

Gasoline Report

a weekly summary



FOR THE WEEK ENDING MAY 28, 2018

- o **Lower crude oil and North American wholesale prices caused the Ontario retail price of regular unleaded gasoline to decline by 1.5 cents from a 47-month high to 135.9 cents a litre.** Prices fell by 2.5 cents in Windsor (from a 47-month high), 1.9 cents in Toronto (from a 47-month high), 1.8 cents in London (to a two-month low), 1.5 cents in Ottawa (from a 47-month high), and 0.7 cents in Sault Ste. Marie (from a 44-month high). Prices rose by 6.2 cents in Thunder Bay (to a 47-month high) and less than a cent in Sudbury (to a 44-month high), North Bay, and Timmins (to a 45-month high). London had the lowest average price for the fourth straight week. The Ontario average retail diesel price increased for the seventh straight week, by 1.3 cents to 130.7 cents, the highest since July 2014. **The Canadian retail regular unleaded gasoline price declined by 1.6 cents to 137.6 cents.** Prices fell by 7.7 cents in Edmonton (from a near 10-year high), 7.1 cents in Calgary (from a near 10-year high), 4.0 cents in Quebec City (from a 47-month high), 2.3 cents in Winnipeg, 1.9 cents in Toronto (from a 47-month high), and less than a cent in Vancouver and Regina. Prices rose by 2.0 cents in Montreal, 1.4 cents in Halifax (to a 44-month high), 1.3 cents in St. John's (to a 17-month high), and 0.2 cents in Saint John (to a 45-month high). The Canadian retail diesel price increased for the seventh straight week, by 1.7 cents to 134.2 cents, the highest since July 2014.
- o **Catalyzed gasoline particulate filters (GPFs) are effective at reducing polycyclic aromatic hydrocarbon (PAH) and nitrated PAH emissions from gasoline direct-injection (GDI) vehicles, as well as particulate matter, black carbon, and total and solid particle number emissions, say the University of California, Riverside and the Manufacturers of Emission Controls Association (MECA).** Although gasoline direct-injection (GDI) vehicles offer the potential for better fuel economy, less fuel pumping, and charge air cooling, they can emit more particulate matter (PM) than port fuel injection vehicles. The study tested two 2016 model year GDI vehicles in their original configuration and with a catalyzed GPF and found that emissions of total hydrocarbons, carbon monoxide, and nitrogen oxides also were generally reduced, with no fuel economy or CO₂ emission penalties. The study said that, given the projected rate of market penetration of GDI vehicles in the U.S. market, there is need for better information about the health risk associated with PM emissions from GDI vehicles that do not have a GPF. As well, since GPF penetration rates in the U.S. are lower than in the European Union, owing to the EU's stricter control of particle number emissions, this should raise concerns about the lack of societal and air quality benefits from the GDI fleet, said the study (*Environmental Science & Technology*, Green Car Congress, <https://pubs.acs.org/doi/10.1021/acs.est.7b05641>).
- o **While diesel's share of new car registrations in the European Union (EU) fell from a peak of 55% in 2011 to 49% in 2016 and continues to fall, this should not prevent automakers from meeting stringent vehicle CO₂ emissions standards, says the International Council on Clean Transportation.** This will be the case even if diesel's share of registrations falls to 15% in 2025, because it will be more compelling and cost-effective to improve gasoline engine efficiency and introduce more hybrid electric powertrains. In fact, declining diesel market share would reduce CO₂ emission compliance costs. Gasoline engine efficiency is approaching that of diesel, through such technologies as direct injection, turbocharging and downsizing, cooled exhaust gas recirculation, and variable valve timing, and new advances like variable compression ratio engines will further erode diesel's efficiency advantages. This, plus the lower cost of gasoline engines and exhaust aftertreatment systems (relative to diesel), will enable gasoline cars to become as CO₂-efficient as diesels while still costing less. Hybrid electric vehicles in the small and lower medium sizes can be up to 20% more CO₂-efficient than comparable diesels, and their cost advantage will widen as battery costs decline and diesel exhaust aftertreatment technology becomes increasingly complex, says the council (Green Car Congress).
- o **Ontario petroleum refiners processed 339,000 barrels a day of crude oil and equivalent in 2017, an increase of 3% from 2016 (when runs fell to their lowest level since records began in 1980) and a three-year high.** Ontario refineries took delivery of 271,000 b/d of domestic crude, up 2.4% from an eight-year low. Foreign crude imports (all from the United States) rose by 30% to 70,000 b/d, the highest in seven years, and their share of total crude receipts increased from 16.9% to 20.5%, a seven-year high. Some data are incomplete due to Statistics Canada confidentiality requirements (Statistics Canada, Ministry of Energy).

