

Highlights

Overview

This issue of the *Natural Gas Monthly* presents the most recent estimates of natural gas data from the Energy Information Administration (EIA). Estimates extend through June 1998 for many data series and through March for most price series. Highlights of the data contained in this issue are:

- Net injections into underground storage are continuing at a rapid rate as the 1998 refill season (April through October) proceeds. From April through June 1998, they are estimated to be 890 billion cubic feet, 20 percent higher than during the same period last year.
- During 1998, monthly estimates of natural gas production and net imports show small increases over 1997 levels.
- Cumulatively for January through June 1998, natural gas consumption declined in all end-use sectors compared with a year ago. Total end-use consumption is estimated to be 10,358 billion cubic feet, 3 percent lower than for the same period of 1997. The drop in residential and commercial consumption may be attributed in part to warmer-than-normal temperatures during the 1997-1998 heating season (November through March), resulting in less demand for gas for space heating.
- Cumulatively from January through March 1998, all natural gas prices dropped compared with the same time period in 1997. The decrease in prices reflects the lower demand for gas during the past heating season.

Supply

Estimates of natural gas production and net imports through June 1998 indicate a slight increase in supply compared with last year. Net injections into storage have also been strong thus far in the 1998 refill season (April through October). From April through June, estimated net injections totaled 890 billion cubic feet, 20 percent higher than during the same period last year.

Dry gas production in June 1998 was estimated to be 1,553 billion cubic feet or 51.8 billion cubic feet per day (Table 1). Although this level represented a decline of 5 percent from the previous month, it was 1 percent higher than in June 1997. Cumulatively from January through June, dry production rose 1 percent from 1997 to 1998 (Figure HI1).

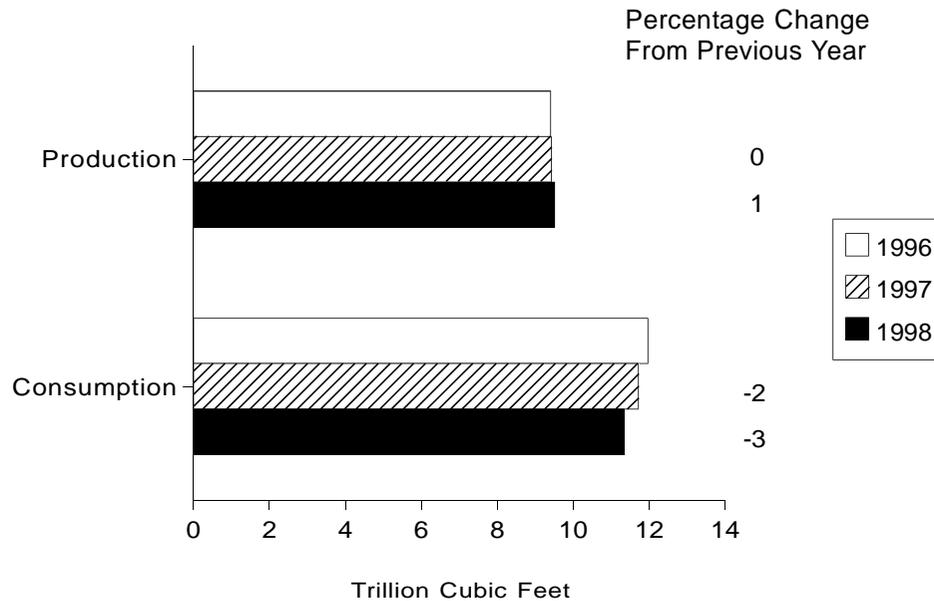
Net imports, which make a significant contribution to the supply of natural gas in the United States, are estimated to be 238 billion cubic feet in June 1998 or 7.9 billion cubic feet per day (Table 2). The monthly estimates of net imports in 1998 have exceeded those of 1997 in every month. Cumulatively for January through June, net imports are 4 percent higher than they were one year ago.

Working gas in underground storage ended the 1997-1998 heating season (November through March) at 1,184 billion cubic feet, 19 percent more than at the end of the previous heating season. Despite this higher level of gas, the refill season began aggressively in April and May as an estimated 548 billion cubic feet of gas was added to underground storage, 45 percent more than during the same months last year. The rate of injections slowed in June 1998 when an estimated 342 billion cubic feet was added (negative net withdrawals in Table 10), 6 percent less than in June 1997. Still, working gas in storage at the end of June 1998 is estimated to be 2,148 billion cubic feet, 24 percent higher than a year ago (Figure HI2).

