

PETROLEUM MARKETS

UNDERSTANDING THEIR DYNAMICS

“In recent years, global economic growth drove demand for oil products and pushed the production levels of most producing countries to unprecedented levels.”



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ISSUES AFFECTING PUMP PRICES

The petroleum industry is comprised of three separate but related sectors: crude oil and natural gas production, petroleum refining and product marketing. Marketing includes wholesaling as well as selling products to consumers through service stations and other outlets.

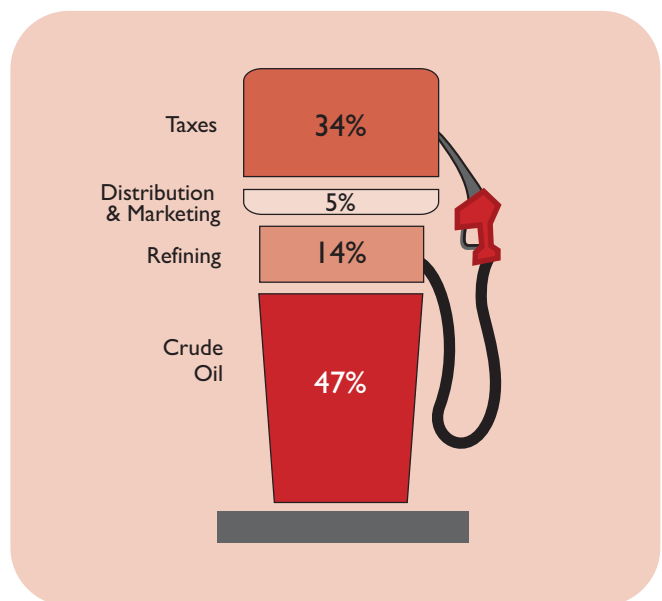
“THE CANADIAN OIL INDUSTRY IS A PRICE TAKER FOR CRUDE OIL AND TAXES THAT REPRESENT MORE THAN 80% OF THE PUMP PRICE...”

The gasoline market is a competitive market, and Canadians enjoy one of lowest pre-tax prices in the world. The price we pay at the pump is influenced by four major factors which include:

- municipal, provincial and federal taxes
- the market for crude oil and exploration (international)
- the market for refined or ‘finished product’ (continental)
- the retail gasoline markets (local)

In 2006, Canadians paid an average of 98 cents per litre (cpl) for gasoline. The following figure illustrates the impact of these four major factors on pump prices.

PUMP PRICE COMPONENTS:



Source: MJErvin, 2006, Regular gasoline at 98 cpl

Since the Distribution & Marketing and Refining sectors accounted for an average of 19 out of 98 cpl of gasoline in 2006, you can see from this figure that the petroleum industry had an influence on about 19% of the total price of gasoline paid by consumers at the pump.