Retail Prices**Regular Unleaded Gasoline**
(Canadian Cents/Litre)

Ontario	<u>May 22</u>	<u>May 28</u>	<u>+/-</u>
Ottawa	137.7	136.2	-1.5
Toronto West	138.9	137.2	-1.7
Toronto East	138.7	136.7	-2.0
Windsor	138.0	135.5	-2.5
London	127.4	125.6	-1.8
Sudbury	134.8	135.6	0.8
Sault Ste. Marie	138.4	137.7	-0.7
Thunder Bay	139.1	145.3	6.2
North Bay	129.4	129.8	0.4
Timmins	<u>139.9</u>	<u>140.1</u>	<u>0.2</u>
 <i>Ontario Average</i>	 137.4	 135.9	 -1.5

Canada	<u>May 22</u>	<u>May 29</u>	<u>+/-</u>
St. John's, Nfld	137.6	138.9	1.3
Charlottetown	132.3	132.3	0.0
Halifax	132.1	133.5	1.4
Saint John, N.B.	129.9	130.1	0.2
Quebec City	141.5	137.5	-4.0
Montreal	136.6	138.6	2.0
Toronto	139.1	137.2	-1.9
Winnipeg	124.4	122.1	-2.3
Regina	124.7	124.5	-0.2
Edmonton	132.8	125.1	-7.7
Calgary	133.3	126.2	-7.1
Vancouver	<u>158.8</u>	<u>158.5</u>	<u>-0.3</u>
 <i>Canada Average</i>	 139.2	 137.6	 -1.6

Source: Ministry of Energy; Kent Group Ltd.

Rack & Spot Prices**Regular Unleaded Gasoline**
(Canadian Cents/Litre, Ex-Tax)

<u>Date</u>	<u>Toronto Rack</u>	<u>New York Spot Barge</u>	<u>Differential</u>	<u>Exchange (U.S.¢)</u>
May 18	87.05	75.15	11.90	77.64
May 25	86.90	75.49	11.41	77.08

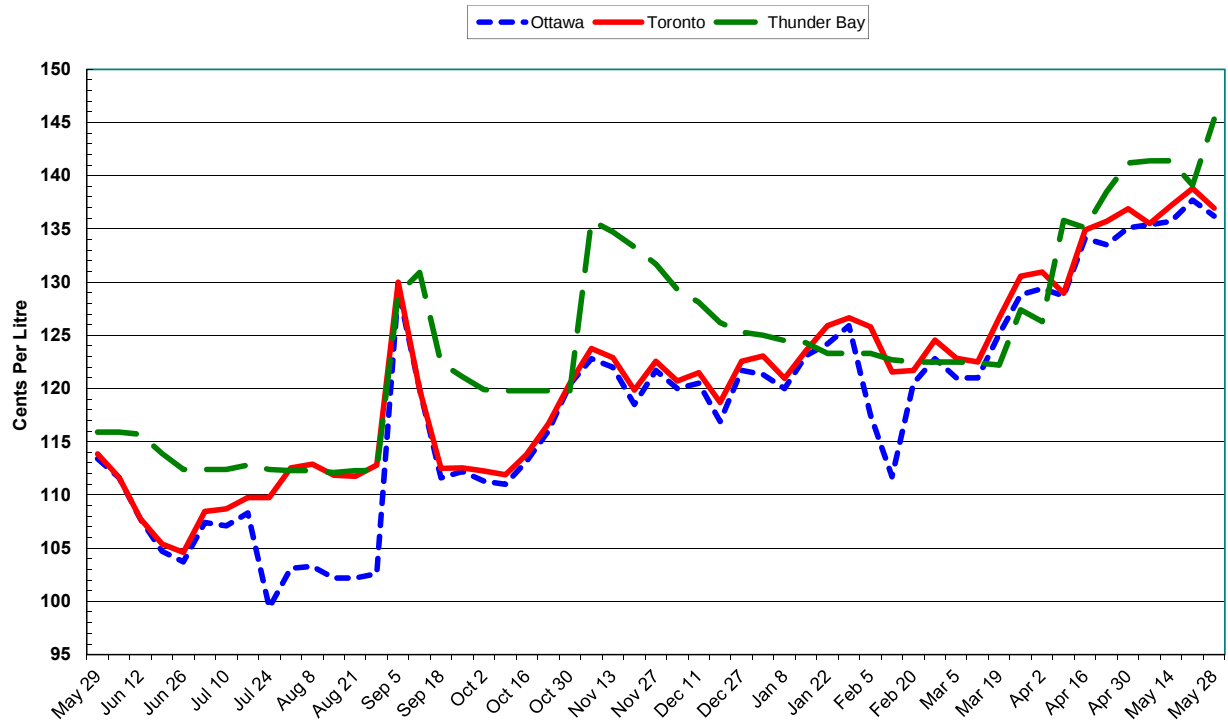
Source: Bloomberg Oil Buyer's Guide; Oil Price Information Service; Bank of Canada

