Canadian Natural Gas

›› Monthly Market Update

September 2005

›› Natural Gas Division
Petroleum Resources Branch
Energy Policy Sector

Natural Resources Canada Ressources naturelles Canada

Canada

Foreword

The *Canadian Natural Gas: Monthly Market Update* is a monthly working paper prepared by the Natural Gas Division of Natural Resources Canada.

Structure and Format of the Report
This five page report provides the most recently available data on natural gas prices and on key fundamentals affecting prices.

To the right is an Executive Summary, which provides a brief, up-to-date overview of natural gas market fundamentals. For those interested in reading ahead, the remainder of the report consists of graphs, with limited text and comments associated with each. The text provides a short description of the natural gas market fundamental, followed by a simple comparative analysis (i.e., year-over-year or month-over-month) of the data contained within the figure.

Beginning in January 2005, this report has been formatted in landscape orientation to be more easily read on a computer screen.

Sources
Various sources are used in developing this report, including Statistics Canada, Canadian Enerdata, Daily Oil Bulletin, the National Energy Board and GLJ Energy Publications.

If you have any comments, suggestions or questions please contact Paul Cheliak at 995-0422, or by email at pcheliak@nrcan.gc.ca

Executive Summary

The chart below depicts year-over-year percentage changes (given the most recently available month of data) in natural gas prices, heating degree days (weather), natural gas domestic sales and exports, storage, drilling, and natural gas production.

Natural Gas Market Fundamental	Percentage Change	
	+	-
Prices	48%	
Heating Degree Days (HDD's)		9%
Sales		1%
Exports	3%	
Storage		11%
Drilling		11%
Production	2%	

PRICES: CDN $8.91/GJ in September 2005; an increase of 48%

HDD's: 20 in July 2005; a decrease of 9%

SALES: 134 Bcf in July 2005; a decrease of 1%

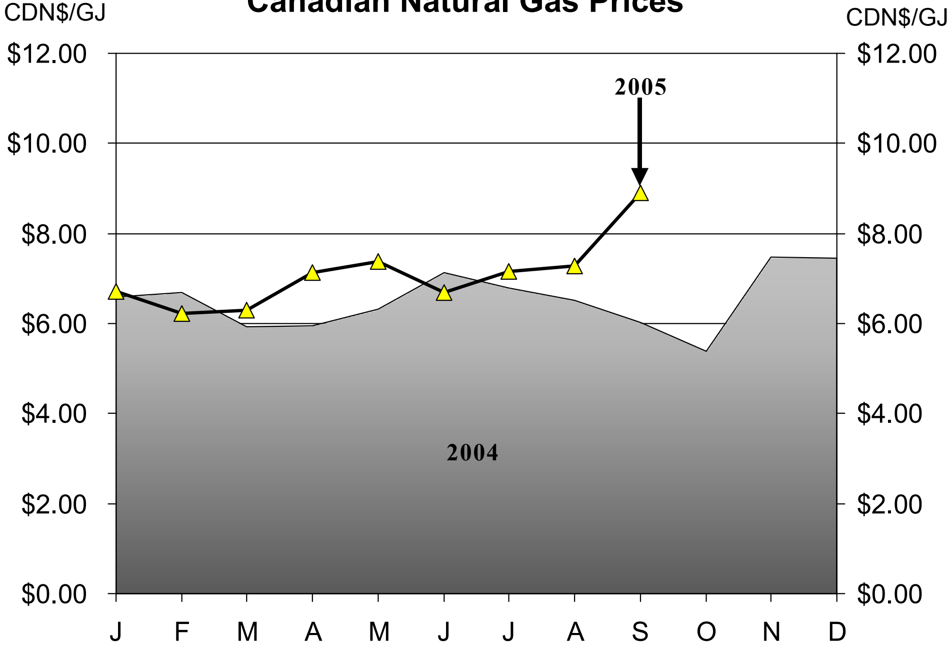
EXPORTS: 305 Bcf in July 2005; an increase of 3%