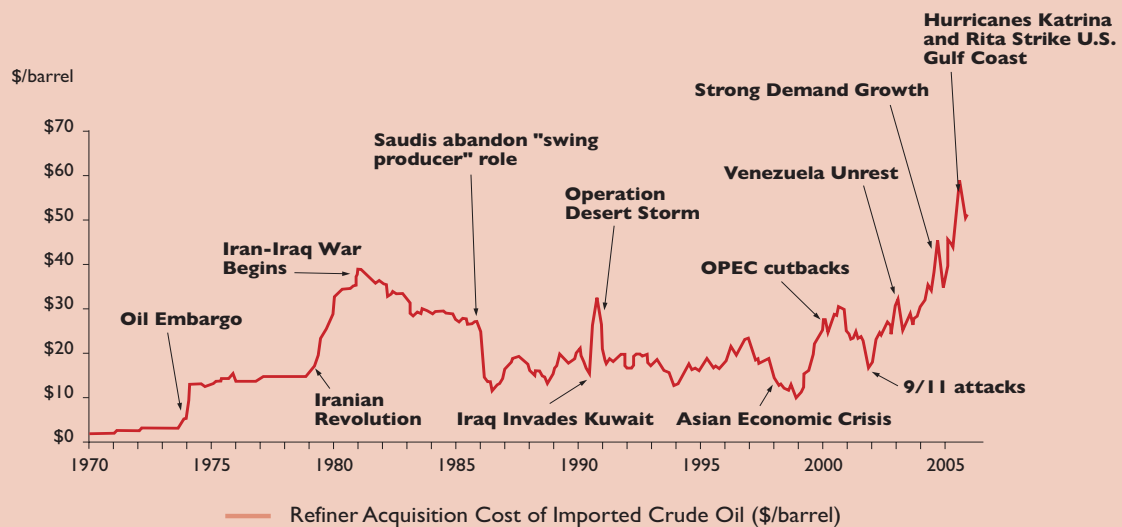
THE INTERNATIONAL MARKET FOR CRUDE OIL

Crude oil is the raw material that is refined into finished products, including gasoline, diesel and jet fuels, heating oil, lubricants and asphalt. It is traded globally and prices are established in a worldwide marketplace. This global market reacts to supply and demand and the expectations of buyers as to where prices might be going. This includes assessments of volatile factors such as economic conditions, natural disasters and geopolitical or military events, especially in major oil-producing regions such as the Middle East. The price is usually expressed in \$US per barrel.

When thinking about the world market, the Organization of Oil Exporting Countries (OPEC) immediately should come to mind. Founded in 1960, OPEC now has 12 members that account for nearly 40% of global oil production and hold three quarters of the planet's known oil reserves. OPEC is a cartel and adjusts its supply to maintain prices.

Recent economic growth around the world, particularly in Asia, has led to increased demand and has driven the production levels of most oil exporting countries to record levels. Lately, the daily excess capacity of OPEC members has been less than one million barrels a day, concentrated mostly in Saudi Arabia. OPEC remains a dominant player in the global oil market.

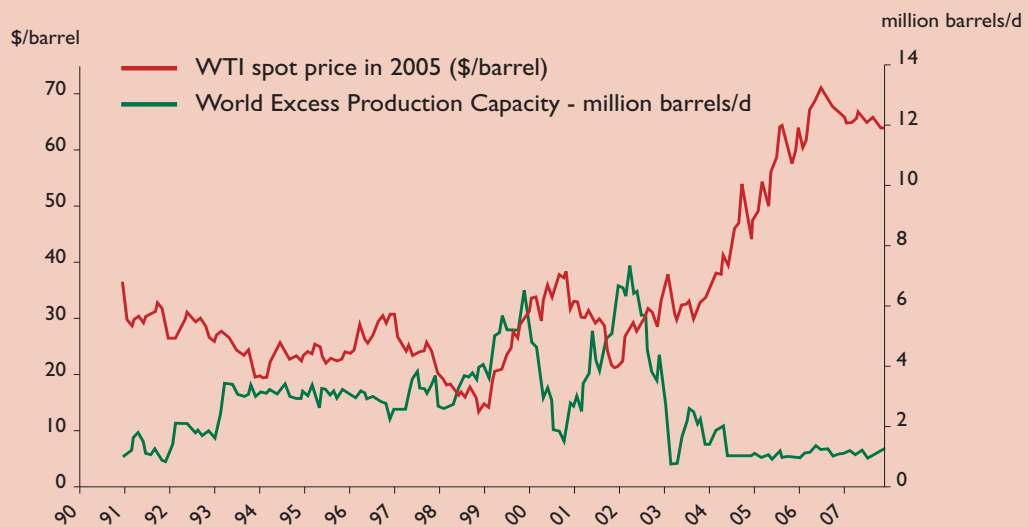
MAJOR EVENTS AND WORLD OIL PRICES 1970-2005



Source : U.S. Energy Information Administration



LACK OF EXCESS PRODUCTION CAPACITY PUSHES WORLD CRUDE OIL PRICES UPWARD



Source : U.S. Energy Information Administration

This tight balance between supply and demand in the world market of over 85 million barrels a day encourages speculation. The slightest incident or crisis sends oil prices in the London and New York markets soaring or plummeting, thus exacerbating speculation and, in turn, having repercussions on prices.

One thing is certain; since the late 1990s the run-up in world crude oil prices is what has really driven the price at the pump in Canada upwards.

Although Canada is an oil producer, the fact remains that the price of crude is essentially determined by world markets. In fact, oil companies active in exploration in Canada (which accounts for about 3% of global supply) have no other choice but to stay in step with the world market to remain competitive globally.

In summer 2006 the price of crude topped the US\$78 a barrel mark, mainly because of global conditions. The price was driven upward not only by the heavy demand for oil from most Asian countries such as China and India, but also by political tensions stemming from conflicts in the Middle East. As a consequence, the price of crude oil reached peaks not seen since the oil crisis in the late 1970s.



TAXES

Taxes account for an important portion of gasoline prices, representing approximately 34% of the price at the pump in 2006.