End-Use Consumption

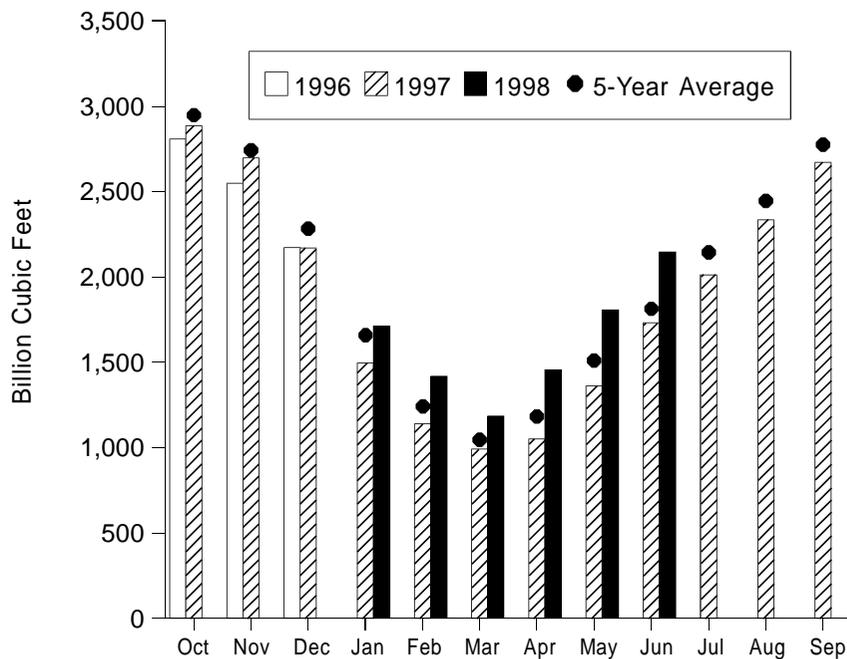
Natural gas consumption by end users in June 1998 is estimated to be 1,295 billion cubic feet, 9 percent less than in May (Table 3). Cumulatively for January through June 1998, end-use consumption is estimated to be 10,358 billion cubic feet, 3 percent lower than for the same period of 1997. The cumulative decline occurred primarily in the residential and industrial sectors as respective consumption levels were 215 and 199 billion cubic feet lower than during the first half of 1997 (Figure HI3). Consumption in the commercial sector also fell, but by a smaller amount (68 billion cubic feet).

Figure HI1. Natural Gas Production and Consumption, January-June, 1996-1998



Source: Table 2.

Figure HI2. Working Gas in Underground Storage in the United States, 1996-1998



Note: The 5-year average is calculated using the latest available monthly data. For example, the December average is calculated from December storage levels for 1993 to 1997 while the January average is calculated from January levels for 1994 to 1998. Data are reported as of the end of the month, thus October data represent the beginning of the heating season.

Sources: Form EIA-191, "Underground Natural Gas Storage Report," Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition," and Short-Term Integrated Forecasting System.

Consumption estimates in the residential and commercial sectors totaled 304 billion cubic feet in June 1998. This level was 5 percent less than in June 1997. The decline in residential and commercial consumption may be attributed in part to warmer-than-normal temperatures during the 1997-1998 heating season, resulting in less demand for gas for space heating.

Estimates of natural gas consumption by electric utilities are now available through March 1998. Electric utilities consumed an estimated 194 billion cubic feet in March 1998, 45 percent more than in February. Electric utility consumption is typically at its lowest during the winter months when the demand for natural gas for space heating is at its highest. However, cumulatively from January through March, electric utility consumption was 499 billion cubic feet, 6 percent higher than during the same period of 1997.

