

Definitions, Sources and Explanatory Notes

Category: **Natural Gas Prices**

Topic: **Prices**

■ Definitions

| Key Terms | Definition |
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| Citygate | A point or measuring station at which a distributing gas utility receives gas from a natural gas pipeline company or transmission system. |
| Commercial Price | The price of gas used by nonmanufacturing establishments or agencies primarily engaged in the sale of goods or services such as hotels, restaurants, wholesale and retail stores and other service enterprises; and gas used by local, State and Federal agencies engaged in nonmanufacturing activities. |
| Electric Power Price | The price of gas used by electricity generators (regulated utilities and non-regulated power producers) whose line of business is the generation of power. |
| Exports | Natural Gas deliveries out of the Continental United States and Alaska to foreign countries. |
| Imports | Natural Gas received in the Continental United States (including Alaska) from a foreign country. |
| Industrial Price | The price of natural gas used for heat, power, or chemical feedstock by manufacturing establishments or those engaged in mining or other mineral extraction as well as consumers in agriculture, forestry, fisheries and construction. |
| Nominal Price | The price paid for a product or service at the time of the transaction. Nominal prices are those that have not been adjusted to remove the effect of changes in the purchasing power of the dollar; they reflect buying power in the year in which the transaction occurred. |
| Residential Price | The price of gas used in private dwellings, including apartments, for heating, cooking, water heating, and other household uses. |
| Wellhead Price | Price of natural gas calculated by dividing the total reported value at the wellhead by the total quantity produced as reported by the appropriate agencies of individual producing States and the U.S. Bureau of Ocean Energy Management, Regulation and Enforcement. The price includes all costs prior to shipment from the lease, including gathering and compression costs, in addition to State production, severance, and similar charges. The Wellhead Price estimate has been discontinued as of January 2013. |

For definitions of related energy terms, refer to the [EIA Energy Glossary](#).

■ Sources

City Gate, Residential, Industrial Prices: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"; Form EIA-910, "Monthly Natural Gas Marketer Survey."

Commercial Price: Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers"; Form EIA-910, "Monthly Natural Gas Marketer Survey." ; Form EIA-910, "Monthly Natural Gas Marketer Survey"

Electric Utilities: 1967-1977: Federal Power Commission (FPC). **1978-2001:** Form EIA-759, "Monthly Power Plant Report" ; Federal Energy Regulatory Commission (FERC), Form-423, "Cost and Quality of Fuels for Electric Plants Report" ; Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition" ; Form EIA-910, "Monthly Natural Gas Marketer Survey"

Electric Power: 2002-2006: Federal Energy Regulatory Commission (FERC), Form-423, "Cost and Quality of Fuels for Electric Plants Report" ; Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" ; **2007-current**, data previously collected on Form EIA-423 and FERC Form 423 are now collected on Form EIA-923, "Power Plant Operations Report."

All other data: 1967-1975: Bureau of Mines, *Minerals Yearbook*, "Natural Gas" chapter. **1976-1978:** EIA, Energy Data Report, *Natural Gas Annual*. **1979:** EIA, *Natural Gas Production and Consumption*, 1979. 1980-present: Form EIA-176, "Annual Report of Natural and Supplemental Gas Supply and Disposition"

- [Background on "Natural Gas Monthly" data](#)
- [Background on "Natural Gas Annual" data](#)
- [Natural Gas Survey Forms and Instructions](#)
- [Electric Survey Forms and Instructions](#)

■ Explanatory Notes

- Prices are in nominal dollars.

Imports and Exports

- EIA reduced the reported volume of gas imported by pipeline from Canada by the amount of natural gas liquids removed from the saturated natural gas carried by Alliance Pipeline. Alliance moves saturated natural gas from the border to a processing plant in Illinois. After the adjustment, volumes of imported natural gas on this pipeline are on the same physical basis as other reported volumes of pipeline imports.
- Prices for LNG imports are reported as "landed," received at the terminal, or "tailgate," after regasification at the terminal. Generally the reporting of LNG import prices varies by point of entry, and the average prices are calculated from a combination of both types of prices. The price of LNG exports to Japan is the "landed" price, defined as received at the terminal in Japan.
- Annual and monthly data are published from the Office of Fossil Energy, U.S. Department of Energy, Natural Gas Imports and Exports.
- Totals may not equal sum of components due to independent rounding.