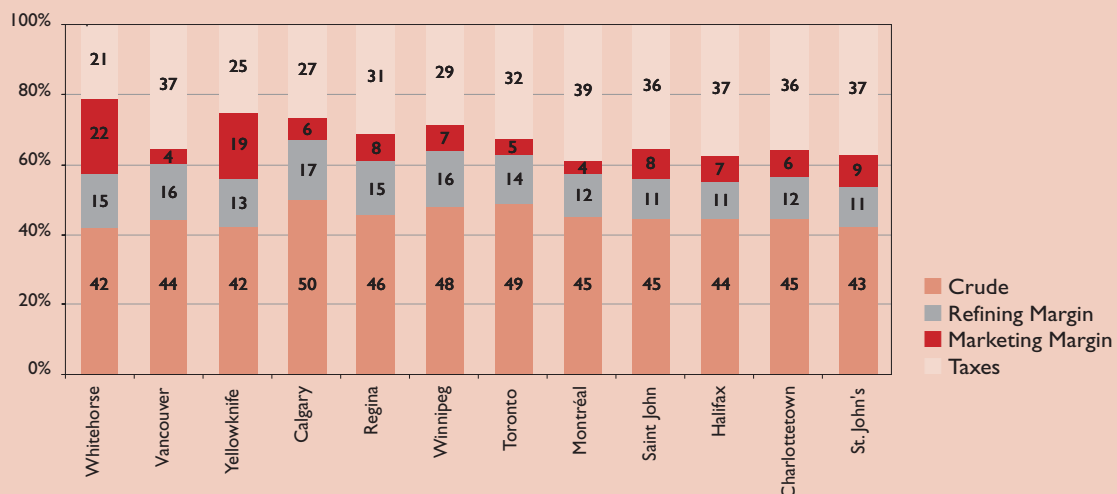
Canadian federal and provincial gasoline taxes are about twice as high as those south of the border. Excluding taxes, the price of gasoline in Canada is practically the same as in the United States.

Moreover, gasoline taxes vary not only from one province to another, but also from one region to the next. For example, they are about ten cents per litre higher in Montreal than in Toronto, and about six cents per litre higher in Montreal than in rural Quebec. In fact, excluding the taxes on retail prices, gasoline prices are comparable from province to province and region to region.

The sharpest differences are mainly the result of local competition, transportation costs, and the sales volumes of different service stations.

Over the years, some provinces have passed legislation limiting market competition. In Quebec, for instance, the Régie de l'énergie sets a weekly floor price to keep key players from selling gasoline at a price lower than the cost of acquisition. Others, such as Atlantic Provinces, have chosen to set the maximum price at the pump weekly or twice a month. According to the Conference Board of Canada, economic studies have shown that intervention policies of this nature adopted by states and provinces across North America generally mean higher prices for consumers. These complex regulating mechanisms add inefficiencies that translate in higher prices for consumers.

PUMP PRICE COMPONENTS – BY PROVINCE



Source: MJ ERVIN, Canadian average – Regular unleaded gasoline 2006 at 98 cpl.

THE CONTINENTAL MARKET FOR REFINED PRODUCTS

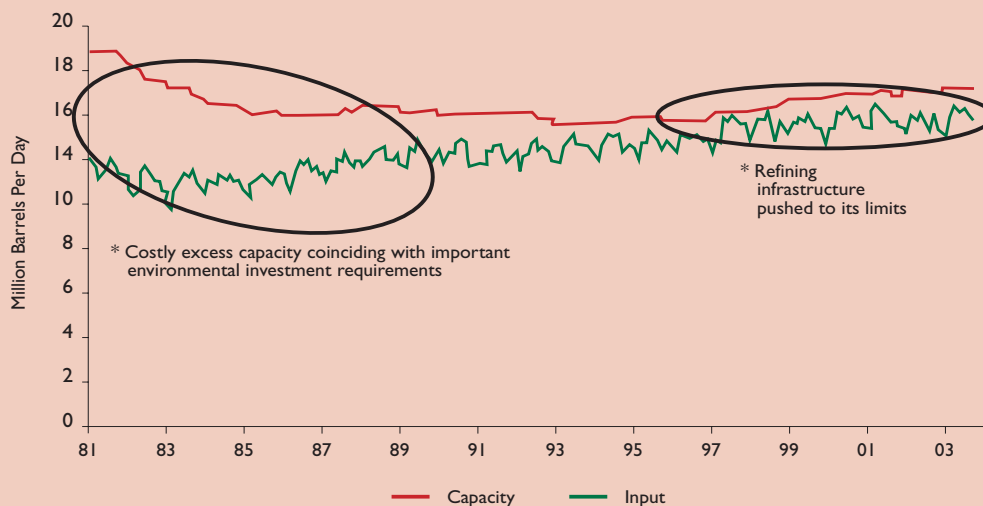
While the price of crude oil is shaped by the world market, wholesale gasoline prices are driven by product supply and demand balances in the North American market.