Prices

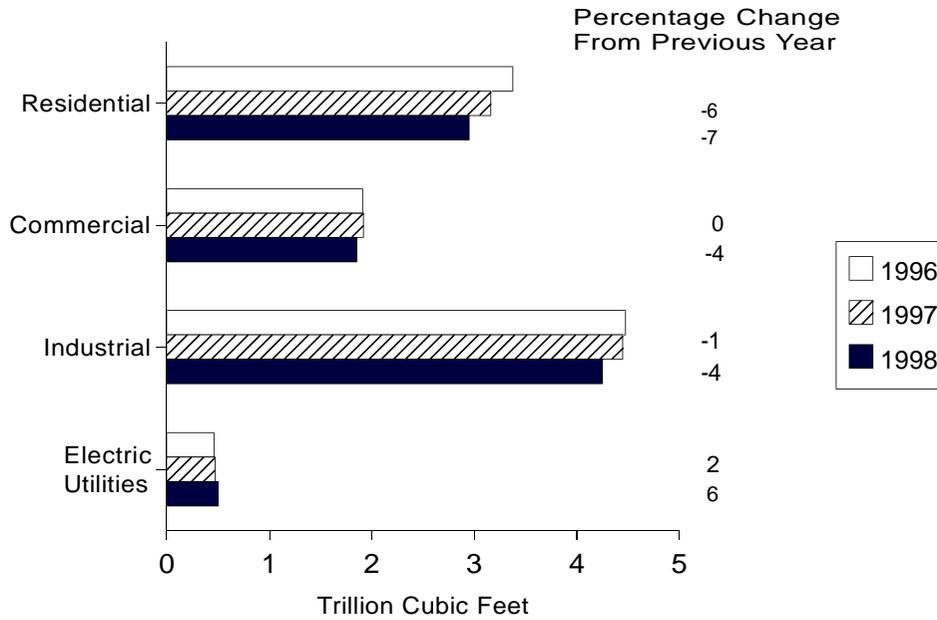
The average natural gas wellhead price in March 1998 is estimated to be \$1.86 per thousand cubic feet, 13 percent higher than the price in February and 16 percent higher than in March 1997 (Table 4). This increase reversed the pattern of declining prices seen beginning in December of the 1997-1998 heating season. Prices in December, January, and February were well below those in the same months of the 1996-1997 heating season. The 1997-1998 heating season was dominated by one of the largest "El Nino" weather patterns of this century, and November was the only month that recorded colder-than-normal weather. Temperatures gradually moderated in succeeding months. However, some of the coldest temperatures of the season occurred in early March, contributing to the rise in wellhead prices during that month.

The estimated price paid for natural gas in the residential sector fell by 2 percent from February to March to \$6.24 per thousand cubic feet. Residential prices in 1997 peaked in August at \$8.81 per thousand cubic feet and since then have continued to decline. Cumulatively from January through March 1998, the price averaged \$6.36 per thousand cubic feet, 5 percent less than one year ago (Figure HI4). The price for deliveries to commercial consumers also dropped from February to March, by 3 percent. Compared with residential prices, commercial prices showed less variation throughout 1997 and into 1998, although cumulatively from January to March 1998 they were 9 percent less than during the same period of 1997.

In the industrial and electric utility sectors, prices are more sensitive to the decline in wellhead price. The estimated price in the industrial sector decreased by 6 percent from February to March 1998. Cumulatively from January through March, it was 13 percent below the level for the same period in 1997. The electric utility prices are available through February 1998 in this report. Cumulatively from January through February, estimated prices in the electric utility sector are sharply lower (29 percent) in 1998 than in 1997--\$2.58 versus \$3.62 per thousand cubic feet.

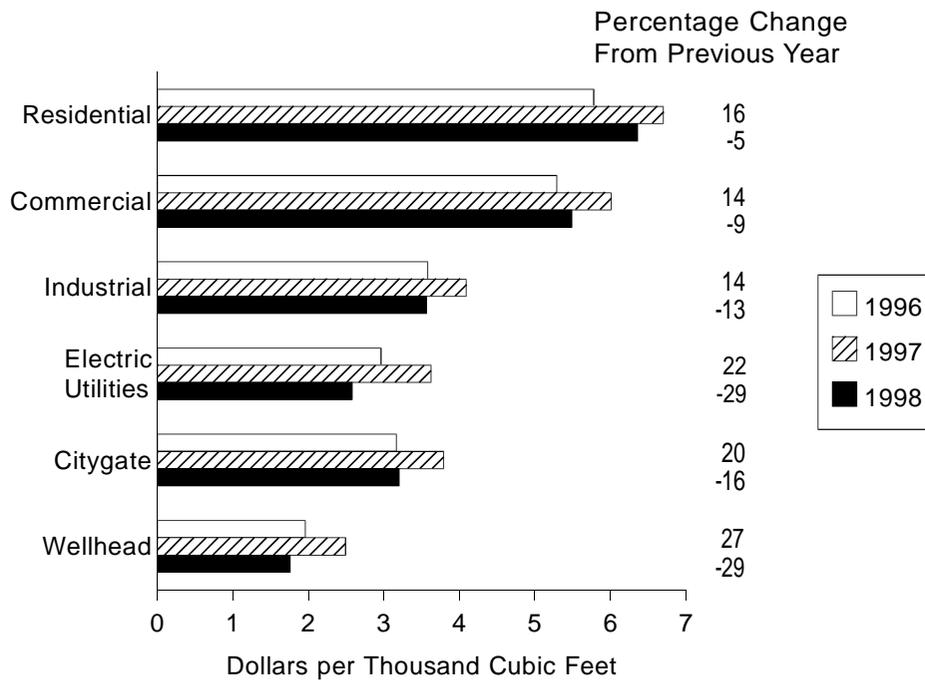
The July futures contract at the Henry Hub declined most days during the first half of June reaching a low of \$1.93 per million Btu (Figure HI5). However, the persistent high temperatures in the Southwest coupled with some recent weather forecasts calling for continued warmer-than-normal temperatures in July and August in the Southwest contributed to a rise in prices during the last week of June. The July contract settled on Tuesday, June 23, at \$2.391 per million Btu and appeared headed for a closing price that will exceed last year's price of \$2.148 for July.

