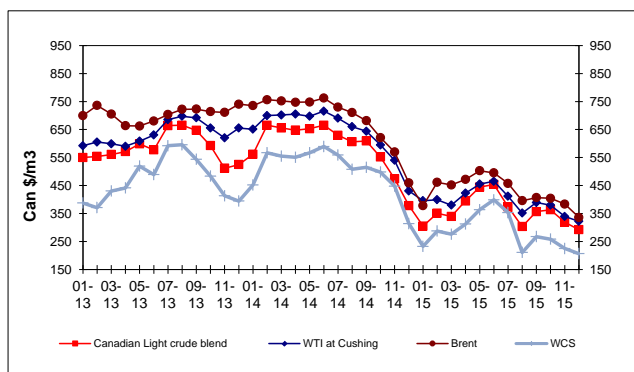
When compared with WTI, the Canadian Light Sweet differential ranged between U.S. \$0.94 and \$7 per barrel (CAD \$7.20 and \$53 CAD/m<sup>3</sup>), with an average of U.S. \$3.60 (CAD \$10.90 / m<sup>3</sup>). WCS ranged from U.S. \$8.50 to \$17 (CAD \$65 to CAD \$140 / m<sup>3</sup>) and averaged U.S. \$13 per barrel (CAD \$105 / m<sup>3</sup>).

The recent decline in oil prices is driven by supply and demand factors. On the supply side, oil markets are currently oversupplied for a number of reasons. For example, the initial decline in oil prices was related to increases in oil production in the US and in some countries which are members of the Organization of Petroleum Exporting Countries (OPEC) (e.g., Libya and Iraq).

These supply-side dynamics combined with lower than expected oil demand growth in China and continued decreases in oil demand in other key regions to create a scenario in which supply growth began to outpace demand growth, causing prices to begin to decline abruptly in June 2014. Global oversupply conditions were exacerbated in November 2014 and December 2015 when OPEC members decided to maintain record production levels despite low oil prices.

These factors combined with the potential re-entry of Iranian production into global markets following the successful negotiation of the Iranian nuclear agreement in 2015 have put further downward pressure on oil prices.

Figure 6: Crude Oil Price Comparisons



Changes in Crude Oil Prices

Crude Oil Type	2015		2014		Difference	
	\$Can/ m <sup>3</sup>	\$US/ bbl	\$Can/ m <sup>3</sup>	\$US/ bbl	\$Can/ m <sup>3</sup>	\$US/ bbl
Canadian Light	362.33	45.05	594.53	85.56	-232.20	-40.51
WTI	391.54	48.68	645.62	92.91	-254.07	-44.23
Brent	431.16	53.60	691.38	99.50	-260.22	-45.89
WCS	286.71	35.64	517.08	74.41	-230.37	-38.77

Source: NRCan





## Federal and Provincial Consumption Taxes on Petroleum Products

(As of December 31, 2015)

	Gasoline	Diesel	Propane (motor vehicle)	Furnace Oil/ Natural Gas (for heating)
<b>Federal Taxes (Fixed in Cents/Litre or in % where indicated)</b>				
Excise Tax	10.0	4.0	-	-
Goods and Services Tax	5%	5%	5%	5%
OR: Harmonized Sales Taxes <sup>(1)</sup> (in most provinces):				
Newfoundland and Labrador, Ontario, and New Brunswick	13%	13%	13%	13%
Nova Scotia <sup>(2)</sup>	15%	15%	15%	5%
Prince Edward Island	14%	14%	14%	5%
<b>Provincial Taxes (Fixed in Cents/Litre or in % where indicated)</b>				
Newfoundland and Labrador	16.5	16.5	7.0	
Prince Edward Island	13.1	20.2		
Nova Scotia	15.5	15.4	7.0	
New Brunswick	15.5	21.5	6.7	
Quebec <sup>(3)</sup>	19.2	20.2		
Quebec Sales Tax (QST)	9.975%	9.975%	9.975%	9.975%
Ontario	14.7	14.3	4.3	
Manitoba	14.0	14.0	3.0	
Saskatchewan	15.0	15.0	9.0	
Alberta	13.0	13.0	9.4	
British Columbia plus Carbon Tax <sup>(4)</sup>	14.5	15.0		
	6.67	7.67	4.62	7.67/5.70
Yukon	6.2	7.2		
Northwest Territories <sup>(5)</sup>	10.7/6.4	9.1		
Nunavut <sup>(5)</sup>	10.7/6.4	9.1		
<b>Transportation Taxes (Fixed in Cents/ Litre)</b> (in addition to federal and provincial taxes)				
Montréal <sup>(3)</sup>	3.0			
Vancouver <sup>(4)</sup>	11.0	11.0		
Victoria <sup>(4)</sup>	3.5	3.5		

### Notes:

- Where the HST is in place, the federal portion of the tax is 5%. GST or HST applies to the retail price excluding GST/HST.
- Nova Scotia has a point of sale tax rebate of the provincial portion of the HST (8%) on furnace oil.
- In Quebec, gasoline, diesel and propane taxes are reduced by varying amounts in certain remote areas and within 20 kilometres of the provincial and U.S. borders. The Quebec provincial sales tax (QST) applies to all petroleum products at a rate of 9.975%. The QST is calculated on the retail price, which includes the Quebec per litre tax, federal excise tax and an urban tax of 3.0 cents per litre that is also added to gasoline sold in Montréal and surrounding municipalities.
- British Columbia applies a carbon tax on all fuels. In the Greater Vancouver and Victoria areas, there are additional transportation taxes of 11.0 and 3.5 cents per litre, respectively, on gasoline and diesel. More information is available on the Government of British Columbia's website at <http://www2.gov.bc.ca/gov/content/taxes/sales-taxes/motor-fuel-carbon-tax>
- In the Northwest Territories and Nunavut, gasoline is taxed at 6.4 cents per litre in communities not served by a highway system.

The order in which taxes are applied is as follows: a) consumption and excise taxes (municipal, provincial and federal) are added to the ex-tax price, then b) the GST/HST are calculated and added onto the sum from a).