Since the early 1980s, the face of refining changed significantly in Canada. Challenged by major environmental investments in cleaner fuels and a strong Canadian economy that pushed the requirements for petroleum products to unprecedented levels, the industry modernized its infrastructure and took advantage of economies of scale. Although the number of refineries were cut in half, production increased during the same period. There used to be 40 refineries in Canada; today there are 18. In other words, although no new refineries were built during that period, the focus was on expanding existing plants. Overall, this resulted in a more efficient Canadian refining sector. Given the continuing strong economic growth, the industry is now approaching virtually full capacity.

The Canadian experience mirrors that in the United States and, proportionately, the US experienced the same phenomena. However, representing ten times the size of the Canadian market, the US refining market strongly influenced the continental market dynamics. North American refineries have little room to manoeuvre in dealing with unpredictable events, which fuels market tensions. For instance, when Hurricanes Katrina and Rita struck the southern U.S. in 2005, local refinery capacity fell by 30%. Given the interdependence of distribution networks, gasoline prices went up all across North America.

With Canada's signature of the North American Free Trade Agreement, the continent operates as a single market with no obstacles to the free flow of petroleum products. Access to American supply is a critical pillar in the Canadian supply framework.

EVOLUTION OF U.S. REFINING CAPACITY

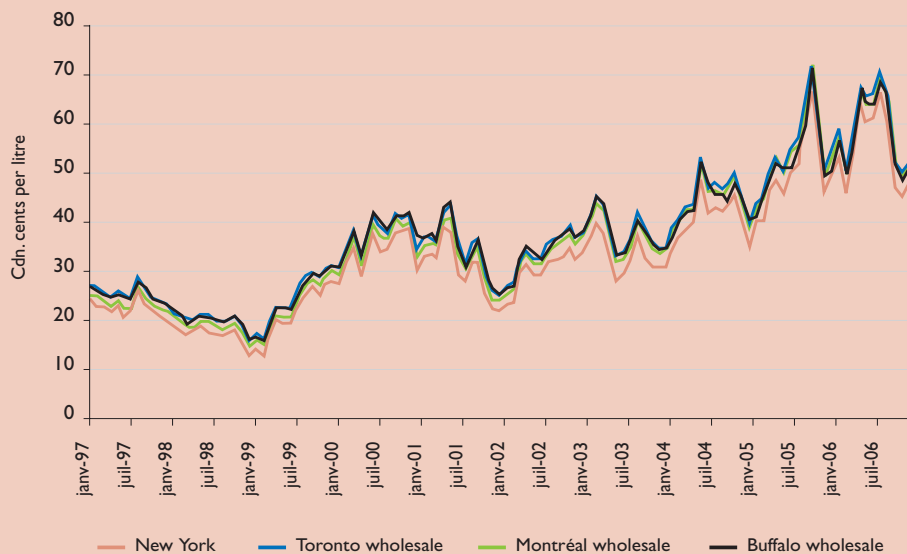




For evidence of this close alignment between Canadian and US markets, one need only look at the curves in the wholesale price of petroleum products to note the symmetry between those of New York, Toronto or Montreal. In Canada, gasoline and heating oil prices are now clearly shaped by the North American market. Canadian producers can not simply decide to ignore the continental market and attempt to set a made in Canada price. If we tried, for example, to set a lower price, we would be

overwhelmed by American traders eager to buy at a lower price. Canadian producers would have no other choice than to restore the balance between supply and demand. This same law of the marketplace can also favour Canadian consumers should a local producer turn its back on the continental market and sharply hike the rack price of its products. This would be an invitation for imports to find their way in the Canadian market and again, restore the balance between supply and demand.

SYMMETRY OF GASOLINE PRICES



Source: MJ ERVIN, 2006, Canadian and American rack prices before taxes.