STORAGE: 400 Bcf in September 2005; a decrease of 11%

DRILLING: 1,333 in September; a decrease of 11%

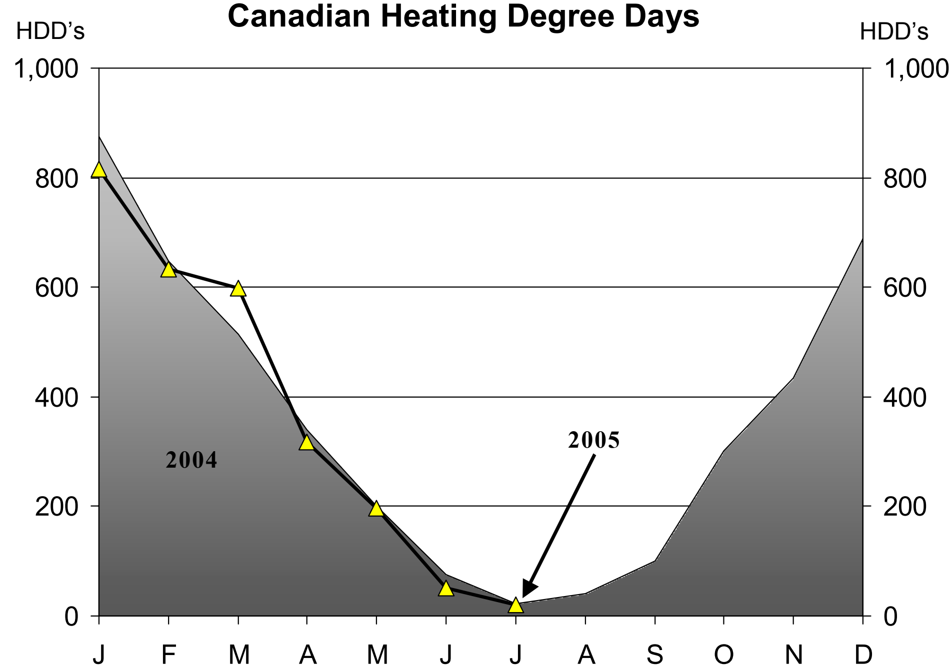
PRODUCTION: 492 Bcf in July 2005; an increase of 2%

Figure 1
Canadian Natural Gas Prices



Source: GLJ Energy Publications **Note:** Canadian price is the Alberta price at the AECO hub.

Figure 2
Canadian Heating Degree Days



Source: Statistics Canada

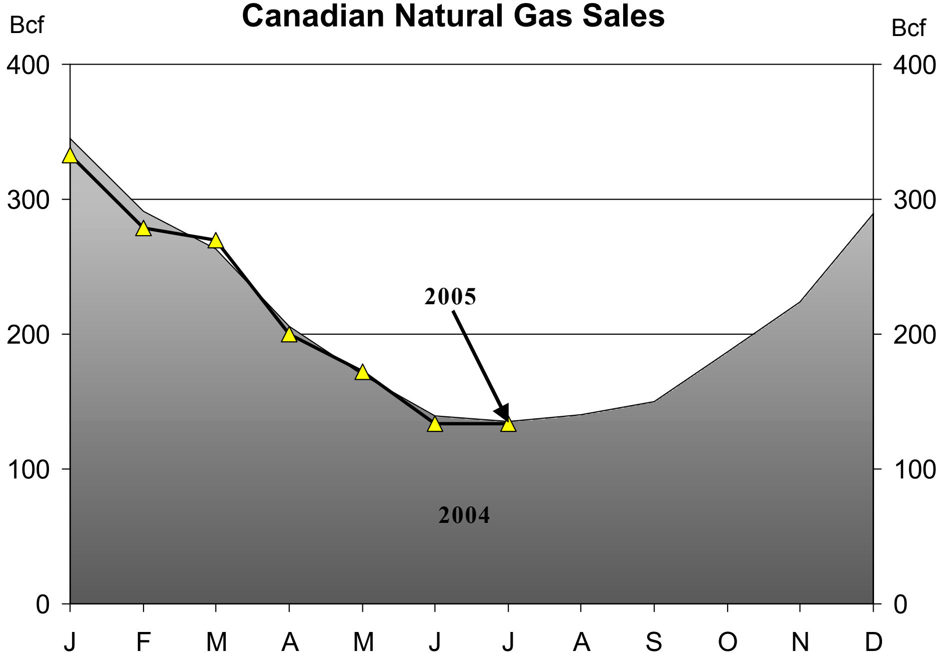
Figure 1 illustrates the price of natural gas at the major Canadian pricing point – the intra-Alberta market. The price is for gas delivered under a 30-day contract. The intra-Alberta market is formed by gas delivered to pipelines in Alberta. Gas changes hands via Nova Inventory Transfers (NIT), exchanges at the AECO storage hub, or sales facilitated by the Natural Gas Exchange (NGX). This is a commodity price – a wholesale price in the producing area. Consumer (or "burner tip") prices will also include pipeline transmission and distribution costs, which vary across Canada. Natural gas is commonly measured in gigajoules (GJ) or cubic metres. A gigajoule is an energy unit, which equates to about 27 cubic metres of natural gas.