Figure HI3. Natural Gas Delivered to Consumers, January-June, 1996-1998



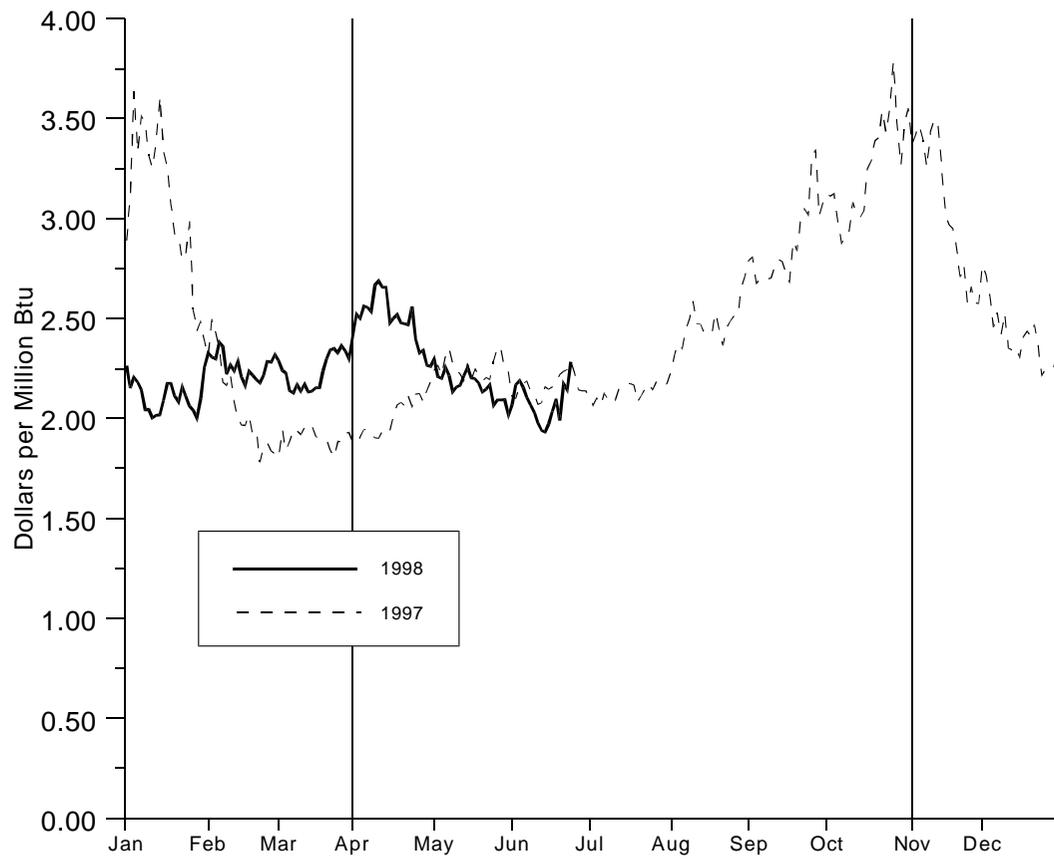
Note: The reporting of electric utility deliveries is 3 months behind the reporting of other deliveries.
Source: Table 3.

Figure HI4. Average Delivered and Wellhead Natural Gas Prices, January-March 1996-1998



Note: Commercial and industrial average prices reflect onsystem sales only. The reporting of electric utility prices is 1 month behind the reporting of other prices..
Source: Table 4.

Figure HI5. Daily Futures Settlement Prices at the Henry Hub



Note: The futures price is for the nearby month contract, that is, for the next contract to terminate trading. Contracts are traded on the New York Mercantile Exchange. April 1 is the beginning of the natural gas storage refill season. November 1 is the beginning of the heating season.

Source: Commodity Futures Trading Commission, Division of Economic Analysis.