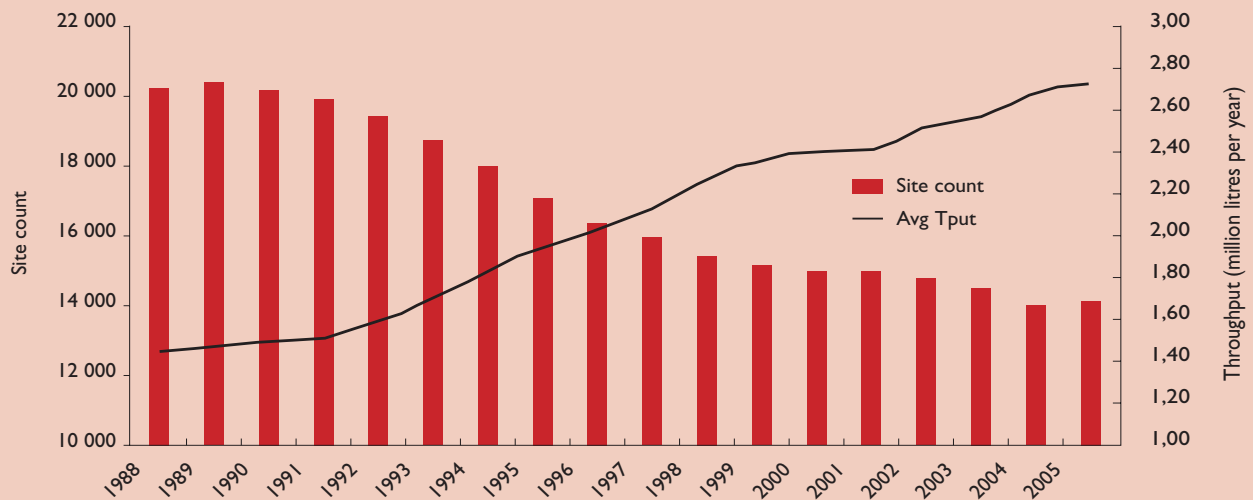
THE LOCAL RETAIL MARKET

Although the average price at the pump is governed by wholesale price dynamics, gasoline prices vary from one province to the next, from one region to another, and even from city to city.

That is because, in addition to world and continental market conditions, the price at the pump is subject to taxes that differ from province to province. The price is also subject to various local factors such as price wars triggered by the arrival of a newcomer in the market, be it an oil company, independent distributor or mass merchandiser store. For them, gasoline is only one of many other products to attract customers and increase total sales.

In fact, the retail sales market is shaped first and foremost by a relentless pursuit of sales outlet efficiency. The industry has changed radically since the early 1980s. Despite the growth in both demand and population, the number of sales outlets across the country has been halved. This means higher volumes at service stations, resulting in efficiency gains that benefit all Canadian consumers. This trend could continue and intensify with the arrival of a growing number of mass merchandisers as has already happened in the United States and Europe.

THE QUEST FOR EFFICIENCY



Source: MJ ERVIN, 2006



With the rationalization of service stations and huge investments in high-volume points of sale, oil companies have recovered market shares they gave up in the 1980s, with the result that today the market share of Canadian Petroleum Products Institute (CPPI) members amounts to roughly 80% across the country although we represent roughly 70% of all service stations.

Over the years, volume and the introduction of related services, such as a convenience store or car wash, have become decisive factors in ensuring a service station's survival.

Also, as can be readily seen every day, no price gets as much attention as gasoline at the pump. Simply put, Canadians are price sensitive when it comes to gas. Studies have found that consumers head for another brand to pay a few pennies less per litre.

The more or less frequent changes in prices at the pump are not the outcome of a lack of competition, as some people tend to believe, but rather of the fiercely competitive nature of the retail market, which is highly transparent with prices usually posted on large outdoor signs at gasoline stations.

The very nature of these fluctuations is such that price adjustments generally mean a series of successive cuts, which are less obvious than the headline-making hikes.

In March 2005, the federal Competition Bureau released the report of its fifth inquiry since 1990 which found that there are no "reasons to believe that they (high retail prices) were the product of anti-competitive acts against which the Competition Bureau would have the authority to take action."

As the Bureau noted, the spike in prices at the pump in the spring and summer of 2004 was caused by the high price of crude and a shortfall in supply caused by insufficient refining capacity in North America.

The Competition Bureau report also acknowledged that "retail gasoline prices in Canada have remained lower than the equivalent prices found in most industrialized countries...."



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