Canadian natural gas commodity prices were CDN $8.91/GJ in September 2005, 22% higher than the previous month and 48% higher than September 2004.

Figure 2 shows Canadian Heating Degree Days (HDD's), which are a measure of how cold it is. The more HDD's in any season, the greater is natural gas demand for space heating. If the winter is unusually cold, demand will respond accordingly and natural gas prices will tend to be stronger. However, if the winter is mild, demand will be weaker, which will tend to moderate prices.

In July 2005, there were 20 HDD's, 9% less than in July 2004. Temperatures in July 2005 were normal.

Figure 3
Canadian Natural Gas Sales

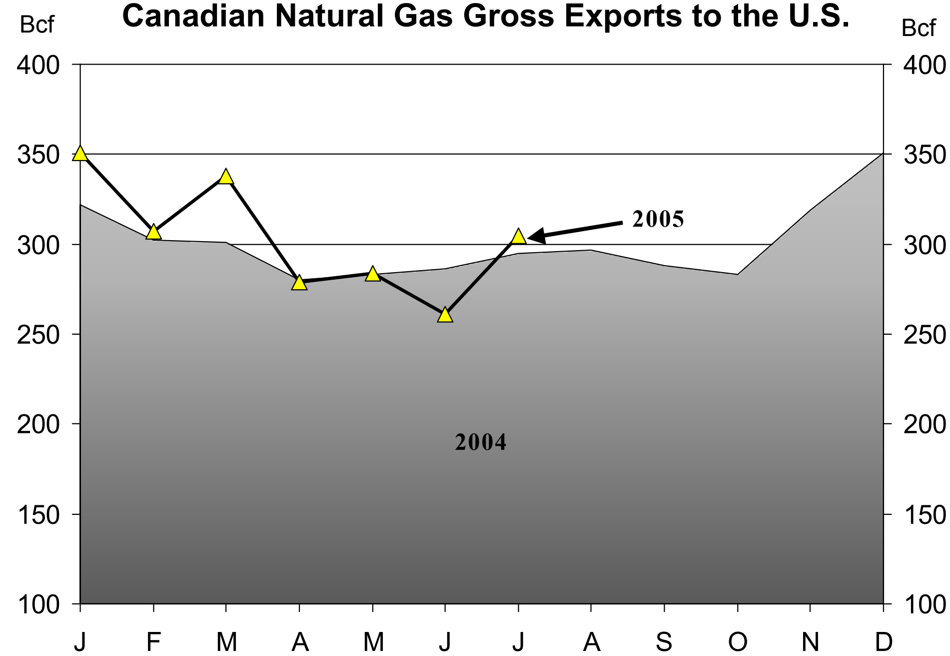


Source: Statistics Canada **Note:** Most recent month is a preliminary figure.

Figure 3 illustrates total Canadian natural gas sales. Sales include all natural gas sold to residential and commercial users (for space and water heating, cooking, etc), industries and electricity generating units in Canada. The totals do not include consumption by the natural gas industry itself (e.g., pipeline compressor fuel).

Natural gas sales to Canadian consumers in July 2005 were 134 Bcf, 1% lower than July 2004.

Figure 4
Canadian Natural Gas Gross Exports to the U.S.

