



## Main factors that affect propane prices

#### **Crude Oil and Natural Gas Prices**

Although most propane is produced from natural gas processing, its price is influenced mainly by the cost of crude oil because propane competes with oil-based fuels for heating.

## **Supply and Demand Balance**

Propane supply and demand is subject to changes in domestic production, weather, and inventory levels, among other factors. While propane production is not seasonal, residential demand is highly seasonal. This imbalance causes inventories to be built up during the summer months when consumption is low and for inventories to be drawn down during the winter months when consumption is much higher. When inventories of propane at the start of the winter heating season are low, chances increase that higher propane prices may occur during the winter season. Colderthan-normal weather can put extra pressure on propane prices during the high demand winter season because there are no readily available sources of increased supply. Cold weather early in the heating season can cause higher prices sooner rather than later, since early inventory withdrawals affect supply availability for the rest of the winter.

## **Proximity of Supply**

Due to transportation costs, customers farthest from the major supply sources will generally pay higher prices for propane.

# North American integrated NGL market

Natural gas liquids (NGLs) is a term for liquid hydrocarbon products including ethane, propane, butane, and pentanes plus that are extracted from natural gas.

The Canadian NGL sector is part of an integrated North American market. Since Canadian propane exports represent a small portion of North American and U.S. demand, Canada does not set the price. Mont Belvieu, Texas is the price reference point for North American NGL markets, as it is the largest consuming region. Its strategic location on the Gulf Coast allows access to supplies from Europe, Africa and the Middle East. Mont Belvieu also has significant storage and pipelines to transport liquids to market, and is close to large crude oil refineries. Petrochemical and export demand are the main factors affecting Mont Belvieu NGL prices.

# **PROPANE PRICES**

A Canadian Overview

## **Retail Prices**

Retail propane purchases are private transactions involving a distributor and an individual family or business, and depend on a number of factors. Supply and demand, time of year and location are all potential factors that influence prices. No centralized data source measures and collects these prices for Canada.

Five Canadian provinces regulate propane prices to varying degrees, and prices can be found on regulator websites:

- New Brunswick Energy & Utilities Board
- Newfoundland & Labrador Board of Commissioners of Public Utilities
- Prince Edward Island Regulatory & Appeals Commission
- Public Utilities Board of Manitoba (propane delivered through grid)
- British Columbia Utilities
  Commission (propane delivered through grid)

For other provinces and territories, interested parties may consider contacting an energy consulting firm that specializes in the analysis of the Canadian NGL market.





There are three other major North American NGL trading centres located at Edmonton, Alberta; Sarnia, Ontario; and Conway, Kansas. These locations have substantial underground storage and are connected to NGL supply, as well as to pipeline transmission and distribution systems. Edmonton and Conway serve the U.S. mid-west market while Sarnia and Mont Belvieu serve the U.S. northeast market.

In general, NGLs are priced higher than natural gas to cover the cost for extraction. Crude oil prices help set the price ceilings for propane and butane because they compete with oil-based products (in particular, naphtha, heating oil and gasoil) in major markets. Since 2000, there have been several periods when natural gas prices have been equal to or above crude oil prices (on an energy equivalent basis). When this happens, propane and butane prices tend to follow natural gas prices and NGL extraction becomes less economic.

Supplies of NGLs in North America are determined by the level of natural gas production, the amount of liquids in the gas and by imports and exports. The two largest contributors to demand are weather, since propane is used in home heating, and the petrochemical industry's requirement for ethane.

Asia has replaced North America as the largest NGL market because of strong growth in demand for propane and butane for home heating, particularly in China. This competition for global propane supplies has occasionally contributed to higher prices in North America.

### **Automotive**

Propane prices for automotive use are reported by Natural Resources Canada. Note that auto propane prices are not the same as residential propane prices due to different storage, delivery and other costs. This information is available at:

www.nrcan.gc.ca.

## Disclaimer

The Canadian Propane Association does not monitor or provide an analysis of propane prices. If you have specific questions regarding charges for your propane supply and/or service, please contact your propane supplier directly.