Other Prices

- Average Wellhead Value, Annual Data: Form EIA-895A, "Annual Quantity and Value of Natural Gas Report," requests state agencies to report the quantity and value of marketed production. When complete data are unavailable, the form instructs the state agency to report the available value and the quantity of marketed production associated with this value. A number of states reported volumes of production and associated values for other than marketed production. In addition, information for several states which were unable to provide data was obtained from Form EIA-176. It should be noted that Form EIA-176 reports a fraction of state production. The imputed value of marketed production in each state is calculated by dividing the state's reported value by its associated production. This unit price is then applied to the quantity of the state's marketed production to derive the imputed value of marketed production.
- Average Wellhead Value, Preliminary Monthly Data: Preliminary values for the monthly U.S. natural gas wellhead price are estimated from the New York Mercantile Exchange (NYMEX) futures closing price for near-month delivery at the Henry Hub, and prevailing cash market prices (spot prices) at 5 major trading hubs: Henry Hub, LA; Carthage, TX; Katy, TX; Waha, TX; and Blanco, NM. The NYMEX price is reported in the trade publication, Gas Daily (published by Financial Times Energy). The spot prices are published in another trade publication, Natural Gas Week (Energy Intelligence Group), and they reflect the spot delivered-to-pipeline, volume-weighted average prices for natural gas bought and sold at the specified trading hubs. Prices include processing, gathering, and transportation fees to the hubs. The estimated wellhead prices are derived with a statistical procedure based on analysis of monthly time series data for the period 1995 through the present. A statistical procedure was adopted beginning with publication of the February 1999 issue of the Natural Gas Monthly. The preliminary estimates are replaced when annual survey data become available, usually about 10 months after the end of the report year.
- Average Wellhead Value, Final Monthly Data: The Form EIA-895A requests state agencies to report monthly values of marketed production. Preliminary monthly gas price data are replaced by these final monthly data.
- City gate prices are calculated from reports to the Form EIA-857 and represent the total cost paid by gas distribution companies for gas received at the point where the gas

is physically transferred from a pipeline company or transmission system. This price is intended to reflect all charges for the acquisition, storage, and transportation of gas as well as other charges associated with the LDC's obtaining the gas for sale to consumers.

- Published residential, commercial, and industrial prices are considered to be total prices paid by end-users per thousand cubic feet of natural gas in the respective sectors, inclusive of all tax, delivery, commodity, demand and other charges.
- Volumes of natural gas reported for the commercial and industrial sectors include data for both sales and deliveries for the account of others.
- The percentage of total volume delivered represents sales to the residential, commercial and industrial sectors. This information may be helpful in evaluating residential, commercial and industrial price data which are based on sales data only.
- Beginning in 1987, prices for deliveries to consumers are calculated using only onsystem sales data. Due to large amounts of missing data for values of lease and plant fuel since 1987, prices are not estimated. In previous years, imputations were made for missing data and a price was calculated using reported and imputed data to derive a total value for gas consumed. Since total consumption value estimates were not made since 1987, no lease and plant fuel value estimate was made.
- Beginning in 1996, consumption of natural gas for agricultural use was classified as industrial use. In 1995 and earlier years, agricultural use was classified as commercial use.
- Average Price of Deliveries to Consumers: Price data are representative of prices for gas sold and delivered to residential, commercial, and industrial consumers. These prices do not reflect average prices of natural gas transported to consumers for the account of third parties or "spot-market" prices. Coverage for prices varies by consumer sector. All average prices, except electric power, are computed by dividing the reported revenue by its associated sales volume. Preliminary monthly prices for deliveries of natural gas to residential commercial and industrial consumers are calculated from reports to Form EIA-857, "Monthly Report of Natural Gas Purchases and Deliveries to Consumers." Final monthly data are calculated by allocating annual consumption data from the Form EIA-176, to each month in proportion to monthly volumes reported in Form EIA-857. In the States of Georgia, Maryland, New York, Ohio, Pennsylvania and Virginia, the residential and commercial sector prices, are collected on the Form EIA-910, "Monthly Natural Gas Marketer Survey," and include data on prices of gas sold to customers in those sectors by energy marketers. In the District of Columbia, Florida and Michigan, the commercial sector prices are also collected on the Form EIA-910. Additional states (Illinois, Massachusetts, New Jersey and West Virginia) may be added in the future as data quality becomes acceptable. In these States, prices in the residential and/or commercial sectors are calculated by combining the data from the Form EIA-910 with the EIA-857 (for preliminary monthly prices) and with the Form EIA-176 for final monthly prices. Beginning in January 2005, the EIA-910 added the States of Florida, Illinois, Massachusetts (which was dropped from the survey in 2008), Michigan, New Jersey, Virginia, West Virginia, and the District of Columbia. In 2011, the EIA-910 reduced the number of States for which it is used to collect data to Georgia, New York and Ohio only.
- The electric power sector comprises electricity-only and combined-heat-and-power plants within the NAICS 22 category whose primary business is to sell electricity, or electricity and heat, to the public. Through 2001, data are for regulated electric utilities only; beginning in 2002, data also include nonregulated members of the electric power sector. For 2013, electric power data are preliminary and shown as of the September 2014 Electric Power Monthly. With the unbundling of services in the natural gas industry, pipeline and local distribution companies provide transportation service for their end-user customers. Those volumes are described as deliveries of gas for the account of others. When companies that deliver gas are the sellers of that gas, they are able to report the associated revenue to the EIA. Those volumes are described as onsystem sales. When the firm that physically delivers gas to the end user acts as a transportation agent, it does not know the sales price of the gas. Respondents, therefore, do not report a revenue amount associated with deliveries for the account of others in their submissions of the Form EIA-176.
- [Standard Error for Natural Gas Deliveries and Price to Consumers by State](#)
- [Statistical Considerations \(Sample Design, Estimation Procedures, Final Revisions, Reliability of Monthly Data\)](#)
- Beginning in 2009, Pipeline and Distribution Use volumes now include Line Loss, defined as known volumes of natural gas that were the result of leaks, damage, accidents, migration and/or blow down.