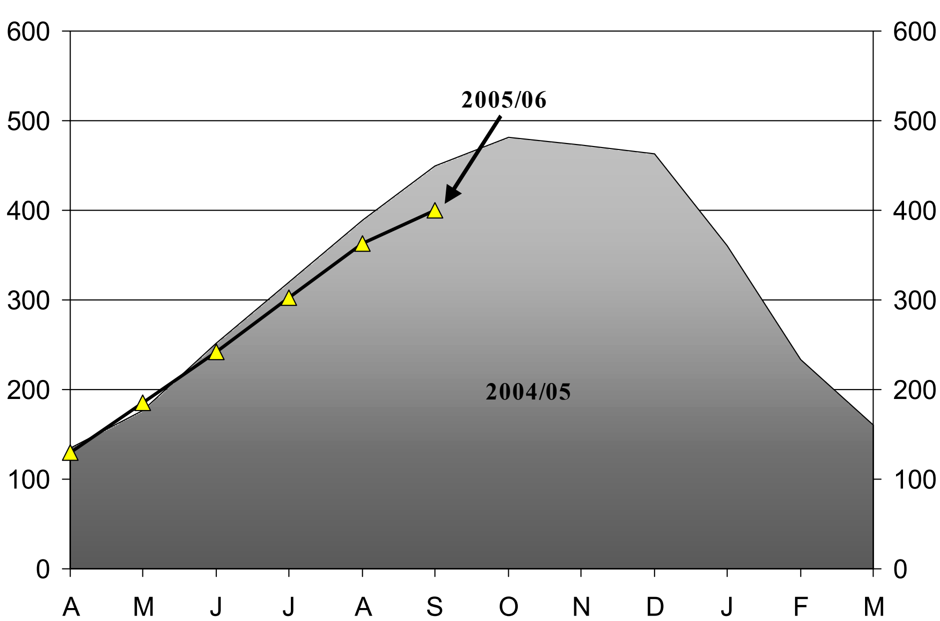


Source: National Energy Board

Figure 4 illustrates natural gas exports to the U.S.. Canadian natural gas requirements are met entirely by domestic sources, as Canada produces natural gas in excess of what is required for domestic consumption. In comparison, the U.S. consumes more natural gas than it produces, therefore natural gas imports are required to make up the difference. Typically, Canada exports between 50 and 60 per cent of its gas production.

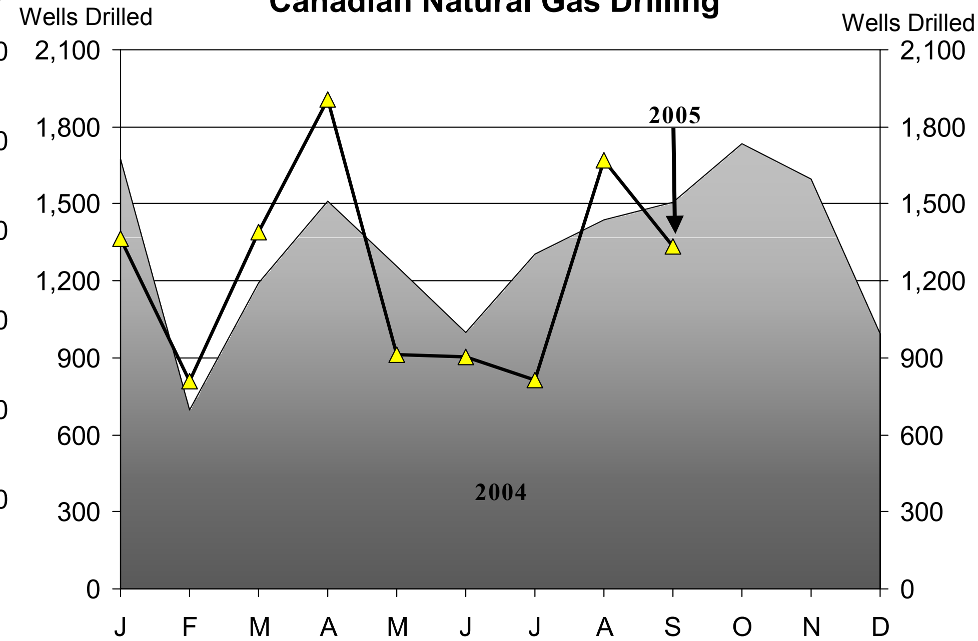
In July 2005, natural gas exports to the U.S. were 305 Bcf, 3% higher than July 2004.