Futures Prices**Petroleum Futures Prices**

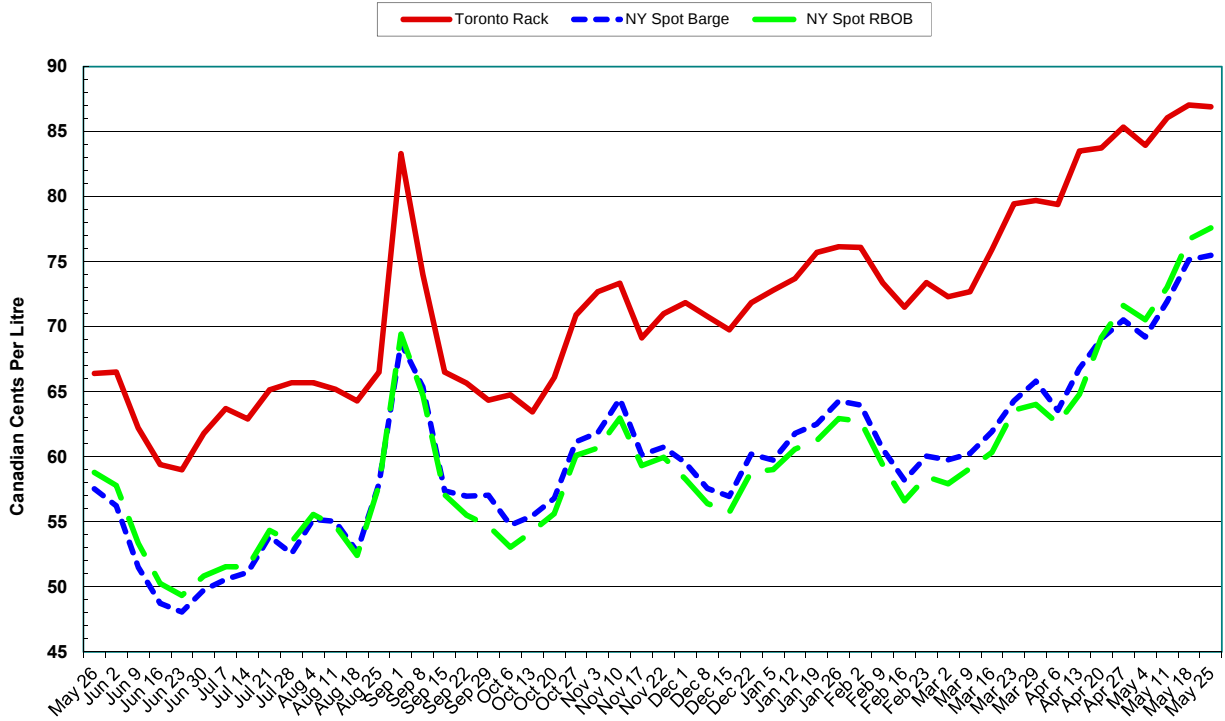
<u>Date</u>	<u>WTI Crude (NY) (US\$/bbl)</u>	<u>Reg.Unleaded RBOB (NY) (US¢/USgal)</u>	<u>Crack Spread (US\$/bbl)</u>
May 18	71.28	223.33	22.52
May 25	67.88	218.14	15.18

Source: CME Group (NYMEX)

Retail Gasoline Prices (2017-2018)
Regular Unleaded



Toronto Rack/NY Spot Barge/NY Spot RBOB (2017-2018)
Regular Unleaded



Petroleum Futures Prices (2017-2018)