Figure 5
Canadian Natural Gas Storage



Source: Canadian Enerdata

Figure 6
Canadian Natural Gas Drilling



Source: Daily Oil Bulletin

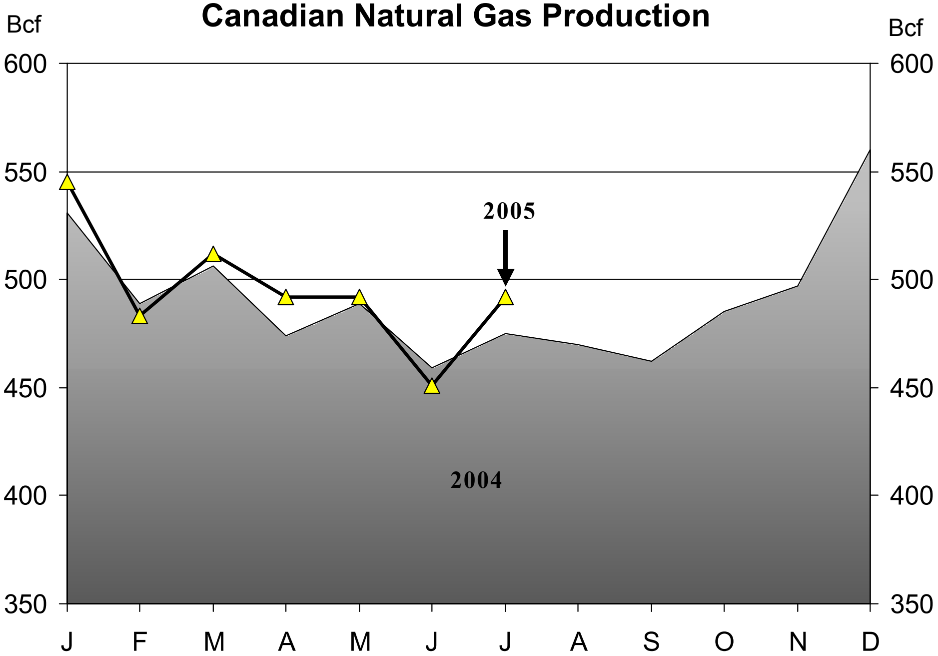
Figure 5 indicates natural gas storage levels in Canada. The amount of gas in storage generally follows a seasonal pattern. In the summer, when natural gas demand is low, gas is injected into storage. Storage volumes peak in the fall. In winter, volumes are drawn down, reaching a low point in the spring.

Canadian natural gas storage inventories increased by 37 Bcf during the month of August 2005. Storage levels at the beginning of September 2005 were 400 Bcf, 11% lower than those of September 2004.

Figure 6 depicts the number of natural gas well completions in Canada. There is a time-lag between drilling a gas well and starting production, due to the work necessary to connect the new well to the pipeline grid. Drilling is therefore a good indicator of future natural gas supply.

There were 1,333 natural gas wells drilled in September 2005, a decrease of 11% compared to September 2004.

Figure 7
Canadian Natural Gas Production



Source: Statistics Canada **Note:** Most recent month is a preliminary figure.

Figure 7 shows marketable natural gas production in Canada. Marketable natural gas is the gas available for consumption after processing and excludes producer or plant uses.

Marketable natural gas production was 492 Bcf in July 2005, 2% higher than in July 2004.

Bibliography and Data Sources

1. *Crude Oil and Natural Gas (Preliminary),* Statistics Canada
2. *Natural Gas Transportation and Distribution, 55-002*, Statistics Canada
3. *Supply and Disposition of Crude Oil and Natural Gas, 26-006,* Statistics Canada
4. *Drilling Highlights,* Daily Oil Bulletin website: www.dailyoilbulletin.com
5. *Canadian Natural Gas Focus,* GLJ Energy Publications Inc.
6. *Natural Gas Storage Survey*, Canadian Enerdata Ltd.
7. *Natural Gas Export Statistics*, National Energy Board website: www.neb-one.gc.ca